

can give us proof that they do we will examine it, and report accordingly.

(2) The proportional lengths of the day and night do not vary when the sun is on the equator, neither would they as "we approach the equator at that time of the year. But when the *sun* approaches the north the days of course become longer and the nights shorter in these parts; and in the south the nights of course become longer and the days shorter, because the sun is further away from them.

(3) The difference of time in different places is owing to the fact that the sun comes to those places at different times in its journey round above the earth. The sun moves in one hour 15° , therefore when it is 12 (noon) at Greenwich it will be one o'clock at Naples, *not* 11.

What causes the moon's half, quarter, and full appearances from our standpoint?—A. Y. R. *Ans.*—If you get an indiarubber ball and paint over one half of it some kind of phosphorus paint, then take it in a dark room, and turn it round you will see all the phases of the moon as the ball turns.

(1) If the earth is a plane how can you account for day and night, as the sun disappears at one point and re-appears at the opposite point? (2) How do you account for time differences, as when it is 12 (mid-day) here it is 9 p.m. in Australia? If as you said, water under the earth, how can the sun pass under and re-appear at the opposite point to its disappearance?—E.P.

Ans.—(1) The sun is not large enough to light all of the earth at once, because the atmosphere resists the rays when the sun gets too far away over any particular part. But when the sun comes round again to the East we see it once more, and it brings morning light. (2) The sun never passes "under the earth," but goes round above the earth. But when it gets away too far from us its rays cannot reach us because of the perspective of the distance, and the atmosphere. The reason why the time is out in Australia from our time is because Australia lies on the opposite side of the plane earth, and the sun does not reach those parts until about ten hours after it has been over England.

THE EARTH'S OBSERVATORY.

(1) The fact that the sun and moon have both been seen above the horizon at the time when a lunar eclipse occurred, *proves that it is not* the shadow of the earth which causes the moon's eclipse. (2) Parallax thought that a semi-opaque or dark moon coming between our moon and an observer on the earth so caused the eclipse. Astronomers have ever admitted the existence of dark bodies in the skies. "Zetetes" suggests in his teaching that the moon's eclipse may be caused by its getting into a mass of thick darkness which revolves around and over the earth in opposition to the sun. But in any case we cannot admit that it is the shadow of the earth because we do not admit that the earth is a heavenly body rushing through space, because it is contrary to the teaching of the Holy Scriptures and also to the evidence of our senses and demonstrated facts.

If you sail 10,000 miles east in one particular latitude the same stars hold the same position to you exactly as they did at starting; but if you start lower down the aspect of the heavens is totally different. This is because the stars move round the earth from east to west; but the stars do not move north and south.

THE EARTH.

VOL. III.

NOS. 33 & 34.

APRIL AND MAY.

THE ROMANCE OF SCIENCE:

EXTRACTS FROM ADDRESSES GIVEN BY LADY BLOUNT.

*TRUTH is a certain sound, divinely garnished,
But fiction ever is with falsehood tarnished.*

"The truth of the Religion of any people may be tested by its Cosmogony; whatever it may be, the system of Religion associated with it must stand or fall."—Lord Macaulay (*Lives of the Popes.*)

Science is simply the Latin word *Scientia*, which means *Knowledge* reduced to system under general facts or principles. *Fact* we know is solid, and is the very essence of veracity. But *Romance* is not Truth. It is the very opposite to it; it is fiction.

Now we maintain that no system, however elaborated, can be placed on the high pedestal described as "Science" unless it be uncontrovertibly based and founded upon Fact.

Therefore all things, whether they be methods, or systems, or mere calculations, without a true factor or foundation to start upon, are really only superficially erected upon hypothesis: and being without true origin or foundation we know are not only unproven in themselves, but when such things are in contradiction to the Holy Scriptures they cannot be more graphically described than as the Scriptures describe them, viz.: "Science falsely so-called."

And this so-called "science" is not true knowledge. it is opposite to Truth.

Nevertheless truth undivided is essential to every individual upon the face of the earth, and not merely a part of it; and so far as we are bound in error we are held in bondage.

If we are thus bound unwittingly, or even unwillingly, we may not suffer condemnation. But in any case we shall suffer loss—and it may be great loss.

It is a disadvantage from an argumentative standpoint, when dealing with atheistic opponents to the Bible and its inspiration, if we are not equipped so as to be able to defend it from every possible point of view.

But alas! the world of children, in all sorts of schools, are taught to regard the Modern Scripture-Contradicting "Science" as infallible; while the Bible is set down as being very fallible!

Some men assert that they have "more evidence in favour of their so-called science than the teachings of Moses." And infidels assume that "Moses can be shown to be caught red-handed in ignorance and error." And they ask derisively "what shall we think of the Christ who quoted and referred to Moses as an authority?"

But Jesus, the Christ, who stated when he was before His earthly judge Pontius Pilate, that he had come forth from the Father-God to bear witness to the truth 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?"—*John* v. 46, 47.

Therefore, there can be no variation in replying to the question, What is Truth?

God's Word is Truth, *i.e.*, The Creator's Word.

And Jesus Christ is the embodiment of that Word.

"And the Word was made flesh.

It is an unimpeachable fact that the Bible is as scientifically accurate in its description of Creation, as it is in setting forth Redemption in and through our dear Redeemer.

A well known infidel has said that "Christians are fools" because they place their faith in the Bible in some things while they own it to be fallacious in others. For instance, they accept its offer of "salvation," and rest upon its promises on these lines; but, at the same time, they accept the teaching of man with regard to Modern Science, as being more reliable than the Bible which it flatly contradicts as to the facts of Creation.

We endorse this statement, therefore let us trace the origin of this Scripture-contradicting "Science," and let us analyze its nature and bearings.

The origin of the Globular theory may be traced and shown to be Pagan. It was introduced into Egypt by the Greek Pythagoras, about 600 B.C. He was a native of Samos, and a great traveller in his early days. He travelled much in the

East. And he imbibed the fallacious idea that the earth and sea together formed a whirling globe; and that the heavenly bodies were other worlds (inhabited). He also accepted the false doctrine of the transmigration of souls, from pagan magicians and Eastern inventors of romance and fiction.

Pythagoras returned to Europe and introduced these serious errors into his own country; but after a time his party was dispersed, probably through dissent, and he left his native land. He went to Italy, where he met with a warm reception; and there, with a few followers, he collected many disciples and founded a College, and a sect which took the name of Pythagoreans. But ultimately an opposing division besieged and set fire to his College, and many of the Pythagorean students and disciples thus met with an untimely end. And whether Pythagoras escaped himself has never been ascertained.

But the mythical pagan doctrines which he had brought from the East were sown in the two European countries, Greece and Italy; and faith in these pagan fables became widely spread: until Ptolemy, who lived contemporaneously with the early Christians, so scouted and denounced these false ideas, that all belief in the Earth's motions, and the transmigration of souls was wholly abandoned for 1,600 years, *i.e.*, until 1,600 A.D., when Copernicus revived the whirling globe theory.

But Copernicus' followers were too hasty in publishing his writings—even before he was himself fully satisfied that the Pythagorean basis on which he had built his calculations rested on a solid foundation. It is stated that his misgivings, caused by dread of censure, were so great, that they hastened, if not caused his death. His most prominent works were published on the very day he died!

Kepler and Galileo took up the hypothesis, followed by one of the greatest, if not *the greatest* mathematician the world has ever produced—namely, Sir Isaac Newton.

However, the wisdom of mortals is no standard measuring-rod of infallibility and Truth. Newton was no logician, and logic formed no part of his composition. Nor did he profess to possess this quality which is absolutely *essential* to a discernor and founder of true Science.

But, nevertheless, Newton was deficient in this particular. For he spent his whole life in inventing and formulating an elaboration which he called the Solar System, building upon

the mythical fallacies which Pythagoras had brought from the East in the first instance ; and which had been handed down by Copernicus Kepler, and Galileo. Without testing the nature of his foundations he accepted the whole fabrication, and took Copernicus' hypothesis all "for granted."

But Kepler was his ideal fancy, or oracle of wisdom !

Thus we may clearly perceive the origin, and manner of establishment of the globular theory ; and it is a fact that it is based upon pagan myths, and the nature of its foundations are purely hypothetical, as even Copernicus' own confessions will testify.

He owned that the Pythagorean teaching was founded upon hypothesis, and that it was not "necessary that hypothesis should be true, or even probable."

And again, that "the hypothesis of terrestrial motion was nothing but an hypothesis." The supporters of modern astronomy either forget or ignore the self-condemning confessions of the founders of the globe theory, and they also close their eyes to its fabulous nature.

Of course it is highly probable that Copernicus knew where Pythagorus had learned this Arabian Night-like story of the globe theory and kindred fallacies, which were simply the outcome of the wildest and most ungodly imaginations of ungodly men. And it appears that, but *too late*, he, to some extent realized that his writings were based merely upon falsehoods invented in the far East by mystically diseased heathen minds and inventors of magic.

Lord Macaulay's pronounced words, at the head of this chapter, are true : "The truth of the religion of any people may be tested by its cosmogony." We go further and say that the veracity of the Bible may be tested by its cosmogony. Let us therefore apply this test, and let us settle the question whether we shall have to write at the end of these pages, "The Romance of the Bible," or "The Romance of Science."

Having traced the origin of the whirling globe theory, let us now analyze its nature and its bearings by the dictates of Reason, governed by the unimpeachable claims of the Holy Scriptures.

If we only allow our reason and observation to act apart from the prejudices of our early training there is not a single fact in all Nature which goes in opposition to the teaching of the Bible, but, on the contrary, all the practical experiments that have ever been made, go unmistakably to prove

that the Bible is as scientifically accurate when it states that God "hath fixed the earth on its basis that it shall not be removed for ever," as it is in setting forth the promise of Eternal Life and Re-Creation in and through our Lord, Jesus the Christ.

In connection with the Newtonian theory the first thing of which we are informed is that the Earth is a "planet," and that it is one of a group of orbs which circle round the sun, and hence are called the "Solar System." If a reason for such a conclusion is asked for, the only attempt ever made to satisfy the enquirer is entirely unsatisfactory and unenlightening. They tell us that as the sun, the moon, and the planets are globular, therefore the Earth must be globular. But this is contrary to the teaching of the Bible, which states that the Earth is "fixed," and that the heavenly bodies were made to give light to our Earth, and to divide the light from the darkness, and to rule over the day and over the night. Also the true order of Creation is given in the Second Commandment, which states that Heaven is *above*, the Earth *beneath*, and water *under* the Earth.

These statements from Holy Writ, which agree with the evidence of our God-given senses, and by which we behold the fact that the Bible account of Creation is true, precludes the possibility of our acceptance of the unscriptural and wildly romantic teaching presented to us by modern scientists.

Again, we used to be told that ships having sailed round the world proved it to be globe, but, as it has already been shown, this circumnavigation "proof" has been exploded.

It also seems that, the "shadow of the Earth upon the Moon" proof, is on its last legs ; and we hope ere long to see the open admission that the periodical lunar eclipse (even as it has been admitted regarding circular sailing) is "no proof of the Earth's globularity" printed in books for instructing the young. For at last our opponents are *beginning* to realize that the fact of the sun and the moon having been both seen above the horizon at the time when a lunar eclipse occurred proves, even from their own standpoint, that it is *not* the shadow of the earth which causes the so-called eclipse of the moon.

The fact that both sun and moon have been seen above the horizon at the time of a lunar eclipse entirely demolishes the possibility of the shadow of the Earth being thrown upon

the moon, even from the globular standpoint, as the following diagram will show.



If the sun and moon have ever been seen above the horizon at the same time during an eclipse of the moon, it is a proof that it is not the shadow of the Earth which eclipses the moon. Let A be the Earth and its horizon, and let B be the moon and C the sun. Now it is evident that any shadow cast by A could not fall upon B but would fall upon D, because shadows always fall directly opposite to the light, and as the light comes from C to A the shadow from A could not fall upon B but must be cast towards D. Therefore an eclipse of the moon under such condition proves that the Earth cannot be a globe.

We, planists, cannot for a moment admit that it is the shadow of the Earth which is cast upon the moon, for we deny that the Earth is a heavenly body. We may not be able to say what this shadow is with certainty—further than that it may be caused by a dark body coming between the moon and an observer on the Earth, or by the moon being involved in a mass of thick vapour revolving around and above the Earth in opposition to the sun, as taught distinctly by “Zetetes.” But we are not above saying that “how” or “why” God darkens or eclipses the moon may be as “inexplicable a mystery to us as is the growth of a blade of grass;” or, as our Lord said regarding His Holy Spirit, we “cannot tell whence it cometh, or whither it goeth, and so is every one that is born of the Spirit.”

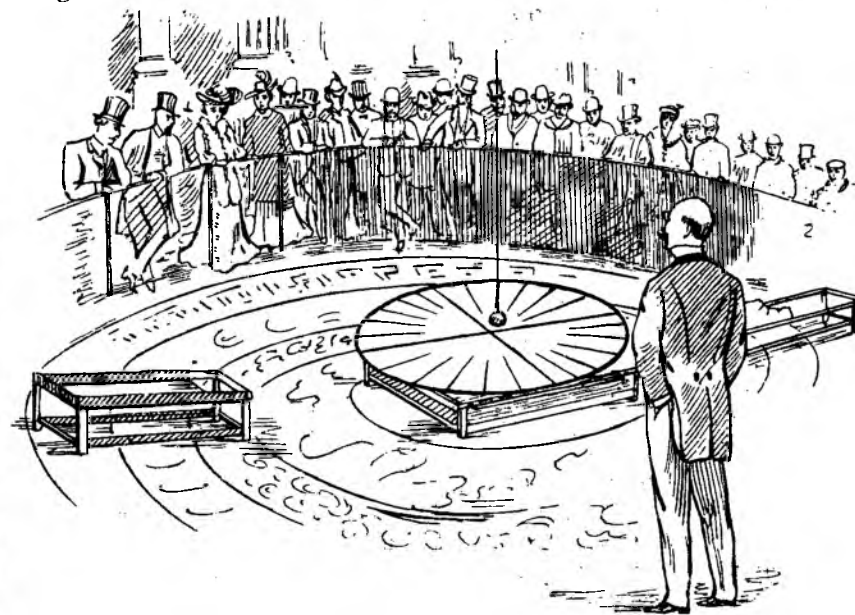
To proceed with our cursory glance at the nature and bearings of the Romance of Modern Science: regarding the Earth's supposed motions, we cannot enquire into the proofs of these motions for the simple reason that no real proofs are ever offered. We are required by our fellow mortals to believe, in contradiction to the evidence of our senses (under the penalty of being jeered at, and called cranks) that the Earth has a number of different motions, the two principal

of which being its “axial” and “rotatory” movements; and yet, not a single fact or proof is ever offered in support of such far-fetched and unreasonable suppositions save that which the cult term “the pendulum proof,” which although no proof at all we must here discuss.

THE PENDULUM PROOF

is a romance of science.

This *pendulum*, modern scientists tell us, affords a *visible* proof that we are living on a whirling globe which, according to a “Work on Science” now before me, is spinning upon its so-called axis at the rate of over 1,000 miles an hour at the Equator; and, in addition other motions, is rushing on an everlasting tour round the sun (the diameter of which is said to be 883,000 miles, and its weight 354,936 times greater than the Earth from which it is said to be about 93,000,000 miles distant,) at the rate of over 1,000 miles per minute. Now to prove that the Earth really has all these motions a pendulum is suspended at the show; the showman sets it in motion, and bids the gaping world of thoughtless men and women to “behold a proof” that we are living on a whirling globe which is rushing away through space!



We believe, with all due deference to the pendulum, and its proprietor, that it proves nothing but the craftiness of the inventor of it; and we describe the show and showman as deceptions. A thing so childish as this "pendulum proof" is one of the most simple and ridiculous attempts to gull the public that could be conceived.

We will quote a recent newspaper report concerning the pendulum, as follows: "The great pendulum which had been hung by the Astronomical Society of France to demonstrate by its oscillations the rotation of the globe, was to-day set in movement at an inaugural ceremony, presided over by M. Chaumie, Minister of Public Instruction. The President of the Republic was represented by Commandant Roulet, and delegations from the Polytechnic and Normal Schools were also present. The official personages were received by M. Poincaré, member of the Institute and of the Bureau of Longitudes, and M. Camille Flammarion, President of the Astronomical Society. They were supported by numerous other savants, mathematicians, astronomers, &c.

"M. Camille Flammarion, after reminding his hearers that it was in 1661 that the demonstration was first made in Florence by Galileo; referred, at considerable length, to the memorable experiment made in France by Foucault half a century ago, and of which the present was a repetition. M. Chaumie commented on the technical explanations given by the astronomer; and then, by burning with a match the string which held it, freed the pendulum, which commenced its majestic oscillations, the stylet marking clearly its passage over the sand."

It has been said that the pendulum experiment proves the rotation of the Earth, but this is quite impossible, for one pendulum turns one way; and sometimes, another pendulum turns in the opposite direction. Now we ask does the Earth rotate in opposite directions at different places at one and the same time? We should like to know. Perhaps the experimentors will kindly enlighten us on this point.

The earth's alleged motion became a leading topic among scientists in the year of the Great Exhibition (1851). The *Literary Gazette* in that year referred to the averment that Galileo had experimented with a pendulum in its simplest form: a weight hanging by a thread to a fixed point. He is said to have discovered the law of isochronous (*i.e.*, equal

in time) vibrations. Foucault was induced, by certain reflections, to repeat Galileo's experiments in the cellar of his mother's house in Paris; and was said to have *proved* an immediate and visible demonstration of the earth's rotation. Suppose the pendulum be set moving in a vertical plane from N to S, the plane in which it vibrates would *appear* to be stationary; however, it is said that M. Foucault, the physicist, showed that the plane is itself slowly moving round the fixed point as a centre in a direction contrary to the earth's rotation, *i.e.*, with the *apparent* heavens E to W. If a "pointer" be attached to the weight of a pendulum suspended by a long and fine wire, capable of turning round in all directions and nearly in contact with the floor of a room, the line which this pointer appears to trace on the ground, and which may easily be followed by a chalk mark, will be found to be slowly, but visibly, turning round like the hand of a watch dial.

As the result of the foregoing averments it was suggested that further observations should be carried out, and accordingly we note that:

"A number of prominent scientists and literateurs of Paris were invited to see the earth revolve; but *what they saw was the pendulum move.*"

"There is an actual, observable, and measureable deviation of the plane of oscillation; the pendulum (not the floor)—not the earth—moves. But a diurnal revolution does produce the deviation; *it is the revolution of the heavens.*"

"The solar sweep completes the cycle of vibration of the pendulum in 24 hours."

We have no faith in the general tenets of the paper from which we have taken the above. However, it was forwarded to us, and we would now remind our readers (as we are apt to remind our hearers) that at times we find truth asserting itself where we least expected it to exist. Yet the truth comes out sometimes, and (as the writer owns) what the people saw was the movement of the pendulum; but what the astronomers wished them to see was the movement of the earth.

It is a forlorn hope!

The pendulum experiment was attempted some years ago with most unique apparatus by an uncle of the present Viscount Cross, G.C.B., G.C.S.I., at his residence on the

Quantock Hills, near the spot where Julius Cæsar pitched his camp after he began his invasion of Britain 55 years B.C., making use of a Latin exclamation, signifying: "How much can be seen from this spot!" The abbreviated Latinism, "Quantum abhoc," in after years suggested the place-name, "Quantock."

Here, when electricity as an illuminant had not been utilized, Mr. Cross encircled his orchard with electric wires and electrified the fruit trees in such a way that the produce was raised 50 per cent. in value. Though Mr. Cross was in advance of the age he could not accept the theory that the Earth moves at the rate of 19 miles per second.

Before accepting the Foucault pendulum deduction he determined to carry out the experiment for himself—choosing the closing days of the year when (according to what we have been taught) the yearly cycle and the earth's "turn over" are completed and another annual cycle and "turn over" begin again. The period of watching and taking notes of the observations extended over a week, and the only result was a slight declination from the exact horizontal position towards the pointer.*

In the last named experiment a gravimeter was used for ascertaining what scientists designate specific gravity—the globe pendulum being attached thereto by means of the horizontal and attachment bar.

A trocheameter was used for the purpose of registering and determining the direction of the circuit in which the pendulum might move; the combined prismatic compass and clinometer being used in connection with the spirit-level, the arrangement being so requisitioned in order to accentuate a desiderated tremulous motion of the earth.

With all the apparati referred to in the foregoing, it was evident that if the Earth rotates 19 miles in a second a very perceptible agitation would have been observable, instead of a temporary declination in all probability caused by the cross-bar arrangement being hung slightly out of the perpendicular. At the close of the experiment Mr. Cross said: "I have found no proof, by actual observation, that the Earth moves round the sun. I have not seen the earth move."

The astronomers would give a great deal to be able to exhibit the motion of the Earth. They know they cannot prove such motion; and so they try to make the unwary

*A diagram to have been printed here was not ready at time of going to press.

believe they see that motion indirectly in the motion of a swinging pendulum. It shows that they are hard pressed for convincing evidence when they resort to fallacious proofs.

The pendulum performance might fitly be named, "The live lion stuffed with straw."

If the Earth had the terrible motions attributed to it, there would be some sensible effects of such motions. But we neither feel the motion, see it, nor hear it. And how people can stand watching the pendulum vibrate, and think that they are seeing a proof of the motion of the Earth almost passes comprehension. They are, however, brought up to believe it, and it is thought to be "scientific" to believe what the astronomers teach. This kind of belief is well defined by Mark Twain's school-boy, who said, "Faith is believing what you know ain't so." But when men professing to be Christians believe such fallacies, which they know to be not only contrary to the testimony of our senses, but contrary to the Word of God, we cannot but grieve to think how they have been misled to put more faith in what is called "science" than in the statements of God's Word and the evidence of their God-given senses.

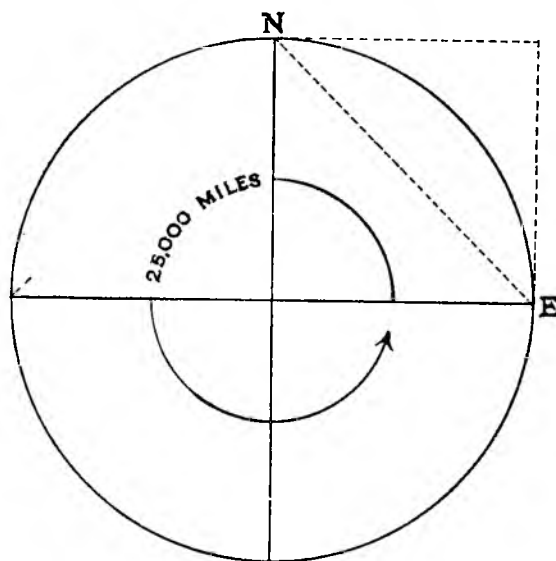
It is all the more sad when a writer like the Editor of *Past and Future*, (who in some things upholds Bible teaching, goes out of his way to tell us that his astronomy is not that of the Bible, but that of the astronomers, which contradicts Holy Writ. I pray that the time is not far distant when all Christians will learn the unreasonableness of not believing in the evidence of their own God-given senses, and in the Word of God the Creator regarding His own account of His own Creation.

The Jews *all* ought also to believe in the Mosaic account of Creation and the Word of the Lord, delivered to them through Moses. We regret that they have not the additional evidence through Jesus the Christ, who endorsed the teaching of Moses and the Prophets. For alas! they have not yet nationally accepted the Lord of Life as their Redeemer.

Therefore, earnestly beseeching both Christians and Jews to discard *The Romance of Science*, I will, before leaving this part of the subject, ask: If the Earth moves, How is it that the motion cannot start a pendulum swinging—if it is stationary to begin with? There surely ought to be no such thing anywhere as a stationary pendulum.

* * * * *

The fallacy of the globular idea is brought into bold relief and made vividly palpable if we picture a man having taken a journey upon this supposed "globe" from N to E, which is estimated to be a distance of about 6,250 miles. According to the hypothecated globular theory it will be seen that the voyager will have fallen over 3,900 miles—the fall being from North to East. This, on a perfect sphere, represents about $\frac{2}{3}$ -ths of the quoted distance. From N to S this huge fall would be further accentuated, and would thus illustrate in a deeper sense the fallacious nature of the globular supposition
(to be continued D.V.)



The preceding article by the Ed., and the one following by "Zetetes," are taken from M.S.S. which they are preparing as joint authors of a book. The articles are printed here to give our readers some idea of the contents of the book, which we shall shortly have published, incorporating with it some articles from "The Earth," which deserve printing in a more permanent form. We shall be glad to receive orders for the book as soon as we get it in the press, which we trust will be very shortly.

THE "THREE POLES" TRICK:

A CANAL EXPERIMENT.

As the very foundation of modern astronomy rests on the assumption that we are living on a whirling globe, all sorts of devices are resorted to to support the idea of the earth's sphericity.

After having demolished some of the best "proofs" it is surely not necessary to examine and review every statement offered in support of this modern and absurd fallacy. But we will briefly refer to one or two others before going on to examine the question of the Earth's supposed motions.

We are informed that the Earth's curvature could be "proved" by three poles placed in a straight line; and such an experiment was tried in a noted instance upon the Bedford Canal, Cambridgeshire. Our examination of this "proof" may throw some light upon the "trick" which was then supposed to win a wager.

We shall, however, quote again from Mr. Gregory's book, published in 1892, p. 110.

"If three poles of exactly the same height be placed in a line the middle one always appears higher than the other two outer ones. Let three poles be fixed in line with their tops cut off at exactly the same height above some level surface (level mind you!), such as the surface of a canal, then, if a telescope is sighted along the first to the third pole the top of the middle pole *will* appear above the line joining the tops of the two outer ones. The cause of this is the curvature of the Earth's surface, and if the experiment can be repeated (why cannot it?) in various parts of the Earth, and ("if") it was found that the curvature was everywhere the same, this *would* prove that the Earth's form is globular, and an approximate determination of its size *could* be obtained. It is found that the middle pole rises 8 inches above the line joining the two outer when the distance between each pole is a mile."

This is a very specious paragraph. It reads well, and an unsuspecting reader might easily be misled by it. But let us examine it a little, and it will be "found to be wholly hypothetical."

The writer of the paragraph quoted does not say that such an experiment *had* been tried and that the result *was* found to be what he said it "would" be if so tried. But in the style of most modern astronomers he jumps from the sub-

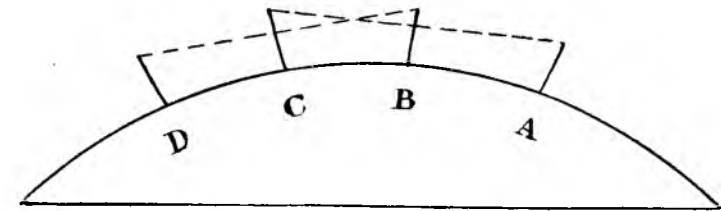
junctive, or hypothetical, mood to the positive, or indicative mood, and says: "If" three equal poles "be placed in a line," meaning I suppose in a *straight* line, "the middle one *always* appears higher than the other two outer ones." Of course, "if the middle pole *is* higher, and if it be left in its position, it "always" will appear so; but this is not what Mr. G. meant to say. We may guess his meaning though his words do not express it. But were he to condescend to give particulars as to time and place others might try the same experiment, and the trick might be found out. But we think we can expose it as it is.

Three poles have to be "fixed in line with their tops cut off at exactly the same height above some level surface." Now, mind! their tops must be "cut off." Good! It is, therefore, self-evident that if the equal poles are fixed on a "level surface" at "exactly the same height," one pole cannot be higher than another; not even 8 inches. If they appear otherwise the poles could not have been fixed at "exactly the same height"! Yet the writer says: "If a telescope is sighted along the first to the third," the middle pole "will" appear higher. The language is vague. The question is, does it appear higher, or does it not? Our scientist says it "will." Well, we shall see soon whether it "will" or no; though 8 inches in a mile cannot appear much.

In the meantime we ask, what does he mean by placing the telescope "along the first" pole? This pole like the others, is upright and perpendicular to the horizon; how then can the telescope be sighted "along" the top of it? This is where the trick comes in! If you remove the first pole and put the telescope in its place, so as to "sight" only the other two, or if you rest the telescope on the top of the first pole, the middle one may appear higher than the third; because the third being further away, looks perspectively less than the middle one which is a mile nearer. Without asking how there can be a middle pole of two, if you remove the telescope some distance away from the first pole, and look over or along the tops of all *the three poles* then they will be "found" to be in the same straight line. And if the telescope be properly adjusted so as to prevent the "error of collimation" the middle pole will *not* be found 8 inches higher than the other two. This can be

tested by experiment; but we shall proceed to prove it by the following diagram.

DIAGRAM VIII.



Let A, B, C, represent three equal poles placed at any convenient and equal distances apart, in a direct line upon the Earth's supposed curved surface—A D. Then, according to the theory of our astronomical friend the top of the middle pole (B) will be "found" to be higher than either of the poles at A and C, as in diagram 8.

Let us suppose for argument's sake that the pole B has been "found" to be higher than the pole C. Now without removing any of the three poles A, B, C, let us add another pole—D—at exactly the same distance as the others. Ignoring pole A, let the telescope be removed to the pole B, and let it be placed in the same relative position to B as it was to A. Join the tops of B and D to represent their false line of sight. It will now be seen that C is the middle pole of the three, B, C, D; and by the same "line of reasoning" the top of the middle pole—C—will be "found" to be higher than either of the poles D and B. But by this "line of reasoning" we have already "proved" that the pole B was higher than the pole C, and now we "prove," in the same way, that pole C is higher than pole B! That is, the pole B—the middle pole experimented upon, at the same time is both higher and lower than the outer pole (C), which is absurd! Wherefore the pole B is NOT higher than the pole C, but exactly the same height above the same level surface; and therefore this experiment does *not* "prove that the Earth's form is globular."

So that our astronomical friend has made at least two gross mis-statements here—one as to a fact, and the other as to the conclusion to be drawn from that supposed fact.

(1) "The middle pole will (not) appear above the line joining the tops of the two outer ones," if the experiment be properly conducted; and, (2) "the cause of this is (not) the curvature of the Earth's surface," for the mere assumption of the Earth's curvature cannot be the "cause" of anything, that is of anything found in Nature.

But stop! It may be—yes, it is—the "cause" of otherwise intelligent men making mis-statements, false statements, and misrepresentations in support of an absurd theory, which its founder confessed was "feigned" for quite another purpose than for strict truth and integrity; for as we have now abundantly shown, the effort to support this superstitious system causes its advocates to depart alike from both.

DIAGRAM IX.

FALSE PERSPECTIVE
(Copied from ROYAL READER Standard VI)



Copied from
SCOTT'S ASTRONOMY (1851) p. 52.

This is further illustrated by their diagrams of ships at sea, and the way they make them climb over a supposed hill of water.

The foregoing diagrams are specimens of the false perspective given in astronomical works and school books. They are so flagrant as to need no refutation. The first ship is seldom placed on the "top" of the diagram, but a little to one side, so that it will appear to rise first before it is made to descend on the other side of the "offing." The first ship, like the first pole should be placed on the "top" of the diagram, and the line of sight should be tangential to the place of observation; then instead of a rise over a convex surface we should see the next pole, or ship, de-

scending at once the awful decline. But then this would be to expose the "trick," of which no doubt the better class of astronomers are fully aware; yet none of them hitherto have had the courage to denounce the deception practised by their supporters. This is left for others.

That it may be seen we are not alone in speaking thus plainly, we will quote, from *Things to Come*, part of an address by Mr. Thomas A. Edison, originally printed in *Suggestive Therapeutics*, he says:

"There are more frauds in modern science than anywhere else..... Take a whole pile of them that I could name, and you will find uncertainty, if not imposition, in half of what they stare as scientific truth. They have time and again set down experiments as done by them, curious out of the way experiments that they never did, and upon which they have founded so-called scientific truths. I have been thrown off my track often by them, and for months at a time. Try the experiment yourself and you will find the result altogether different."

Such is the testimony of a practical scientist and experimenter, and we know his testimony is true as regards theoretical astronomy. We could quote other testimonies, but as we have already given proof that such "frauds" are practised, we think it unnecessary to do so here.

ZETETES.

A DEFENCE OF PHILOSOPHIC DOUBT:
By "Rectangle."

(continued from p. 143.)

In concluding this part of our researches, we quote the following from the *Daily Chronicle* of 14th January, 1893.

"A GEOLOGICAL BLUNDER."

"There is in *Nature* an article by a French writer on Sir Archibald Geikie, Director-General of the Geological Survey, which is just now causing a good deal of talk amongst English men of science. Of course nobody is surprised at the fulsomeness of M. de Lapparent's eulogy. As *Nature* seems to exist for pushing the great official

scientific syndicate of Huxley, Hooker, Geikie and Co., Limited—very strictly limited—which may be said to ‘run’ science in England, M. de Lapparent would not probably have been *permitted* to write anything about a member of it unless it was fulsome. What has really amazed people is the audacity with which a famous historic bungle on the part of the Geological Survey is glossed over, and the Director-General not only credited with the work of those who exposed and corrected it, to his utter discomfort, but actually covered with laurels for thus winning one of the most glorious scientific conquests of the century. The whole thing is delightfully characteristic of State-endowed science in England. If you are one of the official syndicate who ‘run’ it, you may blunder with impunity and make your country ridiculous at the taxpayer’s expense. Scientific men who can correct you shrink from the task. They know that the syndicate can *boycott* them, and by *intrigue* keep them out of every honour and profit, and that the syndicate’s satellites can write and *shout down* everywhere independent non-official critics. They also know that if, perchance, some particular intrepid person does succeed in exposing one of this syndicate, they can always, by the same means—after the public has forgotten the incident—suppress him, and boldly appropriate to themselves the credit of his work.

“The geological secret of the Highlands, with the unlocking of which Sir Archibald Geikie is now credited, was really made a puzzle by the blundering of the Geographical Survey and Director-General Sir Roderick Murchison—and famous courtier and ‘society’ geologist of the last generation. In the Highlands he saw gneisses and ordinary crystalline schists resting on Silurian strata, and he foolishly held the sequence to be quite normal. The schists, he would have it, were not archaic formations, but only meta-morphosed Silurian deposits. He also held that primitive gneiss was not part of the molten *crust of the globe*, but only sediments of sand and mud altered by intense pressure and heat. Murchison, not to put too fine a point on it, ‘bounced’ everybody into accepting this absurd theory, and the whole forces of the Geological Survey, with its official and social influence, together with the unscrupulous power of the official syndicate which

then, as now *jobbed* science wherever it had a state endowment, were spent in perpetuating the blunder and blasting the scientific reputation of whoever scoffed at it. The late Dr. Nicol, Professor of Natural History in Aberdeen, proved that Murchison and the Survey were *wholly wrong*, his proof being as complete as the existing state of science allowed. When he died, Dr. Alleyne Nicholson took the same side, and for years, in relation to this grand problem, it was Aberdeen University against the world. In shouting the last word no voice has been louder than Sir Archibald Geikie’s. It is therefore diverting to find his official biographer stating in *Nature* that all the time he was wrestling *in foro conscientie* with doubts as to the soundness of the official position, and that finally ‘his love of truth’ prompted him to order a re-survey of the whole Highland region. In plain English, the taxpayer, having had to pay for Murchison’s bungling survey, was, because of his successor’s ‘love of truth,’ to enjoy the luxury of paying over again to correct it.

“The real truth, however, is this:—When it was supposed that the Aberdonians were finally crushed, there arose in England a young geologist called Lapworth, who had the courage to revise the whole controversy and take sides with the Aberdeen school. As he developed an extraordinary genius for stratigraphy he not only broke to pieces the official work of the Geographical Survey in the Highlands, but by revealing the true secret of the structure of that perplexing region, he played havoc with the Murchisons and the Geikies and all their satellites, convicting them of *bungling* and covering them with ridicule.....

“Nature, in fact, in these parts had suffered from a much more powerful emetic than Murchison imagined, and when bits of the primitive crust of the GLOBE were thrown up and pushed on the top of more recent deposits, Murchison *jumped to the conclusion* that they were of later date than what they lay on. It was a *terrible blunder*, as the Aberdeen men persistently held, and we do not wonder that Sir Archibald Geikie, who rose to place and power by defending it, is anxious to have his connection with it *veiled* by a friendly hand. But it is rather outrageous for the friendly hand to give him the credit of

conceding the very *error* which he *defended* to the *last gasp*, and deprive Professor Lapworth of the honour of having banished it from science. One of the most diverting things, however, in the article in *Nature* is that Sir Archibald Geikie is belauded because, when frightened by the stir Professor Lapworth made in 1883, he was fain to send his surveyors to go over the Highlands again—he, as their official chief, ordered them “to divest themselves of any *prepossession in favour of published views*, and to map out the actual facts.’ Old Colin Campbell, when he objected to the institution of the Victoria Cross, said it was as absurd to decorate a soldier for being brave as a woman for being virtuous. He did not foresee a still greater absurdity—that of eulogizing a man of science because he instructed his assistants to tell the truth when conducting an investigation into his own blunders.” (*Italics ours.*)—From the *Daily Chronicle*, Saturday, Jan. 14, 1893.

And in a further issue the same paper says :

“Sir Archibald Geikie, Director-General of the Geological Survey, has at last taken notice—in *Nature*, we need hardly say—of our article condemning the attempt to give the Survey the credit of some of the most remarkable discoveries of the age which have really been made by men unaided by the State, and toiling for daily bread as teachers of science. We had heard something that caused us to expose this scandal. The fact is the official ring of State-endowed science not content with *jobbing* the Royal Society and its distinctions, as their critics have been showing in the *Times*, are meditating a raid upon the taxpayer. They want more money, and as a preliminary step their official organ *Nature* of course begins to ‘boom’ their work and reputations. This is a good old game. The only novelty in the situation is that a daily newspaper, for the first time in history ventured to show it up. We do not desire to be harsh to the illustrious scientists who edit *Nature*. It is the duty of all official organs to make big men out of small material. But when they begin to do this by coolly confiscating the achievements of private and independent workers for one of the managing partners in the great firm of Huxley, Geikie, Dyer & Co., limited, we thought it time to protest.....

The letters that have been appearing in the *Times* make some funny revelations about the way the Royal Society is ‘worked.’ Sir Archibald Geikie’s defence suggests that if the *Times* only followed up the game, it scented it would show its readers plenty of sport. We ourselves would make no objection to a vote of money in aid of researches into the ‘frank’ and ‘practical’ manner in which, *and the terms on which*, the official gang of science frequently ‘acknowledge’ the achievements of young outsiders.”—*Daily Chronicle*, Feb. 2, 1893.

(to be continued.)

THE CURVATURE OF THE EARTH.

All things that are moving away from us, or that we are leaving behind, begin to get less, and are lost to sight, when they reach a distance from us of 2,000 times their own height.

Watch a railway train and see it diminish until it becomes the size of a man’s hat, and probably not a mile away, and certainly by the time it is two miles away it will be lost to sight, although a telescope will restore it. This we are told is from the well known principle mentioned above.

The other day I watched a large bird flying, and when it got about a quarter of a mile away it became the size of a common house fly which was upon the pane of the window through which I was looking, and in a few seconds it was entirely lost to view.

Again, I saw a ship at sea—it was sailing close to the shore, which was as near as possible the same height as the ship (say one hundred feet)—and I watched and noticed that both the ship and the shore were reduced in height to the extent of one third. The hull of the vessel was entirely gone from sight, and of course one third of the coast could not be seen—the portion that was gone was, of necessity, the lower part. On looking again I found that two-thirds of the height, both of the ship and shore, had gone, and, still watching, saw both disappear at exactly the same time.

Now we know what the astronomers say, on losing sight of the ship's hull, but can they say about the shore, "that the curvature of the earth hid it"? Well, I will leave them to say it again, for they have said many things quite as foolish and untrue.

If any person desires to know the truth as to whether there is any curvature or not, he has only to fix his eye upon two vessels at sea—ten or twelve miles apart—between those two vessels there ought to be a curvature of many yards, but with a good telescope and spirit level he will not be able to detect an inch.

Then again, the datum line on railways ought to convince every searcher for the truth that the earth has no curvature. Without a datum line no railway has been laid, and railways have been made thousands of miles in extent without tracing an inch of curvature.

In Great Britain no plans for erecting buildings in connection with railways, nor for the construction of railways, that allows for the Earth's curvature will be accepted by Parliamentary Committees.

And it is a fact generally known that the river Nile, for several thousand miles, has no fall beyond that of a foot or six inches.

"TRUTH."

HE ONLY SAW THE PLANE.

On February 7th, 1903, at the age of 93 years, died Mr. James Glaisher, F.R.S., the meteorologist, who once held many important positions in scientific circles.

For avowed scientific purposes he made 28 ascents in balloons between the 17th July, 1862, and 26th May, 1866, the most memorable of which was that of the 5th September, 1862, in company with the skilful aeronaut Mr. Coxwell, when an altitude of 37,000 feet—or seven miles—was reached. This voyage nearly cost both gentlemen their lives.

In Mr. Glaisher's original record of this premier ascent, he, in effect, stated that at the altitude of 6 miles the Earth

appeared to be like a huge bowl, with the edges (horizon) 200 miles away on every hand, and on a dead level with the car of the balloon. In another part of the record he states: "all perception of comparative altitudes of objects, on or near the ground is lost; houses, trees, the undulations of the country, etc., are all reduced to one level; everything, in fact, seems to be on the same level; and the whole has the appearance of a plane. Everything seen looking downwards from a balloon, including the clouds, seems projected upon one visible plane beneath."

Again, he states: "Always, however great the height of the balloon, when I have seen the horizon, it has appeared to be on the level of the car." Also, "I have never seen any part of the surface of the Earth—from a balloon—other than as a plane."

Corroborative accounts by all other aeronauts, without exception, of the above PLANE FACT could be referred to if necessary, but the extracts given should be quite sufficient to convince any honest thinker, that balloonists have the best possible grounds for doubting the assumed sphericity of the world of land and water; yet they have not the honesty or courage to admit they have been misled, and that that which they see, not only *seems* and *appears* so, but IS part of the vast PLANE OF THE WORLD.

The magnificent distant horizon, and the 6-mile depth under the car, observed by Mr. Glaisher, should convince anyone outside a lunatic asylum, that if the World be a globe, the observer, under the conditions at such an altitude, *must have had to look down* to his horizon; but as anything so absurd was not and cannot be done by anyone at any elevation when looking across the sea, or any large expanse of land, the only conclusion to be arrived at is that the World is NOT a globe.

Without doubt, had Mr. Glaisher been nearer 20 than 66 years of age, and had he possessed the telescopic eyes of a South African Boer, or a Bedouin, he would have seen nearly as far again as he did; in fact his view was only limited by the strength of his vision, as the other conditions recorded were favourable.

To the lasting disgrace of the so-called scientific world they allowed some deluded person or persons to attempt to

garble and modify Mr. Glaisher's original straight-forward account some time after publication; they seeing no doubt that such did not square with the globular theory; but as this is on a par with the ostrich burying its head in the sand it need not trouble truth-seekers.

Before concluding this notice it may be well to remember that every observer makes his own horizon, which on being approached continuously recedes, and the limit to which this imaginary line may be seen varies as much under certain air and other conditions as most people's eyes vary in strength. The school-men infer that this varying line is a fixture, or as if it were an apex to a following downward curve; this we know by innumerable demonstrations made from beaches, vessels, cliffs, and other elevations, and balloons, is absolutely false. And yet the vanishing ship trick is still chattered about, not only by children at school but by grown-up people who think they are educated.

We are certain that if any globe-deluded observers, from any position, could see a portion of the supposed globe, by having to look *down* to their horizon in the slightest degree, the world would soon hear of it, and the professors would rip their gowns for joy, and hug each other. But the poor creatures will never have this satisfaction; so it is useless for them to save up their strength and gowns in anticipation of such an impossibility.

We *know* it is impossible to see that which is non-existent, and the evidence of our senses is against such rubbish as the World being a planet; against it being a globe; against its supposed various fearful motions; against its vast oceans being anything so unnatural as convex; in fact, dead against all the whimsical, sophistical, and God-dishonouring ideas and inventions, by which Modern Elementary Theoretical Science attempts to establish all such scatter-brain absurdities.

And now, Mr. Glaisher, with due respect, you are wished farewell by

H. H. D'ARCY ADAMS.



LECTURE

AT EDDY WOOD INSTITUTE, SHORNCLIFFE.

Is the solar system the clock of the Bible?

The question before you may be somewhat startling to some, and I dare say I am right in thinking that there are only a few present who would give an unhesitating answer; nevertheless, there are a growing number of persons scattered throughout the various denominations of the world, who, if asked the question, would at once give a definite answer, and that in the affirmative.

In my rambles in the East I have come across stone monuments and sundials, some of which are crumbling to decay, showing that in days long gone by, the knowledge of the constellations and the movements of the sun, moon, and planets was of a very high order.

In common with some here, I have also had the sadness to see crowds, numbering many thousands, who would plunge into the rivers, or perform some other act of worship, on the signal from a leading priest who would be watching for the first indication of an expected eclipse, or rising of the sun, moon, or some particular star or planet.

While heathenism has debased the use and knowledge of astronomy, Christianity at large has lost its value as a support of God's Word, His glory, and His power.

Genesis i. 1, 2 (idiomatic translation).—You notice the marked difference between the text of the A.V., which, grand as it is, has lost much of the original thought with which it was invested. Here we have revealed to us the condition of things when God commenced to bring order out of disorder, and make the Earth habitable for man and the lower organisms.

Here are the proofs of a common start of the motion, as we see it to-day, of the solar system. We shall enlarge on a few of them as time permits.

These rings, of various sizes, represent the lines of time which never can meet, but which can be positively traced back to a common starting point. All are methods that can

be used to demonstrate that the present age commenced 5,901 years ago.

Does the sun celebrate its birthday? Yes, and keeps it up four days. It commenced its present course by observing a perfect sidereal day, which is repeated every 20th of September, the exact commencement of each year. On the 23rd the sun enters Libra at the autumnal equinox; then the Earth has day and night equal everywhere. I may here say that the sidereal day is not one of 24 hours as it is in the solar day, but 23 hours, 56 minutes, 4 seconds; the latter being the time it takes for any star to leave and return to the same place overhead the next night. The difference being that the sun has progressed about one degree on its journey round the Earth. The sun's starting point is also a beautiful geometrical as well as an astronomical figure.

Now who was the prime mover in all this wondrous perfection? We have seen how Elohim brooded on the face of the deep. Are we left in doubt as to who is intended? No, certainly not.

This is what we received by revelation 4,000 years after the event. This wonderful being, Jesus Christ, Who in the secret councils of the Godhead planned this age with all its wonders, and with the power of the absolute and Almighty God in six literal days created the world, and at the same time called into being everything necessary for the blessing and welfare of mankind. This is the wondrous person who claims our allegiance; is He not entitled to it? Can we show our love sufficiently? And yet impotent man has the audacity to leave Him out of his arguments, as if He were not; as if He had not laid down His life for us.

The cosmogony which contradicts the writings of Moses and does not take into consideration the presence of God's Son at Creation, or rather organization of the present age, is learning gone mad, and cannot possibly stand the test of practical science.

The term science is a word which scientific men sometimes use rightly, but it is at the same time a juggling word with which imaginative speculators label their effervescence, as we well know it means "known facts" and nothing more.

If the traducers of Moses remained in the ranks of the speculators we should not have so much case for alarm, but

the very greatest enemies of revelation have been and are in the fortress they should be defending; where would the infidels of to-day have been but for the essays and reviews of 1862? They had the system of Voltaire to work upon. Infidelity was then (1862) provided with shot and shell, which have been hurled against the Pentateuch with unceasing energy. If we who love our king, our constitution, and our country, were posted in a fortress and we discovered one of our comrades drawing the explosive charges out of the shells, or sending messages to the enemy, giving information as to what he considered to be weak spots in our position, would'nt we rush him off and have him placed in irons at once?

The statement of Moses, which I believe to have been given directly by the inspiration of the Holy Spirit, not only states that the lights of heaven were for years, days, and seasons, but also for evidences (which is a better word than signs); what a great pity that their value as evidences has been somewhat obscured. Josephus tells us (b. i., p. 23) that the children of Seth, on being told by Adam that the Earth was to be destroyed both by fire and water, made two pillars, one of stone and one of brick, on which they described their knowledge of the heavenly bodies. I noticed that one of his translators, however, while admitting possibilities, tries to nullify the effect of the original statement, and such editing has been going on from the beginning until now.

When the *Arch Higher Critic* had not got his hands quite so full in early days, he conducted his business in person, using the body of the serpent as his medium. As time went on he employed emissaries both inside and outside the fortress. Jannes and Jambress were pretty active outside the fortress with Pharaoh, but the criticisms of those inside—Korah, Dathan, and Abiram—culminated in a frightful catastrophe.

A week ago yesterday I was referring to the "helps" at the end of a Bible I have recently bought, and dropped across these words: "The history of Egypt has been traced back to more than 4,000 years B.C." If it is not out of fashion to call a spade a spade, then that must be called a distortion of the truth; for the object of such writers is to

belittle the sacred records; for lack of knowledge it goes on to say that this is gathered from the writings of Manetho.

Now we definitely know that if this Egyptian cat worshipper is correctly reproduced, he had very little knowledge of the truth of chronology or very little regard for it, for Eratosthenes, who lived at the same time, had charge of the great Alexandrian library and a far greater opportunity of knowing the truth, computed the length of the dynasties at 3,000 years less than does Manetho, who it is known had no connected records to rely on and placed all the different dynasties consecutively instead of contemporaneously, as some of them are known to have been.

Our modern critics repeat the old cry with changed names and it has become "Away with Moses! Give us Manetho."

Any would be chronologist who tries to make this age appear more than 5901 years must have a very prolific imagination, for neither connected history nor the science of astronomy will support it.

It will be well to state here that all planetary motion proves that that prince of chronologists, Archbishop Ussher, is perfectly correct, except for about eight years near the birth of Christ, and it seems almost a miracle that he was so wonderfully correct; one thing is certain he loved his Bible and was faithful to its teaching.

To show that light can be quickly brought into existence, intensified, or removed as occasion requires, we have only to remember how easily we can control our artificial lights, whether they are stored in a solid, liquid, or gaseous form. Are we wise in doubting God's ability to do what we ourselves can so easily do? Can He who made the eye see not, or He that made the ear hear not?

God has not only honoured the Earth in an astronomical sense but also by sending His Son to die for our salvation, and having accomplished this work He is now seated at the right hand of the Father in heaven, in the glorified body which He took from *this earth*, leaving only His blood crying for vengeance on the one hand, and pointing to God's love and forgiveness on the other.

The eclipse cycle shows that three months must have preceded the first winter solstice. The first eclipse was a solar one, and occurred on the 1st January, 0, A.M. The

life history of this solar eclipse, or the period of its recurrence, is 1293 years.

Here we have solar eclipses by progression, each one obscuring the sun less until the moon passes above the plane of the sun.

A total solar eclipse can only be seen in a limited space of the Earth's surface; the one here represented would be seen above the equator; the moon's shadow will touch the equator and extend a little to the north of it.

The Eclipse Cycle.—Every eclipse term lasts 18 years and 11 or 10 days, after which it repeats itself. This is not the one called the METONIC CYCLE which was so well known to the ancients, who did good work with it.

Then we have the brightest star of the heavens, called Sirius or the flaming dog star, which we now see rising early every evening and following the great constellation, Orion. This is a marvellous time-keeper. Every 162 years it rises a few minutes before the sun, every other star having disappeared before the rays of the sun almost half an hour before. The rising of Sirius synchronises with the rising of the Nile. We want no better chronological proof of the length of the present age than this wonderful star furnishes.

Now we will consider the positions of the planets as they were recently situated for the first time since the Flood. The influence which we know they exert on each other probably had something to do with the recent cataclysms and seismic phenomena.

Antediluvian Patriarchs.—We now come to one of the most startling chronological discoveries of modern times, viz. : that the record of our seven days has never been broken and has always existed since Creation. If all the wit and wisdom of all the sceptics could be concentrated into one representative he could not overturn or even touch with an insinuation the Lunar Solar Cycle and the way it proves the early writings of Moses. The records that are given of the Antediluvian Patriarchs gives the age of each when his son was born, this added to the age of Noah, 600, gives the year of the world when the Flood came. This we see was 1656 A.M.

Lunar Cycle (7 years of 354 days).—The nine famous occurrences of the Flood year, took place on the seventh,

or Sabbath Day (the day we now call Saturday), and the tables of figures in the above cycle are what anyone with the ordinary amount of intelligence may make out for himself. This subject is open for anyone to study, and I hope that something which has been said may cause you to think that it is possible after all that the "Solar System is the Clock of the Bible."

Discussion followed, with some objections along the lines of the old bone and dust-heap theories.

The audience were so well pleased that the speaker was invited to continue the subject in a fortnight's time. This invitation was accepted. Some figures, by way of proof, will then be dealt with, and some lively discussion is promised.

Colonial & Yry. Depôt,
Shorncliffe.

J. MARRIOTT,
Sergt.-Maj.

UNDERSTANDING.

The Fatherhead of all truth and knowledge has given man an unerring law as a guide to understanding :

"Try all things : hold fast that which is good."

But man has given up God's Word, which he considers is a time-worn old fashioned book, unsuited to our advanced civilized era, and asks the question, how would it be possible for a man to prove all things when it takes the whole of a life-time to thoroughly understand a small branch of modern science ?

But surely if he would use reason he must perceive that upon all subjects there must be two sides ; and if we judge of these without looking into them for ourselves we neglect God's greatest gift—our understanding. When we are ordered to "prove all things" it is not required that we should plunge into the various deep studies which man interests himself in, but that we should not take up any definite standpoint until we have thoroughly thrashed out the matter for ourselves.

Nevertheless, it is the custom to read a book embracing certain theories, and instantly, haphazard to either, become partisans or violent opponents of the ideas set forth, and by so doing they level themselves to the animals who have no understanding.

Locke says : "Let no man, therefore, that would have a sight of what everyone pretends to be desirous of having a sight of—truth in its full extent—narrow and blind their own prospects. Let no man think there is truth but in the sciences that they study." Another writer says : "Man is a bigger fool than an animal on account of his greater cleverness." And sometimes you will find that the cleverer the man the greater the bigot, which is accounted for by the substitution of cramming for education, and of hypothesis for proof.

Again, Locke says : "We take our principles haphazard upon trust, and without ever having examined them, and then believe a whole system upon a presumption that they are true and solid, and what is all this but childish, shameful, senseless credulity ?"

Again, we must not let the theories which have been taught us in early youth have too much weight—which is a common error, even among men who have been exceptionally well educated, and who seem to look upon dogmas taught them in infancy as almost divinely revealed facts.

Nor should we allow reverence, nor any prejudice soever, to give beauty to any opinions. I have met men holding beliefs so tenaciously who, on finding they could not maintain their principles, so taken up and rested in, have cast away all belief (or pretended to do so) and called themselves agnostics.

Therefore let us search for truth reasonably, and never hold an opinion so blindly that we are not willing to hear any fresh ideas which may help us to throw away error and "hold fast that which is good."

W. A. B.



MAN'S PLACE IN THE UNIVERSE.

The *Fortnightly Review* of March 1st, 1903, contained an article, with the above heading, by Alfred R. Wallace, which we have been requested to examine in *The Earth*. The article is rather long; so if the reply to it be equally long, and the Ed. of *The Earth* cannot find room for it in one issue, I suppose it will have to appear in two.

Mr. Wallace is a scientist of no mean repute, and his name is familiar to Zetetics in connection with an experiment tried on the Old Bedford Level. This experiment was fully described at the time by the referee for John Hampden, Esq., Mr. William Carpenter, especially in two pamphlets published by him, entitled respectively *Wallace's Wonderful Water*, and *Water Not Convex; the Earth Not a Globe; demonstrated by Alfred R. Wallace, F.R.G.S.* We need not now refer further to these pamphlets, except to say that they were well received, and reviewed at the time; and that the writer of this article will be glad if any of our readers can spare a copy, especially of the latter, as they are both now out of print. It would be for the interest of the Plane Truth if these trenchant pamphlets were both reprinted. With these preliminary remarks we will now turn to the article under review.

In his opening remarks Mr. Wallace says:

"To the early astronomers the earth was the centre of the visible universe, sun, moon, planets, and stars all alike revolving around it in more or less eccentric and complex orbits; and all were thought to exist as appendages to our globe, and for the sole use and enjoyment of man — 'the sun to rule by day, and the moon and stars to rule by night.' But when it was found that our earth was not specially distinguished from other planets by any superiority of size or position, it was seen that our pride of place must be given up."

This opening paragraph seems to be the key to the writer's position; for, while it contains a confession of the ancient belief and truth, it is mixed up with modern underlying assumptions which, until proved, vitiate not only the "New Astronomy" upon which the writer leans for support, but the whole of his carefully elaborated argument. It will be noted he (a) calls the "earth" "our globe," not to be distinguished in this respect from the "other planets"; (b) that

this was "found" by the establishment of the "Copernican system"; and (c) that ancient writers only "thought," although they "naturally" thought, that the sun and moon were intended "for the sole use and enjoyment of man." Thus there are three assumptions underlying his position at the very outset; the first and most important, because it is *the* assumption which underlies all astronomical theories and conclusions, namely, that the earth is a "globe," and a "planet" amongst "other planets," being "our globe"; and second, that Bible and other ancient writers only "thought," though they very "naturally" thought, there was only one sun to rule the day, while modern scientists believe there are "millions of suns and systems, many of which were (are?) probably far grander and more important than ours"; and, third, that all this was "found" out "when the Copernican system became established."

Now we should like to ask what was the year of our Lord when the Copernican system "became established"; and who established it? It was certainly not established by Copernicus, for he honestly confesses that the system was based on hypotheses, or suppositions. He admitted even more; for he wrote.

"It is not necessary that the hypotheses should be true, or even probable; it is sufficient that they lead to results of calculation which agree with calculation.....Neither let anyone, so far as hypotheses are concerned, expect anything certain from astronomy, since that science can afford nothing of the kind."

Yet, knowing this, Mr. W. quietly assumes that the Copernican system was "established"; and that it was "found" that our earth was a "planet"! Until we are informed by whom, how and when, this system was "found" to be true, and thus "established," we must beg leave to accept the Copernican Confession before the statements of the writer under consideration.

As I have already shown in the pages of *The Earth*, "Gravitation" is another tremendous but unproven assumption underlying the "New Astronomy"; and it equally underlies M. W.'s belief and article. But I mention this not merely to show what hypotheses underlie this question, but for the sake of a short quotation from Sir Isaac Newton

respecting these suppositions. He says :

“ But the reason of these properties of gravity I could never hitherto deduce from phenomena, and I am unwilling to frame hypotheses about them ; for whatever is not deduced from phenomena ought to be called hypothesis, and no sort of hypotheses are allowable in experimental philosophy.”

Yet writers on astronomy pile on supposition after supposition as though they would, by the number and subtlety of their guesses, make up for their lack of foundation facts, and certainties. But in the interests alike of religion and of logic we cannot allow these unfounded speculations to pass unchallenged. And that they have a direct bearing upon important religious questions and doctrines the writer of the article in the *F. R.* himself ably shows. He says :

“ The tendency of all recent astronomical research has been to give us wider views of the vastness, the variety, and the marvellous complexity of the stellar universe, and proportionally to reduce the importance of our little speck of earth almost to the vanishing point ; and this has been made use of by the more aggressive among modern sceptics to hold up religious creeds and dogmas to scorn and contempt. They point out the irrationality and absurdity of supposing that the Creator of all this unimaginable vastness of suns and systems, filling, for all we know, endless space, should have any *special* interest in so pitiful a creature as man, the degraded or imperfectly developed inhabitant of one of the smaller planets attached to a second or third rate sun ; while that He should have selected this little world for the scene of the tremendous and unique sacrifice of His Son, in order to save a portion of these ‘ miserable sinners ’ from the natural consequences of their sins was, in their view, a crowning absurdity too incredible to be believed by any rational being. And it must be confessed that the theologians had no adequate reply to this rude attack ; while many of them have felt their position to be untenable, and have renounced the idea of a special revelation and a supreme Saviour for the exclusive benefit of so minute and insignificant a speck in the universe.”

This paragraph shows the importance of the Zetetic contention from a religious standpoint, for we readily admit that if the astronomical guesses be true relative to “ all this unimaginable vastness of suns and systems,” then the above infidel objections are founded upon good reasons ; but if these suppositions are not true, according to the Zetetic contention, then the sceptic is unreasonable in taking for granted the truth of acknowledged hypotheses, and the theologian highly culpable in giving up historical and revealed truth for mere speculative and unproved assumptions.

(to be continued D.V.)

TO THE EDITOR.

I had a copy of the Christmas Number of *Present Truth* lent me, and in an article for little children, called *Christmas Candles*, it says : “ The moon and the planets have no light of their own any more than our earth has—it is the reflection of the rays of the sun, which, though it has passed for a time out of our sight, is still shining in the heavens, and giving us light by night as well as by day.....The moon is but a bearer of the sun's light.”

Now when people are trying to teach children Scripture truths, why do they turn aside to the theories of heathen philosophers, and the teachings of men whose one aim is to deny the Bible and the need of a Creator or Saviour? *Genesis* i. plainly teaches that the Lord made *two* great lights, and innumerable smaller ones ; the greater—the sun—to rule the day, and the lesser—the moon, and stars—to rule the night.

The revelation of God is plain ; not delivered in mysterious language, and, when understood, corresponds with right reason. So why try to muddle our children's heads with a lot of trash, that the very propounders do not rightly understand, and cannot substantiate? No scientist has ever given proof that the moon receives its light from the sun, but true science teaches that they are independent lights, because being lights of such different character one could not be a reflector of the other, as a reflector must necessarily reflect what it receives ; so instead of our earth having *no* light of its own, Scripture teaches we have *two* lights all our own, for they were set to minister to our earth, to divide day from night ; to be for signs and seasons ; and for days and years.

And further, the writer tries to teach that Christian religion is moonshine, by saying, “ Just as the moon reflects the sun's rays, so the Christian should catch the rays of the Sun of Righteousness and shed them over the world.” With all due reverence to the writer's object, I trust that Christians will do their utmost to shed abroad the rays of the Sun of Righteousness exactly as they receive them, unmixed with the traditions and fables of men, which, like the moon is supposed to do, would turn all the warmth of Love into

coldness of heart, and make God a God to be feared instead of a God to be loved and trusted, and a God to whom we can unburden our inmost soul and ask for guidance in times of need ; and to whom we can take our highest hopes and greatest triumphs and know that he feels alike our joys and sorrows.

If Christians were to study their Bibles more, and act according to the Divine teachings, they would soon take away the taunt of Christianity being moonshine.

I will here take the opportunity to reply to your correspondent, Mr. H. J. Young, on

LEVELLING AND THEODOLITE WORK.

I have been engaged in building operations, large and small, for the past nineteen years, and have always levelled work in the manner described by him, but I contend they are points in a *true level*, not points of a great circle ; and I should very much like to know by what method a spirit level describes a circle. He says that the lengths of level line used in building operations are not long enough to distinguish between level and horizontal lines. I should like to know the difference, as I have always found the horizon line at sea *perfectly level* ; so I fear he will be unable to give us a practical proof of the difference.

If the lengths of building lines do not satisfy him, perhaps the evidence of a practical engineer may interest him. Mr. W. Winckler, M.I.C.E., says : "As an engineer of many years standing, I say that this absurd allowance is only permitted in school books.....I have projected many miles of railway, and many more of canals, and the allowance has not even been thought of, much less allowed for."

This allowance for curvature means this : that it is 8-ins. for the first mile of a canal, and increasing at the ratio by the square of the distance in miles, and thus a small navigable canal for boats, say 30 miles long, will have by the above rule an allowance for curvature of 600 feet. Think of that and *then please credit engineers as not being quite such fools*. Nothing of the sort is allowed.

He asks how do I know two plummets would hang parallel? Practical proof—why do we plumb the walls of a building? His reference to the pendulum has already been answered.

Crockham Hill.

C. RHYS EVANS.

IS THE EARTH ROUND?

"Lady E. A. M. Blount, editor of *The Earth*, held a drawing room meeting at 1, Queen's Gardens, Richmond, on Thursday, March 12th, which was well attended. Amongst those present were the Mayor (Mr. A. Chancellor), the Misses Davies, Miss Wilkinson, Mrs. Ferguson, Miss Behren, Mrs. and Miss Howey, Mrs. Priestman, Mrs. Barnett, the Misses Dixon, Mrs. Claridge, and others. The Chair was taken by Lieutenant-Colonel Wintle. Her ladyship gave an interesting and instructive address, in which she promulgated the theory that the earth was flat and motionless. Amongst those who took part in the discussion that followed were the chairman and Dr. Berks Hutchinson, of Capetown.

We have received a letter from Mr. Sydney Holland, Chairman of the London Hospital, asking us to insert in *The Earth* an appeal for funds for that institution. We are very much pressed for space just now, and so we are sorry we cannot at present insert the whole of his earnest appeal. We believe the hospital is doing good work as far as we have been able to enquire, and that it is worthy of the support of Zetetics who have any to spare in that direction. Speaking for myself, personally, my whole time, means, and energy are taken up with the work in which we are engaged.—Ed.

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.

IS THE EARTH A GLOBE?—REPRINTS FROM NEWSPAPERS.—
 "Lady Blount will chiefly devote herself, I understand, to the question, 'Are we living on a level and immovable earth, or on a globe revolving at the rate of about 1,000 miles an hour, and travelling through space about 1,500,000 a day?' The greatest scientists, and the oldest and newest geographies, tell us that we are on a globe, but Lady Blount will seek to show that that is impossible, and to hear her lecture 'all thinking people' are cordially invited, the admission being free. The first thought that will arise in the minds of most people on this subject as a proof of the globular theory is the teaching about the ship at sea, whose masts are seen before the hull as it approaches the shore. I mentioned this matter to a surveyor who apparently believes that the earth and sea are a plane, and he replied that it was no proof that the earth is a globe, but that it was explainable by the laws of perspective, and that after a ship has entirely disappeared from the vision of the naked eye it can often be restored by a telescope. He himself had seen the whole of the Gunfleet light-ship off Walton-on-the-Naze by the aid of a glass, whereas, according to the supposed curvature of the earth, it would be 43 feet below the level of the line. The same gentleman also told me that the datum line from which surveys are made is always a horizontal line, and that no allowance for curvature is made in cutting canals. It will doubtless be highly interesting to hear Lady Blount's description of how, as the Psalmist said, 'The world also is established that it cannot be moved.'—*Essex County Chronicle.*

FOUR LINES FROM DRYDEN.—Dryden wrote :

"By education all have been misled
 They so believe because they so were bred.
 The priest continues where the nurse began,
 And thus the child imposes on the man."

St. MICHAEL'S LITERARY SOCIETY.—The meeting was held on the 9th inst., in the Men's Institute. Rev. T. W. Henry, B.A., occupied the chair. A lecture on "The Flat Earth," was delivered by Mr. Atkinson, and proved both interesting and instructive. Several questions were asked by different members, and Mr. Atkinson having replied, a vote of thanks was passed to the essayist, and the meeting was brought to a close by pronouncing the benediction.—*Belfast Evening Telegraph, 10/2/03.*

WHY MEN DO NOT GO TO CHURCH.—"My opinion is that most men want a religion and a public worship, but the religion they seek must follow the lines of scientific enquiry, abandoning error when discovered, and retaining only what is rationally true."

"The reason why men have ceased to go to church is because they have ceased to believe in the myths of the Bible—the creation of the world, the fall of man, original sin, and the atonement."

"The cause is simply the progress of science."

From *The Morning Leader.*

MARCONI AND HIS GREAT INVENTION. British Government's Caution.—Mr. Marconi was the guest at the house dinner of the Savage Club in London on Saturday, and made a speech upon wireless telegraphy. The results attained, he said, had greatly increased all over the world the great interest taken in so fascinating a subject. His system of wireless telegraphy was now used on twenty-five transatlantic liners; it had established communication with stations on both sides of the Atlantic, which communication was valuable not only to passengers, but in some instances had been serviceable to the safety of ships. (Cheers). These land stations on both sides of the Atlantic could be spoken for a distance of 200 miles, but he confidently hoped to increase that distance very considerably shortly. He felt bound to acknowledge the great encouragement King Edward had already given him. As early as 1898 His Majesty, as Prince of Wales, had lent him the Royal yacht Osborne for three weeks at a time for his experiments. The British Government had to be very cautious what steps they took, as this subject was one affecting the whole empire. He sympathised with that caution, but as half a Britisher himself—(cheers)—he should be sorry if the result of that policy was that every continental nation should reap the advantages of this system of wireless communication before England. (Cheers).—*Northern Daily Telegraph, 23/2/03.*

LETTERS.

RAPID ROTATING. To the Editor.—In an astronomical work I have been studying there is the figure of a circle representing the orbit of the Earth, in which two horizontal lines are drawn, the lower line dividing the circle into two equal portions, the upper line representing the Ecliptic, on which a figure of the sun is placed—said to be 2,000,000 miles above the line which divides the Earth's orbit into two equal portions. The Earth is represented as starting on its annual rotation from the centre of the orbit on September 20th, and on September 23rd reaches the plane of the Ecliptic. That is very rapid travelling—two million miles in three days. It is very well that we do not go at that speed all through the year, as another figure shows the months when the earth moves slower; the globist whistles "Brakes down," and when it gets to 20th September they open wide the "throttle valve."

We had better be on the look out when September comes and give a wide berth to the tall chimneys, and it will be as well to do as they do out West, that is dig a hole near our dwelling to flee into when it becomes unsafe on the

surface of the earth. This kind of philosophy reminds me of a practice I, with other boys, had of frequenting the barracks to hear the old soldiers tell of foreign countries; and though they usually told us facts, they sometimes tried to see how much they could get us to take down. I compare this 2,000,000 miles in three days to the old soldiers' stories, and decline to swallow it.

PHILOMATHESEAN.

[We do not wonder you cannot swallow such stories. The great mistake in such writings is in attributing the motion of the *sun* to the earth. The earth has no such motion, and yet in works which professedly uphold Bible teaching we are again and again treated to these fabulous stories of the earth's career through space on an everlasting tour round the sun, and moving so many thousands, and in this case so many millions, of miles, as described above. Mr. Dimpleby's works are of this class. His books contain many good things on time and Bible chronology, though all that he says he cannot verify; but his greatest mistake, as we have said, is in contradicting the Bible and Reason by insisting the earth is rushing through space at an awful rate, while the Creator and our own senses tell us "that it is fixed" so firmly on 'foundations' that it cannot be moved at any time.—Ed.]

I am interested in the article appearing in the current number of *The Earth*, and which deals with the subject of the tides. I am pleased to see an attempt to account for the opposing influences of moon and earth, but I think the theory advanced is fantastic and wrong in that it overlooks the fact that the elevated portion of water, though in a state of expansion, as per theory, would still have weight, and water finds its own level.

My own belief is that a wave of *intensified gravitation* is continually traversing the interior of the earth, and that the waters of the sea are attracted to that portion of the earth's surface immediately under the influence of this wave, but of course I do not dogmatize on this.—J. H.

[As gravitation is only a theory which has never been proved, Zetetics cannot admit the assumption of any hypothetical power to explain the cause of the tides.—Ed.]

2, King Edward Terrace, Beehive Road, Baddow Road,
Chelmsford.

Dear Madam,

Feb. 24th, 1903.

I thank you for the package of literature, which I have read and return as requested. I noted the articles on *Sunset* and *Sunrise*, and of course agree with you as to the effects of Perspective. As to Refraction—I think that the so-called "Ether" must be less dense than the atmosphere, or it would not remain above it. This reasoning from everyday observations—(Is reason from analogy, *not* from observation.—Ed.)—and, as in the majority of cases, light passing from a rarer to a denser medium is refracted toward the normal, it is only reasonable to *suppose* (!) that this is the case with the rays of sunlight. Of course I do not see how we can actually prove this to be the case; mirages *seem*—"seem;" saying they seem to do is not proving they do.—Ed.)—to confirm our conclusion in regard to the behaviour of light in an atmosphere of varying density; neither do I see how it can be disproved, nor the reverse proved—(by first learning that the earth is a plane from the fact that water is level.—Ed.)

If light does not travel in straight lines, the matter is worthy of thorough in-

vestigation; but I think it has been proved conclusively that the direction of a ray of light travelling through a homogeneous medium will, until reflected, be in a straight line—(this is not the question, as you show in the next line.—Ed.)

Of course the atmosphere is not homogeneous, but the density varies with the height, so that the direction of light rays would not be affected laterally.

All experiments prove that light is radiated equally in all directions; and the Creator being so strong on the point of uniformity and order, is it reasonable to suppose that the sun which is a source of light, should act so contrary to all other lights? (Do you know any experiments that have been tried with this object in view, and, if so, under what conditions were they made?—Ed.)

Do not think that I am a believer in extreme "scientific" statements, for I maintain that the authors of such have stepped out of the depth of legitimate reasoning, and are floundering in the ocean of baseless conclusions. (You are doubtless right.—Ed.) Believe me, yours very sincerely,

HAROLD A. WATKINS.

Shorncliffe. 26/2/03.

Dear Lady Blount,—I write to thank you for your kind letter of the 14th inst., and now forward some of the results of my observations, which have been as exhaustive as time would permit. We have recently been very fortunate in having several days on which the atmosphere was perfectly clear, and, as I think I have previously told you, the spur of the hill on which we live is, perhaps, one of the best places on the earth for making such observations, remembering that there are objects in sight, and at such convenient and approximate known distances; and also that the great commercial route below us comprises a greater part of the London, North Sea, Baltic, and North European traffic which proceeds west, large numbers of ships are always in sight.

I intended sending you a list of questions of a general character, and which do not appear to square with your views; but seeing several statements, by "Zetetes," reprinted in the current *Earth*, on what he terms the "hull-down proof," I venture to forward my contribution on the same subject, (as the proposition that water is flat seems to be the one on which "Zetetes" stakes everything), and will merely ask you one astronomical question: "Why, instead of travelling along the horizon, do the most southern constellations *appear* to revolve in one sidereal day *round Octans*."

It will, perhaps, be well, before I proceed with my observations, to say that my position here is similar to that of a superintending accountant and confidential clerk of a large office. The staff is composed of men of broad experience and who have travelled over most of the known world. One has resided some years in Central America, and tells me that among his acquaintances there was a sea captain who was a strong pianist, and of whose ideas he has imbibed. Two others in the office declared that water was flat; several are globists, and others had open minds. It seemed necessary to tell you this to enable you to see that our investigation was not a one-sided affair. Should any of your friends doubt my statements, or wish for further information, I shall have no difficulty in obtaining and forwarding the statements of others, or if preferable the addresses of my co-investigators.

I will, as briefly as possible, relate a few of the chief tests which may for convenience be described under four heads. Observations were made from an elevation of 250 feet, our strongest telescope having a power of 160 diameters, and several observers compared notes at each position. Humanly speaking, the conditions were perfect. Vessels were seen to rise into clear view as if they were coming up over a bend; although the distance was considerable there was no mistaking the manner of these appearances and disappearances, which agreed with the descriptions given in the ordinary text books. The vessels went out of sight at precisely the same time to all the observers, whether

they had glasses of high or low power. The slightest haze would, of course have altered these conditions, but we were fortunate in having it clear.

(2) Two points were selected—Cape Grez Nez on the French coast, and Dungeness on our own coast. All the vessels and portions of vessels seen above the horizon within these points were counted from our elevation, and also, a minute or two after, from an elevation of 10 feet. From the former position 32 were seen, from the latter only 10 were seen. On another occasion 40 were seen from the higher and 12 from the lower position. The same persons, with their own glasses, observed in each position, and the horizon was so closely searched and notes compared that I am satisfied nothing escaped.

(3) At 10 feet, processions of masts and rigging were watched going up and down the channel (straight across the front of our position); now and then a vessel would come nearer in to the shore than the majority, when more of its masts and perhaps its hull could be seen. Quite a number passed with only their pennants and two or three feet of their topmasts in sight, the cordage and other details being plainly seen through strong glasses. Some steamed at such a distance that only *portions* of the funnels showed above the water, others were passing but their smoke only could be seen above the horizon, and, whether it rose in thick volumes or in lesser quantities, it was as plainly seen that the speed and direction of the vessel was clearly indicated, and it could at times be followed with the naked eye. Such sights can be seen here every day.

(4) This test is a modification of number two, and carried out more leisurely. At a good elevation a group of vessels at a convenient distance would be selected, and as we descended the disappearance would be closely watched; on retracing our steps the vessels would be seen to gradually re-appear.

This test showed that a vessel which was distinctly visible to the naked eye disappeared in proportion to the speed that the hill was descended, and *vice versa*, clearly demonstrating that it was not the distance (according to the law of perspective) which prevented it from being seen, and that "a telescope cannot pierce a segment of water," to quote a most caustic Zetetic.

(5) This test was made on a dark night when the atmosphere was quite free from fog. Various lights along the French coast could be seen quite distinctly, but one in particular gives a sweeping flash of such remarkable brilliance that it attracts everybody's notice for miles along our coast. This was selected as our point of observation. The distance from the edge of the Sandgate promenade to the water's edge was just 50 yards, and the beach descends fairly rapidly. For the first 20 yards the light was distinctly seen, each flash; but as one advanced another pace it entirely disappeared, and for the 30 yards to the water's edge no light of any sort could be seen on the French coast.

If any of your contributors are able to explain away these facts or show that something or other has not been taken into account in these experiments I shall be pleased to hear them; but at present I must go a little further than one Zetetic writer, who says that water is flat or *thereabouts*, and confess that to me the surface of the sea appears to be convex. The law of perspective, used in the most liberal manner possible, utterly fails to account for the phenomena which I have witnessed and described.

My earnest and prayerful desire has been to obtain the truth, and I hope you will see that the retention of my opinions is not due to senseless perverseness. I assure you that these opinions would at once have been given up if the evidence of my senses had been against them. It will be seen by the two enclosed copies of lectures, given by me recently, that the accepted view of the earth's shape does not in any way lead one to disbelieve in the revelation of God to man, or that one word of the Mosaic Cosmogony is incorrect.

Allow me to thank you very heartily for your kindness, and the very considerate way in which you have treated one who, in a sense, belongs to the opposing camp. With very best wishes, believe me, yours sincerely,

J. MARRIOTT, Sergt.-Major.

[Perhaps some of our readers who have made similar investigations will be able to reply to this letter. We should have liked it better had it been more definite as to the distances of the vessels, etc., but we print it as it is, believing the writer to be honest. He should, however, examine the proofs we have often given in *The Earth* that water is absolutely level. We note that our correspondent believes the Bible to be scientifically correct in its Chronology; to be consistent he should also believe the Bible to be correct in its statements on Cosmogony, or the shape and form of the earth.—Ed.]

We take this opportunity of informing our readers that "Zetetes" is writing a series of articles on Chronology in *The Sabbath of Creation*.

REPLY TO LETTER FROM NORTHAM, WEST AUSTRALIA.

A correspondent has sent us a lengthy letter from Northam, West Australia, dated January 25th, 1903. His letter is an arrogant attack on Planists, and drags us back to the ABC of the question, whilst most of his assumed corrections are really nothing but assertions of his own imagining.

He commences his onslaught by saying that he "*really cannot understand.*" So far so good; this is really his state of mind—*he really cannot understand*—and this keynote explains not only his frame of mind, but also that of his class of partly fledged astronomers.

Our correspondent continues, after the word understand, and adds "how intelligent men can go the lengths they do on the Plane Earth Theory." In these words it is difficult to be quite sure whether Mr. F. attempts to compliment correspondents to *The Earth* as persons who *may* be intelligent, or whether, on the other hand, he means to imply deficiency of intellect as the mainspring of the Flat Earth School.

The religious element is of course not even hinted at, as religion is by no means a leading mark with the astronomer whose aim is, and always was, atheism pure and simple, or, to put it kindly, an attempt to *deliver the world* from the ridiculous and, to them, insane fad of believing in a future existence and a Divine Creator, together with a Divine origin in all things.

This inherent propensity in the astronomer accounts for his monstrous perversions, and his denial of Biblical evidence.

He objects also on the grounds that the Flat Earth Theory is ancient. He cannot bear this, and likes everything modern and in its place. He likes the modern Globe Theory and wireless telegraphy to Mars. Nevertheless, the modern application of wireless telegraphy on this earth itself he never will relish, as that clearly proves that the earth is not a globe; and the general tendency of it is certainly to prove that it is flat.

To continue: this Australian writer ventures on two questions in perspective. He makes two statements, one of which is clearly absurd, whilst the second proves that he is acquainted with the more correct explanation of the Educative action of perspective. Why then his questions? Why does he propound two totally different views of perspective, and ask the editor of an advanced magazine to state *which is correct*?

This is the singular feature of his enquiry. We are actually called upon to say of two simple matters which one is right, as if, indeed, he was setting a trap for our editorial judgment, and was hoping that we would fall into it, and of course uphold the impossible and ridiculous teaching that perspective enlarges objects. Really it is too much to expect that the editor of a high-class magazine should stoop to decide between a black ball and a white one—as to which is black! Of a line of lamp posts, each 100 feet high, he really wishes us to explain whether they disappear by the bottoms being *summarily cut off*, or by the tops collapsing, or, lastly, by the gradual process of being lost to sight.

And now to return to this awful letter, which I have not got far into—as yet, having only just reached the eleventh line of this amazing document.

The next query is “do we not see the sun rise bit by bit?” Well, yes, I conclude that I may say we do, but it does not require a scientific magazine to tell the world this. However, more follows. Having got the sun up, he says: “is it not bigger than when at 12 mid-day?” This staggering question shews the mental status of the average astronomical pretender. Clearly he is quite oblivious to atmospheric effect. And here I may add that he has a companion in a recent writer who set to work to measure the diameter of the sun by the time it took to rise or set.

The result in this case was very disastrous, as the experimenter made the diameter of the sun some 240 miles by timing its rising or setting when refracted by the atmosphere, instead of the correct measurement of 32 miles—which latter distance is found from the sun's movement at 12 o'clock mid-day, at which hour no refraction is caused by the atmosphere.

Mr. F.'s next query has to do with distances found in given latitudes, and his measurements are all behind the times as regards flat-earth maps of the latest (1902-3) patterns. He has evidently seen some abandoned publications of many years standing, and knows little or nothing of the modern distances found by steam-boats, and on which later plans have been framed. His letter, however, gives us one distance which may be of value—and is of considerable value if correct—namely, 2,118 miles between Bunbury and Brisbane, Australia.

From this more or less valuable distance he passes on to conjectures about the rising of the sun, and which might be worth examination only that further on in his letter it is found that these conjectures are really based on paltry diagrams of his own construction.

This is the crying sin of all astronomers. They construct small figures, often about the size of half-a-crown, and from these small figures they construct their whole theory of the earth and the stars. Anyone who examines one of these diagrams cannot fail to perceive, when his attention is drawn to this marvellous fact, that the astronomers use one and the same horizon for every place or position, and this horizon is in reality the central *inside* plane of a sphere, and is actually the very plane which we Planists contend for as the earth itself.

They take *our earth* for *their horizon*, whereas we, on the other hand, teach that *each locality* has its own horizon; and it has long been pointed out that this would be the case even on a globe. Even on a globe the horizon must be *local* to the individual. This one crucial fact disposes of the whole science of astronomy, and brings it down like a house of cards.

Speaking of his sunrises, this writer's words are, “*This being calculated on a planisphere which is very small.*” Here then are the two crying sins of astronomers in the words of one of them. They calculate on a *planisphere* (instead of a globe) and it—the planisphere—is *very small*. Half-a-Crown size is the usual thing.

Finally, this penman, is for a midnight sun down South, and the late Antarctic Expedition should be able to decide this point, which practical navigators are opposed to, in that when running between Cape Good Hope and Melbourne, in latitude 60 S, they carry the midday sun on the *port hand*, but when in latitude 43 S the sun is carried to starboard, and is never *seen at night*, so they say. Let the Antarcotics speak out; the matter is important; but in no case can it make the earth a globe. It will simply alter late 1903 plans of the earth. The main objection to the land outside is that the countries are out of all proportion to each other, both Russia and China being very vast.

Speaking of his sunrises, this correspondent uses the language of conjecture and says “*if the sun rises 30 deg. South of East it sets 30 deg. South of West and the latitude would be 40 deg.*” But why has this conjecture been hazarded? He resides at *Perth*, in latitude 31 deg., why then has he set to work to conjecture for latitude 40 deg., *instead of stating what actually occurs* at Perth itself? This of course throws discredit on all his statements. From latitude 40 deg.

he ventures to latitude 51 deg., and, among other statements, he happily says that the sun *is due south*.

In this latter conjecture he is contradicted by practical Navigation, which proves beyond question that the sun often bears *North*, even in Southern latitudes. In support of this most valuable *fact* I am able to quote *Norie's Epitome of Navigation*, p. 188, example No. 2: “On September 21, 1874, Longitude 90 deg. E, the meridian altitude of the sun's lower limb was 58 deg. 12 min. 10 secs. bearing *North*: Index error, 2-10, height of the eye 14 feet: required the latitude.”

	m.	s.
Sun's declination (Table x)	0	40 North
Correction for Longitude 90 East (Table 12)	6	
Correct declination	0	46 North
Observed Sun's lower limb	58	12 North
Index error	2	
Correct observed altitude lower limb	58	10
Correction table I x plus 11 m. 7 s.	12	
	58	22
	90	0
Meridian Zenith distance	31	38 South
Correct declination	46	North

Latitude 30 52 South; that of Perth, West Australia, almost to a minute. Here then, in the very latitude of *Perth* itself, from whence this person dates his letter, we have the clearest refutation of his nonsensical conjectures—which, of course, have no application at Perth, nor anywhere else in the various latitudes he has thought proper to select, instead of confining himself to actual observations at Perth. I need say no more. March, 1903. E. E. MIDDLETON.

A SPECIAL LECTURE was given at the New Assembly Hall, Union St., Coventry, on Monday, March 23rd, 1903, by Lady Blount, entitled “Is the Earth a Globe?” The Band of the 2nd V. B. Roy. War. Regt., conducted by Mr. T. J. Marshall, (by kind permission of Col. H. Nutt and the Officers of the Regiment, played Selections, and Songs were sung by Messrs. A. H. Wainwright, and A. Longbottom (accompanied by Mr. A. Mealand). The whole of the music and songs given during the evening were composed by the lecturer. Reserved Seats were charged for.

Regarding the above lecture, Mrs. Longbottom writes, March 27th: “We are seeing the results of the Lecture already, as two or three were fully convinced that the Plane Earth Theory is true, and a few more are wavering. It has also given Archie the opportunity of speaking to several who would not hear a word about it before.”

The Ed. also held a meeting at Lewes Mansions, on March 24th; and at the Clifton Hall, Selhurst, on the 26th. Dr. E. Haughton took the chair on the latter occasion. A collection was made after this meeting, when the friends present gave liberally; and our highly esteemed, Mr. Arthur West, who arranged the meeting, handed the proceeds to a poor Christian friend. Fuller accounts and newspaper reports of these meetings will be printed in our next issue, if space allows; but in any case Dr. E. Haughton's able opening address will appear (D.V.)

CH. DAMIEN'S SYSTEM.
FRENCH IN THREE MONTHS!

REVISED EDITION, 1902.

We have much pleasure in recommending the above work.

The booklet contains the three thousand words, and idioms, which are most used in ordinary conversation ; sufficient to enable you to talk French all your life ; no fossil philological peculiarities, but French as it is actually spoken in France. Grammar underlies each group of examples, and we think this a cleverly condensed method of teaching the French language.

The Author of *French in Three Months* also gives Lessons in Conversational French to adults, at

128, CROMWELL ROAD, LONDON, S.W. ;

AND

64, ROSSLYN HILL, HAMPSTEAD, N.W.

Friends of the Ed. of this Magazine can testify to his ability and agreeable way of teaching.

The Magnetic Nerve Invigorator Co.,

JONATHAN NICHOLSON,

22, Budge Row, Cannon Street,

LONDON, E.C.

Price of Appliances £1 1s., £2 2s., & £3 3s.

Instalments may be arranged.

THE EARTH.

VOL. III.

Nos. 35 & 36.

JUNE AND JULY.

5

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