C. Jupiter in oreallation p 48 near might fitter in al. D'Anvier touteratione "Lancel 14 53. Hord Jatinances de fictures fit 54-3 a Violandon of D'anne box mogen y by John 7.02 M.A. p 49-

Please return this to

Z. ARCHIBALD SMITH.

3: * * - * 7

94, Gwendolen Road, LEICESTER.

EARTH-NOT A GLOBE - REVIEW,

MH R

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

IANUARY, 1893.

No. 1.

Price $\mathbf{2}$ d.

GREETING !

T may be thought that there are a sufficient number of Periodicals in the market without adding one more to the extensive list. There are plenty no doubt, if they were all of the right kind. But are they? How many of them profess to stand by the Word of God as true and faithful in all its parts. And of those who profess to uphold the sacred Scriptures as inspired of God, how many believe and advocate the literal truth of the account of Creation as recorded therein? or the various descriptions given by them of the works of God as found in what is called Nature? Not one! At least, we know not of any.

Not a single Christian Editor who in the face of the so-called "Science" of the nineteenth century dare contend for the literal truth of the Bible text given at the heading of this paper? We repeat it, we know of none. We know of many, and some loud in their profession that they believe the Bible to be the inspired Word of God, who yet have declined to allow us, or our friends, to uphold in their columns the literal truth of the Bible in all its references to the material Creation. We deplore this fact; and hence the necessity has been laid upon us, with all our weakness, physically or numerically, to come to the rescue in *The Earth Review*. God is able to use the weakest instrumentality to his own glory, and to the confusion of the enemies of his truth. Our trust is in God; and in the faithfulness of his Word, in *all* its teachings from Genesis to Revelation. Our protto is, Let God be true, though every man be a liar.

If Genesis is not to be relied upon, in its description of Creation, how shall we trust Exodus? If the Old Testament is not true, what will become of the New? If the Creator, through his servants, the prophets,

has not correctly described his Works, how can we trust him for our salvation? As the great Teacher, who came from God, himself declared; "If ye believe not his (Moses) writings, how shall ye believe my words? They stand or fall together. Our Lord says so; and every logical and candid mind must see it is so. We are prepared to accept the conclusion; for we feel sure that no fact in nature is contrary to Bible teaching.

It is well-known that the teachings of modern Astronomy are opposed to the teachings of the Bible; but it is not so well understood that all known facts in nature are in harmony with Bible representations. Thomas Paine, in his so-called "Age of Reason," says :---

"The two beliefs "---Modern Astronomy and the Bible ---" cannot be held together in the same mind : he who thinks he believes both has thought very little of either."

This witness is true here. But he makes the very common mistake of assuming, or supposing, that Astronomy must be true; and hence he draws the unwarrantable conclusion that the Bible must be false. This is not "reason," but assumption; and is surely an unpardonable offence against good logic on the part of one who professes to "reason" We call the attention of our sceptical friends to its inconclusiveness. Give us *facts*, or sound "reasons" based on facts, and we will listen to our opponents with attention; but it will be the province of *The Earth Review* to expose from time to time the flimsy pretexts for reason which so frequently are placed before us by those who oppose the Word of the living God on questions of Cosmology.

We want the *facts* of Science, not in its every varying theories and contradictions. For these facts we shall ever be glad to find room, in proportion to their importance and our space. But, we candidly confess at the outset that we do not know of any one fact in Nature which conflicts with the accounts of the Creation or Universe, as set forth in the Holy Scriptures. The God of Creation or of Nature, is the God of Revelation; and both these we believe to be in harmony. These harmonies we propose to shew to our readers as we have opportunity in future numbers of our little paper.

We invite our friends, all over the outstretched earth, to come forward and help us. They can strengthen our hands with means and with matter. Short, pointed, and pithy articles. or letters—written on one side of the paper only—and sent to the Editor, will receive careful attention. Also *marked* and prepaid newspaper articles, or cuttings connected with the subject. Subscriptions for the paper must be sent to the Secretary, Mr. John Williams, 32, Bankside, Southwark, London, S.E.

UNIVERSITY EXTENTION.

As we are entirely undenominational, we are not going to attempt to establish another sectarian church, or to support any particular existing one. "The Universal Zetetic Society" is simply banded together to contend for the Truth and honour of God's Word, especially as related to His Works in Nature and Creation; and *The Earth Review* is its organ. We therefore invite the co-operation of all earnest-minded men, by whatever distinctive names they may, unfortunately, happen to be called. We are certain that all who are concerned for the honour of God's Word, and all who desire to see Nature honestly interpreted, must acknowledge that our aim and purpose is good. To all such, we send greeting. "If the foundations be destroyed, what can the righteous do"? But again, "If God be for us, who," with any hope of success, "can be against us"?

UNIVERSITY EXTENSION.

According to a report in the *Standard* of Tuesday, November 29th, 1892, the Chelsea centre of the University Extension Society held its annual meeting the previous night at St. Mark's College, Chelsea.

The chairman, Mr. H. D. Ackland, M.P., Vice-President of the Council, spoke of the advantages to be obtained in connection with our Universities, in providing students and teachers from elementary schools, with advanced scientific instruction. He asked the London County Council for a grant of $\pounds_{10,000}$ to $\pounds_{20,000}$, "for the purposes of a Teaching University in promoting the work of University Extension teaching." He also hoped that the Government would "meet that sum with something like a grant of a similar amount." London had "already devoted $\pounds_{30,000}$ a year to the purpose of forwarding education."

These are modest sums of money; but we would not complain if they were indeed devoted to the purposes of "education." Students should be allowed, and trained, to think for themselves, and not crammed, like school children, with mere theories already in vogue. To educate (L e, and *duco*) means to *educe*, or to draw forth the thinking powers of the mind, not merely to cram it with dates, historical facts, or so-called scientific hypotheses. To teach men, indeed, *how to think*; not simply to fill their minds with the ideas or thoughts of other men.

Does the University Extension Society aim at this? Do our Universities? For instance, if any student should get up and call in question the teachings of modern Astronomy, giving his reasons for so doing, would he be encouraged as an original thinker? Would he be tolerated even, however strong the reasons he might be prepared to offer? We think not, and if he would not, what becomes of the boast of education? What powers of mind are *educed* by stifling all scientific discussion? What was the state of theology when the Church of Rome had power to silence—

2

not by argument, but by fire and faggot—all controversy? And such at present is the state of scientific teaching in our Schools and Universities. It is one sided, cramped, and in some cases, even superstitious, out of harmony with Nature.

If we are wrong in so speaking, let anyone of our University friends step down for a moment from his high pedestal of learning, and let him give us one proof in support of the popular view that we are living on a whirling globe flying through something called "space" at the fearful rate of about eleven hundred miles in an hour, or nineteen miles a second! Or to simplify matters, we will waive the question of the shape of the earth, if any of our savants, with all his boasted University education, can give us one decent proof that the earth has any motion at all. We only ask for one, if it be a good one. Who will give it? Our "space" shall be at his disposal; at least a fair share of it. Now, "Scientists" to the rescue; and if you can give us only one proof of the Earth's supposed motion, we will yield your right, and advocate your claim, to the modest sum of £30,000 to £40,000 which you are asking in support of your University Extension Scheme. But if you cannot give us the proof asked for in support of one of your favourite "Sciences," and one, too, which is positively asserted to be an "exact" Science, then you must excuse us saying that we think you are unworthy of the support demanded; and that, moreover, your boasted system of education is unsound, unscientific, and misleading, and must sooner or later give way to the true Zetetic mode of teaching advocated by us.

SCIENCE AND COURTSHIP.

At the meeting of the University Extension Scheme, before referred to, one of the speakers (S.A.B), "spoke of a workman who was devoted to literature, another who was absorbed by scientific study," and of "a young man who was courting," and who complained that when "he walked out with his young woman he could not talk history with her, or Science, or Literature; so that but for the matter of an occasional kiss, his courtship was very monotonous." This, it is reported, made the audience laugh, but whether at the awkwardness of the promising young scientist, or at the novel way of recommending "science" to the sex, the report does not proceed to inform us.

But our fair readers will not be slow to perceive the moral of this. Let them attend well to University Extension Lectures, or let them be prepared to forego the honour, if not the pleasure, of being wooed by any young aspirant after scientific honours. Just think of it. "Only an occasional kiss"! And no "scientific" jargon, or learned technicalities, to fill up the "monotonous" intervals! Oh Venus! What a fearful prospect! Ye virgins take heed. We are living in the nineteenth century; and vain shall be all your fair blandishments, and youthful charms, unless you are prepared to satisfy Mercury that you are fully competent to conduct your courtship according to the rules of scientific terminology. How in the world did our forefathers manage in past ages? Poor, simple and misguided souls!

Fancy the dreariness of their courtships, for over five thousand years -at least !--and with only "an occasional kiss" to relieve the monotony of their unscientific existence ! How thankful we, their sons, ought to be that we were not born in their days, nor in the olden times before them ! But ye maidens, take courage ; and instead of wasting your time at your toilets, attend henceforth to your studies. Instead of learning such common place acquirements as how to stitch, cook, and darn, to make shirts or to knit stockings, you must now go in for "science," study "literature," and how to "talk history." Then when you have "passed " your examinations in these higher studies, certificates may be awarded you, by our grave and "reverend" seigniors, certifying our younger scientists that are are now in a fit and proper condition of mind to be wooed and won by them. Certifying you can "talk history, science, or literature," in such a sort as to relieve the tedium of cool scientific courtship, even though there be only a "very occasional kiss" thrown in for the sake of a little unscientific variety.

CREATION versus SALVATION.

ILLOGICAL CHRISTIANS.

We are often advised by well-meaning Christians, who are ignorant of the bearings of our contention, to allow the subject of the plane earth to "drop," and to join with them in proclaiming what they are pleased to call "the gospel." As we are going to press we have received another gratuitous piece of advice of the same nature. Our friend writes :---

"You believe the earth is flat and stands still. I may give it a passing notice. I am surprised to find a man of so much intelligence and learning should persist in such notions. Is it not a clear fact that we can determine the approximate size of the globe? And if you go in a straight line in any direction you will come to the place from which you started, and how do you account for the Seasons, and the difference in the length of the days at different Seasons; and tidal motions, &c. I think you would be better engaged in helping to swell the world-wide cry of the Gospel. Don't you think so?"

4

SABBATH MUSINGS

THE EARTH REVIEW.

In answer to the last question we say decidely, No! not at the expense of leaving off teaching the *plain truth*. It is undeniable that the Holy Scriptures teach that the Earth is stationary; that it rests on "foundations" and "pillars"; and that it is "established so fast that it cannot be moved." We therefore contend that if, as some of our christian friends would have us believe, the Bible is not true in its material teachings respecting the Universe, it is not reliable in its promises of spiritual blessings. But we maintain that the Bible *is* true; true to fact and to every day observation; and that the earth does not move. In future numbers we hope to give good proofs of the earth's immobility for those who need them; but in the meantime we have a right to ask for some *one* proof, and we only ask for one, of the earth's supposed terrible motions? It *appears* stationary. It *feels* stationary. Then why should we give up the evidence of our God-given senses for the sake of a mere astronomical and unsupported assumption?

There is much more behind this question of the shape of the earth than our good natured but illogical advisers are aware of. If we are credited. as we are by those who know us, with at least an average share of common sense, and a little more than the average amount of "intelligence and learning," how is it that our advisers—who for the most part have never really studied the question-how is it they cannot credit us with understanding this subject, which we have studied, and with understanding its importance as supplying a good foundation for our confidence in the sure Word of God? We maintain that if the Bible is not true respecting the material Creation, it is not reliable it its promises of Salvation; and that it is perfectly useless to preach the Gospel of Jesus the Christ to men who have lost their faith in the inspiration, or truthfulness, of the Word of God. It is, moreover, a great pity when Christian friends unite with sceptical foes in support of a godless science, falsely called "science," which strikes at the very foundation of the truth of the Creator's Word. They incur a grave responsibility in so doing. Let them take heed.

In answer to our correspondents questions, we say. It is *not* "a clear fact that we can determine the approximate size of the globe." It is *not* a clear fact that the earth is a globe at all. Let proof be offered. And again, it is not possible "to go in a straight line in any direction, and come back to the place of starting." Any "straight line" is an impossibility on a spherical surface. But apart from this self-evident fact, no one has ever travelled or voyaged due North, or due South, and come back to the same place again. The great ice barriers would prevent this. Yet our correspondent thoughtlessly says, "in *any* direction"! Men can go round the World in an easterly or a westerly direction ; but this is also possible on a plane. Hence it is no proof of the earth's sphericity. But

our opponents do not seem to be able to discriminate in these things. It is the fault, doubtless, of our system of "education," which crams young minds with other men's ideas, instead of teaching them to think for themselves, and to think cautiously and accurately.

Let us hope that *The Earth Review* will help, at least, to raise enquiry, and so teach men to think for themselves; and not to leave all their thinking to professional and interested preachers of science. There is an evident need of such a paper as ours, even apart from its advocacy of the truth of the Bible, if only to awaken candid enquiry. Let us hope that all lovers of truth—natural truth or spiritual—and all lovers of original ideas, possessing true freedom of thought, will rally round us, and help us on towards a world-wide circulation of *The Earth Review*.

SABBATH MUSINGS.

"THE GLORY OF GOD."

The inspired Psalmist says that "The heavens declare of glory of God; and the firmament sheweth his handywork"; therefore, whatever some professed Christians affirm to the contrary, the subject of Creation is connected with right views of God, his worship, and his glory. But if we would have a right conception of God, and his glory, we must see to it that we have a right conception of his works in Creation. How, for instance, do we obtain an insight into the character of any great man, whether he be a poet, politician, sculptor, general, or king? It is not by his acts, or his works? But suppose these acts, or works, are mis-represented to us, or defaced by someone, should we not have false and distorted views respecting the author, artist, or the maker of those things? Assuredly. And so it comes to pass in respect to the construction of the world, false views of the universe have led men into a misconception respecting the Character of God, and even alas! in many cases, to a denial of the very existence of such a personal Being.

Let us, then, endeavour to come back to first principles. The world exists, and must have come from somewhere. It is "unthinkable" to say it came by chance, or any "fortuitous concourse of atoms." Its wonderful variety, the general co-relation and adaptibility of its various parts, and the exact and never failing motions of all the heavenly bodies, *prove*, to any well-balanced and unprejudiced mind. that some grand and controlling Intelligence directs and rules over all. As the apostle Paul declares, "The invisible things of Him from the creation to the world are clearly seen, being understood by the things that are made, even His eternal power and Godhead : so that they are without excuse." Rom. i. 20.

A grand truth lies in this statement of the apostle. Paul was no fool. It is allowed on all sides, alike by friend and foe, Sceptic and

6

Christian, M. Renan and the Archbishop of Canterbury, that no one man has had more influence in forming Christianity, the history of which has for eighteen centuries been making the history of the civilised world, than the apostle Paul. His name will be had in honour when the names of the adversaries of the truth will have sunk into merited and everlasting oblivion. And this great man agrees with the Psalmist in teaching that the Creation, as set forth in the Bible, and as found in what some call "Nature," sets forth unmistakably the grand truth that God Is. Now, this is a fundamental verity, and the foundation of all true faith. GOD Is. And "he that cometh to God must believe that He Is, and that He is a rewarder of them that diligently seek Him." Now, this faith is, on the one hand, neither an unreasoning credulity, nor, on the other hand, is it a bigoted *dis*belief. It is based on an intelligent and reasonable understanding of the things that are seen above and around us.

The Book of Nature is open to all men; but it must be read and studied without prejudice and without philosophical bias. We must come to it like little children, with the honest desire to know the truth, and not attempt to read into it our own, nor any one else's, plausible or implausible hypotheses. If we do this patiently and persistently, we shall be "rewarded": the grand and ineffaceable truth will dawn upon us that GOD IS.

We shall see His glory in the bright and blazing sun as he goes forth majestically, like a giant, to run his daily course. We shall own *His* Power and Godhead when the moon, queen of the night, rises in quiet and stately splendour, to reflect her silver radiance in every rippling stream. And we shall confess *His* wisdom and unfailing skill when, at night, we gaze up into the firmament and behold ten thousand glittering gems, shining in matchless beauty, and shedding upon the earth their silent influences, as they nightly perform their appointed revolutions. Truly we shall then confess with the Psalmist, that "the heavens declare the glory of God, and the firmament sheweth His handiwork."

"The firmament sheweth His handiwork." That vast and incomparable structure which spans the heavens, and covers the earth with its capacious dome, divides the waters which are "above" the firmament from the waters which are "under" the firmament. And when we realize something of the tremendous size of this tent-like covering, spanning with one mighty arch across the whole of the outstretched earth; when we considered its weight, its strength, its stability, and the avowed purpose for which it was made by the Creator, we can unhesitatingly and devoutly again exclaim with the Psalmist, "The firmament sheweth His handiwork." No wonder such a "work" occupied the whole of one day, the third, in the "great and marvellous" work of the six days Creation. Job, one of the finest, and certainly one of the most ancient, of true philosophers,

when comparing the works of God with the puny works of man, asks: "Hast thou with Him spread out the sky, which is strong, and as a molten looking glass?" Job 37: 18. It is, perhaps, this mirror-like quality which the firmament possesses that makes unbelieving "scientists" think that they

firmament possesses that makes unbelieving "scientists" think that they can, with their glasses, peer into what they call "space," which they affirm to be "boundless." As well might a child, gazing upon the bosom of a glassy lake, affirm that it had no bottom, and that the sky and clouds, reflected from its placid surface, were slumbering in the unfathomed depths below, and not above, its waters.

SABBATH MUSINGS.

The idea of illimitable "space," filled with an infinity of revolving worlds or globes, is not only a bewildering idea, unfounded on fact, but it directly tends to remove the Creator, or rather the idea of a Creator, far, and farther, away from this earthly plane of ours. It necessarily and logically leads to Atheism; and too often, alas! it practically leads men there. The idea of Heaven as a place, the abode of The Eternal. becomes to the logical and thinking Newtonian a myth; and God, if he acknowledge such a personal Being at all, becomes farther and farther removed from the scene of all earthly operations. Whereas the Saviour of the World, who "came down from Heaven," to do his Father's will, taught His disciples to believe that Heaven was not very far off; that it was directly and always "above" us; that God was concerned in the work of His hands; and that as "our Father," He was near enough to hear the prayers of all those who call upon him in sincerity and truth. This is assuring : this is comforting. God cares for the world ; and He will punish those who afflict mankind with their selfishness, their greed. their falsehoods, and their oppressions. Yea, God has "so loved the world "---not the "globe," as some misguided Christians have lately printed and perverted this sublime text with a ridiculous "globe" stamped on the paper-God "so loved the world that He gave His only begotten Son, that whosoever believeth in Him should not perish but have everlasting life." This, we say, is comforting. It is assuring. But, on the astronomical hypothesis, the world is like an uncared-for orphan, or a desolate wanderer : God is removed too far from us to be any practical use : and the idea of Heaven is so vague, that such a place, if it exist at all may be anywhere or nowhere; "all round the globe;" or spirited away from us altogether, "beyond the bounds of time and space." Thus the Christian's hope is undermined, and his faith is eaten away at the very core by this insidious and so-called "scientific" worm. This is most calamitous ; yet even some of our "spiritual guides" are either so false to their professions, or are so deceived themselves, that they cry out, "It does not matter what shape the earth is; we don't care whether it be round or flat, square or oblong, so long as "-yes, so long as they get a good "living," and hold a respectable position in society? Is this it? Such a confession really means, when put into plain language, We do not care

8

whether the Bible be true or false, in its record of Creation, so long as our interests or our hope of "Salvation" is assured. But "woe" is pronounced against such easy going shepherds of Israel. "Woe" to them who are leaving their flocks to become a prey to the devouring wolves of "Science," "falsely so called," as the great apostle intimates. Let us be on our guard. There are honourable exceptions to such false shepherds and teachers, and others are being raised up to warn us. We have quoted some of their noble testimonies. Let us give heed to these needful warnings. God has never left Himself without witnesses to His Truth whether in Nature or in Revelation. We may shew this, if the Lord permit, more fully another time as regards Creation truth.

In conclusion, we would call the attention of all our readers to the seasonable warning given us by the Apostle Paul, where he says ;-- "Beware lest any man spoil you through *philosophy* and vain deceit, after the tradition of men, after the rudiments of the world, and *not after* CHRIST." Col. 2:8. And again, Let us "prove all things; and hold fast that which is good."

"Historically as well as logically the concession of any scientific errors has led to the downfall of the whole Biblical system of doctrine. Moses in his vision of the creation during six days may not have reviewed the whole physical development of the globe."

The Century Illustrated Monthly Magazine.

Of course the "concession" of error in the Bible must eventually and logically, lead to the downfall of "the whole Biblical system of doctrine" *in the minds of those making the concession*: but we do not make that concession, and we call for proof that the Earth *is* a "globe" before we can make it. But the above extract shews the importance of our contention that the Earth is a plane. ED. T.E.R.

"If the origin from which a system of philosophy is derived be a false and erroneous one, whatever emanates from it must of necessity be also false." LORD BACON.

"We should have fewer disputes in the world if words were taken for what they mean." $$\rm Locke.$$

Mr. J. Lack read a paper on "Zetetic Astronomy" at the Breakley Road Chapel, London, December 20th, 1892. But the report reached us too late for further notice.

THE SONG OF THE EVOLUTIONIST.

By "ZETETES."

In the infinite ages of past time There was nothing but "atoms" about ; They groped up and down in the darkness, Or ran in irregular rout : At length seized by "gravity's " impulse, They all rushed away after one And clashing around it struck fire, so They formed the bright spherical sun ! The heat soon expanded his body To most disproportionate size ; And Sol felt himself solitary, Lone occupant then of the skies : With labour he threw off young star-suns, To occupy parts unexplored ; And kept but a few suns about him, Not liking too much to be bored. The planets he tied to his body-The rest he could never restrain-And these fled the centre, for freedom, But strong was great " gravity's " chain ! Our world as she whirled—hot and plastic— Made herself like her father the sun : But as the long ages rolled over Her blazing and brightness got done. However, at length germinated In a quiet old " Cambrian " spot, From Sunshine and mud in solution, " A shapeless albuminous dot : " He could " push out an arm when he wanted," He learned to "catch prey, so he thrived;" And from him, our mighty ancestor, All life on the planet's derived ! Then "active Ascideans" evolving Fresh forms he contrived in his spleen, Legs, limbs, improvised for the sexes, All sorts up to twelve or sixteen : The strongest the beautiful choosing-The "fittest" survive on a Ball— And beauties the weak ones refusing, The weakest soon " went to the wall." Too many limbs proved inconvenient, For "mammals" which came into view ; He therefore dropped ten or a dozen, Reduced them to four, or to two : Made monkeys four-legged, or four-handed. Evolving in time into men, With two legs, and two hands for labour, And toe-fingers, remnant of ten. So on through the ages still future The world will keep "whirling" about, The "law of survival" is cruel, It threatens to make me drop out: I'll eat then and drink, for to-morrow, The Book is right here-we shall die : And after -ah me ! this here-after-

Suppose Pve believed but a lie !

Copied from the Leicester Free Press, Saturday, October 10th, 1891. and contained in the Satire by "Zetetes,"—See Advertisements].

CORRESPONDENCE.

Letters intended for publication in the "The Earth Review" must be legibly written on one side only of the paper, and must have some bearing on the subject before us.

The Editor cannot, of course, be held responsible for the various opinions of his correspondents.

All letters must be prepaid, and addressed,

" ZETETES," Plutus House, St. Saviour's Road, Leicester, England.

To the Editor.

DEAR SIR,-It is reported that Colonel Dulier has brought out an "ingenious apparatus for washing smoke." It was also reported that Lord Armstrong, at the banquet given to the members of the British Association at Newcastle, said, " there is after all some connexion between smoke and science." Beyond all question of doubt Lord Armstrong is perfectly right, as I know you will ultimately prove, but I write to ask, if you are in possession of any information as the the fact or otherwise, whether there is a smoke washing apparatus to be placed in every observatory in the United Kingdom to wash away the smoke of the globe ? Your kind reply will be esteemed by

BALAAM'S ASS.

Our correspondent who signs himself Balaam's Ass, has asked us a question we are not able directly to answer. He might obtain the desired information by writing to the officials at the Royal Observatory, Greenwich. No doubt an apparatus for "washing smoke " would be very useful in such places. Astronomers often complain of particles of dust, or smoke, obstructing their field of view when they look through their powerful telescopes. But if an apparatus could be devised for washing from off their own own visions much of the philosophic, and scientific smoke which prevents them seeing Nature as she is, it would indeed be a useful and an ingenious invention. Let us hope that our EARTH REVIEW may help them in this matter.

Scientists are generally alive to the smallest particles of dust and smoke which may obstruct the visual ray, or

interfere in the least degree with the results of their experiments ; but few of them seem to think it necessary to guard against the mental smoke of prejudice and early training, especially in the matter referred to by our correspondent, "the smoke of the globe." It is not very long ago that Galileo was condemned, as a philosopher and a Christian, for teaching that the earth was a moving ball, rolling on nowhere ; but now it is considered a sign of mental incapacity to doubt it. But why so? Let our learned men honestly apply themselves to the fundamental question as to whether the Earth be a globe, or a plane, and they will find that the globular theory has been enveloped in much more Scientific Smoke and dust than most people are aware of. It will be the object of The Earth Review, in future numbers, to help to clear away some of this accumulated philosophical smoke, so that our readers may get to know whether we are living on a star, or planet, shooting through "space"; or whether, as our senses attest and the good old Book declares, we are living on an "out-stretched" earth, "founded upon her bases, that it should not be moved for ever." PSA. c.iv. 5. REV. VER. MARGIN.

AUCKLAND, NEW ZEALAND, NOVEMBER 2ND, 1892.

DEAE SIR,—A short time ago someone sent me five phamphlets, called "Cranks" from London, the name on the wrapper was ——. I am not acquainted with the gentleman, but I can truly say I feel very grateful for them, and shall circulate them among my friends. I have only very recently

become acquainted with any of the facts relating to the plane Earth subject through the kindness of Mr. J. T. B. Dines, Auckland, and they certainly appeal to my common sense and reason as indisputable proofs. Above all I am glad that so much testimony can be got from the " Sacred Writings " in corroboration of the facts of Nature. I have sent to Mr. W. Carpenter for one of his "100 Proofs." It is pleasing to find that we have one grand foundation truth, Water Level and not Convex. I should like to get some more information on the subject, or reading matter. Are there any regular publica-tions issued? Would you kindly send me a list of publications, also best method of sending payment for the same.

I suppose N.Z. Stamps are no use at Home.

Have you any leaflets on the absurdity of atmospheric pressure ?

Hoping to hear from you at your carliest convenience.

I remain, yours respectfully, GEO. REVELL.

We may inform our N.Z. friends that P.O. Orders can be made payable to us in English money, and if a few of our Colonial friends would join, a number of pamphlets and papers could be sent to the same address.

We have already forwarded a few papers to our correspondent, and hope to hear from him again soon. Probably our indefatigable Secretary will send copies of The Earth Review to him.

Our esteemed London friend, who generously helped us to publish "Cranks," will be glad to know the cause is progressing well in New Zealand, at the so-called "Antipodes." Our friends, however, seem to have their heads right side up ! ED. T.E.R.

BELFAST,

MONDAY, DEC. 12, 1892.

DEAR SIR,—My lecture according to programme has been delivered. I had an audience numbering between 70 and 80, and from enquiries made and interest displayed, together with demonstrations of approval, I have reason to believe that my efforts have been somewhat of a success. But even should this not have been the case, I consider

CORRESPONDENCE.

it a privilege to be permitted to proclaim the truth which is at such a discount nowadays.

My audience was mixed. The poetry from your *Satire* was well received by all, and it was understood by those who were not able to follow the more difficult portions of the Lecture ; and I proclaimed the name of the author with no uncertain sound.

I shall circulate the New Organ with pleasure; and be glad to have anything fresh on this interesting subject.

Will you please forward me some copies of "The sun-dial," two or three "Do the Bible and science agree,"? and a few leaflets on "Bible Astronomy," for which I enclose 2...

Yours very sincerely,

J. ATKINSON.

The following was refused insertion in "The Faith."

To the Editor of THE FAITH.

32, BANKSIDE, LONDON, S.E.,

AUGUST 20, 1892.

DEAR SIR,—Pardon the liberty I take in addressing you. Believe me I should not do so only that I see you intend to exclude from the pages of your invaluable pamphlet a subject of the utmost importance to the faith of God's people.

Lady Blount in this months issue of "The Faith" informs us that she believes in the Scriptural (not the Scientific) account of Creation, and that that account is, that the earth is a circular, and stretched out plane. Is this God's truth Sir ? And if so, Why close your columns to it and declare that "The Faith" has no testimony to bear to it ?

If the first chapters of Genesis are not an accurate and *literal* account of the Creation, the whole Bible is a lie, and the Christian Faith is folly in essence. Can you Sir as a Christian professedly seeking to defend God's Truth permit " the gaze of the people to be to man" instead of to God's unchanging, unerring Holy Word, and not lift up your voice in testimony? Are you not by your flat hindering the fulfilment of the Divine injunction on

PERSPECTIVE.

the first page of your pamphlet to "contend carnestly for the faith which was once for all delivered unto the saints"? You invite contributions about Spiritualism, Theosophy &c., these are but forms of demonology, and what is the so-called science of Modern Astronomy but the same? I can understand the Editors of "Science Siftings" excluding from their pages the truth of God, but I cannot understand a Christian Editor of a periodical of the character of "The Faith" doing the same. Surely it becometh us to fulfil

all righteousness "for God's" glory sake. May I add that I believe that full liberty of discussion on all matters of faith, would increase, not only the size, but also the circulation of "The Faith."

With Christian regards and wishes.

Believe me, yours respectfully,

JNO. WILLIAME.

Cyrus E. Brooks, Esq.

PERSPECTIVE.

FROM THE FUTURE OF DEC. 1892.

SIR,-I should like to say a few words in reply to "Enquirer." His criticism of the "One Hundred Proofs" I shall leave Mr. Carpenter to answer. I am pleased to find that "Enquirer" has the candour to admit that "the effects of perspective alone are sufficient to compel the removal of the time-honoured mistake of the hull-down 'proof' of the sphericity of the earth." Yet this is generally considered to be one of the best popular proofs of the globe theory. But I think "Enquirer falls into a very common error when he says : "At length, when the apparent horizon is overpassed by an outward-bound ship, its hull gradually disappears." Now, according to the rules of perspective, objects below the level of the eve appear to rise to a point, or line, on a level with the eve as they recede ; but they never appear to rise above it, or "overpass" it, and then go down. The apparent horizon is always seen on a level with the eye of the spectator; therefore, if the hull of a vessel be below the line of sight when it starts out on its outward-bound voyage, it will, as long as it is visible, remain below the horizon. It will never overpass the horizon. or be seen above or on it; but the hull will disappear before it quite reaches the vanishing point. As "Enquirer" remarks: "Such instances should be noted and stated with exactness." Last year, when I was staying at Brighton, I watched the disappearance of out-going hulls with this special point in view. I pointed out this fact to others, who acknowledged I was right. Vanished hulls can often be rendered visible again by means of a good telescope. This proves that they have not gone down below and beyond the horizon.

In regard to the eclipse of the Moon having been occasionally observed while the Sun was also visible above the horizon, this we regard as a proof that the earth is not a globe. The fact can be explained with out the aid of the globe theory. "Enquirer" admits the fact, but he assumes that we must be ignorant of "the elementary knowledge" he so

kindly supplies. Like many others, he cannot argue in favour of the globe theory without innocently assuming the question at issue. For instance, he savs. "Atmospheric refraction raises a distant object 33', an amount which exceeds the apparent diameter of the Moon or the Sun; and by consequence, both luminaries may be visible at one moment from one region of the earth's surface." This reasoning quietly assumes one or both luminaries to be actually below the horizon, yet he admits that "appearances are sometimes treacherous." Although the Sun appears to be set. it does not follow that the body of the Sun is actually below the earth. Perspective and the earth's atmosphere are sufficient to account for the phenomena of sunset, without necessitating the belief that the orb has really gone below the horizon. Now, the assumption of the globularists that it is the earth's shadow which eclipses the Moon, requires the further assumption that either the Sun or the Moon is actually below the earth at the time of the eclipse of the Moon. Then a third assumption is made to explain the fact that both Sun and eclipsed Moon are visible at one and the same movement (from the top of the earth); and this assumption, in order to fit with their theory, is that "atmospheric refraction raises a distant object." The fallacy of any one of these several and subtle assumptions would be sufficient to vitiate the whole argument in support of the globe theory. If the earth were really a globe, it would be impossible to see from the same place, at the same time, two apparently and comparitively small orbs, in exact opposition, on either side of the earth. It would take up too much space to show this by diagrams, or I would do so. One of the orbs would be at least 90° below the visible horizon. and our friends do not surely claim that atmospheric refraction can bring up a body 90° above that horizon. At another opportunity, I should like to deal with the greatest assumption of all, viz: Solar attraction or "Gravitation," without which the globular theory falls to the ground.

Zetetes.

We are glad to report that the Editor of *The Future*, has, during the past year. had the courage to admit several letters discussing the important question of "The Shape of the Earth." ED. T.E.R.

Leicester.

HONEST AND NOBLE CONFESSIONS.

"When we consider that the advocates of the earth's stationary and central position can account for, and explain the celestial phenomena as accurately, to their own thinking, as we can ours, in addition to which they have the evidence of their *senses*, and SCRIPTURE, and FACTS in their favour, which we have not; it is not without a shew of reason that they maintain the superiority of their system. $\cdot \cdot \cdot$ However perfect our *theory* may appear in our estimation, and however simply (?) and satisfactorily the Newtonian *hypothesis* may seem to us to account for all the celestial phenomena, yet we are here compelled to admit the astound-

HONEST AND NOBLE CONFESSIONS.

ing truth that, if our premises be disputed, and our facts challenged, the whole range of Astronomy does not contain the proofs of its own accuracy."—Dr. Woodhouse, a late professor of Astronomy at Cambridge.

My "BELIEF." "I believe in the Scriptural, and not in the socalled 'scientific' account of Creation. I believe that the Earth is a circular and out-stretched plane; and that it will 'not be removed for ever.' I believe that the Sun, Moon, and Stars are what they appear, mere lights made to serve this earth; and that the heavens form a canopy or tent-like covering, to encircle it."—LADY BLOUNT. [See the full expression of her Ladyship's "Belief" in *The Faith* for August, 1892].

THE following was the official confession, in 1616 A.D., of the Church of Rome, when confronting the then Astronomical innovator, Galileo, who recanted and publicly confessed that his doctrine of the earth's motion was false :---

"I.—The proposition that the Sun "is the centre of the World and immovable from its place, is absurd, philosophically false, and formally heretical; because it is expressly contrary to the Holy Scriptures."

" II.—The proposition that the Earth is not the centre of the world, nor immovable, but that it moves, and also with a diurnal motion, is also absurd, philosophically false, and theologically considered, equally erroneous in faith."

"And so we say, pronounce and by our sentence declare, decree, and reserve, in this and in every other better form and manner, which lawfully we may and can use. So We, the subscribing Cardinals pronounce."—

> "This 26th day of February, 1616." (SUBSCRIBED BY SEVEN CARDINALS).

"I AGREE with you in your contention respecting the Earth; for my motto has long been, 'Let God be true and every man a liar.'"

REV. W. E. BULLINGER, D.D.

"IT may be a surprise to find that we are still imperfectly acquainted with the exact figure of the Earth." *Daily Chronicle* (science notes) April 8th, 1891.

"THE whole of Astronomical science, so far as the stellar universe is concerned, is founded upon a false basis. This arises from the fact that the construction of the heavens in respect to the apparent arrangement of the stars in space is always erroneous, and yet necessarily all astronomy is founded upon this supposititious situation of the stars."—The English Mechanic, Jan. 4th, 1889. "WHOEVER considers aright will acknowledge, that, next to the Word of God, the most certain cure of superstition, and the best aliment of faith, is the knowledge of Nature." LORD BACON.

"THESE (Bereans) were more noble than those in Thessalonica, in that they received the Word with all readiness of mind, and searched the Scriptures daily. whether those things were so." Acts 17: 11.

Let us follow their example in searching into the book of Nature.-ED. E.R.

THE "Catholic World," says; "The defence of the sacred Scriptures is to-day the great talk of the Christian apologist, and most of the attacks that are made upon the Bible are based upon scientific theories of some kind or other." "But," it adds, "the Christian has nothing to do with *defending the sacred Scriptures.* The Word of God is quick (living) and powerful and sharper than any two-edged sword, piercing even to the dividing asunder of soul and spirit and of the joints and marrow and is a discerner of the thoughts and intents of the heart, HEB. iv. : 12. It is *fully able to defend itself*; what the Christian wants is THE SACRED SCRIP-TURES AS A DEFENCE FOR HIM. To those who dwell in the secret place of the Most High, the promise is, His TRUTH shall be thy shield and buckler. Those who profess the religion of Christ need such an acquaintance with the sacred Scriptures, that they will not be alarmed lest that ROCK should be *overturned* by idle 'scientific' *theories.*"

CUTTINGS AND REMARKS.

A very distinguished Visitor.

We have no desire to unduly alarm our readers, but our duty to the public compels us to announce that to-night a collision may be expected between the earth and a comet. The notice we give is somewhat short, so short indeed that if the worst comes to the worst, some distant readers may have barely learned the fact before the shock gives it an emphatic confirmation. The Rev. M. BAXTER has somehow or other overlooked this noteworthy prediction, an oversight possibly accounted for by his feverish desire to discover some unfortunate individual who may be publicly described as "The Beast" without running foul of the law of libel. . . .

Just at present it is perhaps risky to speak disrespectfully of comets, but it

is undeniable that they are chiefly distinguished by their eccentricity, They resemble in no small degree political parties. They consist of a definite point or nucleus, with a remarkably nebulous tail preceding or following the nucleus. The tail precedes the nucleus when the comet has passed its perihelion and is receding from the sun, and it follows it when the sun is approached. That is to say, it is always to the front in a retreat and in the rear in an attack. As with the humble members of political parties, its distinguishing feature is prudence. Nor does the resemblance end here, for astronomers assure us that comets' tails are noted for their extreme tenuity. Stars which the slightest fog completely obscures shine through millions (?) of miles of their transparent material. In the same way it is easy to see through

16

. 17

the motives and tactits of the political hanger-on. The nucleus is really the only part of a comet which need be noticed by practical men. The vaporous tails have frequently come within the earth's attraction (?) and have been absorbed into its atmosphere, just as the Liberal Unionists have been "merged" into the Tory party. Whether the effect of the absorption of a comet's tail into our atmosphere has been salubrious or deleterious, or even if the event has had any perceptible influence at all, is only a matter of speculation among the learned. This extremely negative result resembles the action of homeopathic medicines upon the human frame -at least, as described by allopaths. The moral seems to be that the world will be wise if it carefully avoids the nucleus to-night and collides simply with the tail. "Run into something cheap," shouled the economical peer to his coachman when his horses bolted down Piccadilly.

Mankind has received comets in various moods. Sometimes they have been hailed with rapturous welcome. They have been supposed to herald a superior wine vintage. The produce of 1811 and of 1858 was specially announced as " comet wines," and topers declared that it was very good. On the other hand, these eccentric heavenly bodies have been regarded with hatred and terror. They were included in a very uncomplimentary prayer in the year 1456. The Turks had just captured Constantinople, and it was feared that they would soon overrun Europe. A comet was hovering about at the time, and the pious of the day added to the Ave Maria the following special supplication : " Lord, save us from the devil, the Turk, and the comet." It is strange that at the end of the nineteenth century we should be threatened by the same three influences. The first seems destined to be always with us, the second will haunt us until the Eastern Question is really settled, and the third threatens to mend or end us to-night.—*Prom the Morning Leader,* London, November 21st, 1892.

A fearful Collision-BETWEEN & ROCK AND & WREATH OF SMOKE !

A Dalziel Telegram, dated Philadelphia, November 24, says Professor Synder, instructor of astronomy in the High School here, states that the earth last night collided with a comet in the Andromeda group and shattered it to pieces. This theory is said to receive confirmation (!) by news from Illinois and other States, where there was a great fall of meteors. These are supposed to be the remains of the defunct comet.—Reynolds, November 27th, 1892.

In the above paragraph the words " said," and " supposed," which we have underlined, are very properly inserted by the thoughtful editor; but the Astronomical " Professor " has not been so cautious in boldly affirming that the earth " collided with a comet," and "shattered it to pieces." But he probably presumed either upon the ignorance, or the credulity, of the students in the "High School;" or upon his own self-sufficient authority as a learned "Scientist." Many of these "highly" learned men seem to think it utterly superfluous to offer "proofs," or "reasons," for their self-confident assertions. But, as the earth's supposed revolution has never yet been proved, he might as well have talked of a great mountain colliding with a little wreath of smoke! A little more "Scientific Smoke" for our correspondent "B.A." to clear away ?

ED. T.E.R.

The Globe Shining!

" As seen from the moon, the earth would appear four times greater in diameter, and thirteen times wider in surface than the moon does to us. The illumination of the earth is fourteen times greater on the moon than that of the moon on the earth."—Homeland, December 8th, 1892.

Proof wanted of the above statements. Fancy our "dull distant mountains" shining "fourteen times" brighter than the moon, and yet we "can't see it"! Perhaps we need "glasses" —astronomical ones?

Ed. T.E.R.

"A dis-quieting feature of the recently issued yearly return of shipping casualities is the increase in the number of missing sailing vessels, which rose from 46 in 1888-89, and 26 in 1889-90, to 64 in 1890-91."

We need not be astonished at this when we remember that all our Mariners are taught to believe the absurd theory that they are navigating a whirling globe, instead of sailing on the "level of the sea." It is a sad reflection on the boasted "science" of the nineteenth Century.

ED. T.E.R.

Said 'Tim to Mickey: "Do you belave the Earth turns round ?" "Oi do," replied Mickey, "whin Oi'm drunk; but not whin Oi'm sober."

THE NEW SCRIPTURES.

ACCORDING TO TYNDALL, HUXLEY, SPENCER, AND DARWIN.

THE NEW SCRIPTURES.

- 1-"Primarily the Unknowable moved upon comos and evolved protoplasm.
- 2—And protoplasm was inorganic and undifferentiated, containing all things in potential energy; and a spirit of evolution moved upon the fluid mass.
- 3—And the Unknowable said, "Let atoms attract"; and their contact begat light, heat, and electricity.
- 4-And the Unconditioned differentiated the atoms, each after its kind; and their combinations begat rock, air, and water.
- 5—And there went out a spirit of evolution from the Unconditioned. and working in protoplasm by accretion and absorption, produced the organic cell.
- 6—And cell, by nutrition, evolved primordial germ, and germ developed protogene ; and protogene began eozoon, and eozoon begat monad, and monad begat animalcule.
- 7—And aminalcule begat ephemera ; then began creeping things to multiply on the face of the earth.
- 8—And earthly atoms in vegetable protoplasm begat the molecule, and thence came all grass and every herb in the earth.
- 9—And animalculace in the water *evolved* fins, tails, claws, and scales ; and in the air, wings and beaks, and on the land they sprouted such organs as were necessary, as played upon by the environment.
- 10—And by accretion and absorption came the radiata and mollusca, and mollusca begat articulata, and articulata begat vertebrata.

18

. . .

- **11**—Now these are the generations of the higher vertebrata, in the cosmic period when the Unknowable evoluted the bipedal mammalia.
- 12—And every man of the earth, while he was yet a monkey, and the horse while he was a hipparion, and the hipparion before he was a an oredon.
- 13—Out of the ascidian came the amphibian and begat the pentadactyle; and the pentadactyle, by inheritance and selection, produced the hylobate, from which the simiadæ in all their tribes.
- 14—And out of the simiadæ the lemur prevailed above his fellows, and produced the platyrhine monkey.
- 15—And the platyrhine begat the caterrhine, and the catterhine monkey begat the authropoid ape, and the ape begat the longimanous orang, and the orang begat the chimpanzee, and the chimpanzee evoluted the *what-is-it*?
- 16—And the what-is-it went to the land of Nod, and took him a wife of the longimanous gibbons.
- 17—And in process of the cosmic period were born unto them and their children, the anthropomorphic primordial types.
- 18—The homunsulus, the prognathus, the troglodyte, the autochthon, the tarragen, these are the generations of primeval man.
- 19—And primeval man was naked and not ashamed, but lived in quadrumanus innocence, and struggled mightily to harmonise with the environment.
- 20—And by inheritance and natural selections did he progress from the stable and homogeneous to the complex and heterogeneous; for the weakest died and the strongest grew and multiplied.
- 21-And man grew a thumb, for that he had need of it, and developed capacities for prey.
- 22—For, behold the swiftest men caught the most animals, and the swiftest animals got away from the most men ; wherefore the slow animals were eaten and the slow men starved to death.
- 23—And as types were differentiated the weaker types continually disappeared.
- 24—And the earth was filled with violence; for man strove with man, and tribe with tribe, whereby they killed off the weak and foolish, and secured the survival of the fittest."—From the "Rainbow," and copied from an American Fournal.
- If it require *faith* to believe the grand, simple, and reasonable account of Creation given in Genesis, how much credulity and gullibility does it require to swallow down this new gospel of Evolution ? ED. E.R.

GLOBE TINKERING,

OR GAS METORITES.

Our esteemed Editor has privileged me with the reading of an article to appear in this number entitled, "University Extension." In that article he has Sampson-like felt for the pillars of modern Astronomy. doubtless, with the intention of pulling down that "house of cards." He knows that the so-called sciences—which in the point of fact are not science at all, but mere speculations, or a contrivance to explain phenomena-have not got the shawdow of *practical* demonstrated proof, either of globularity or mobility to support them ! If confirmation of this is needed, it can be found in the Daily Chronicle (April 8th, 1891). There we read a confession of ignorance with respect to the shape of the earth. "It may be a surprise to find that we are still imperfectly acquainted with the exact figure of the earth "! But how did the savants manufacture our whirling, twirling, tumbling, rotating seven-motioned globe? Why, they imagined that it was one, and hence they can never demonstratively prove their speculations, by a practical appeal to nature ! Having imagined the earth to be a globe, they set about to find out its origin by other speculations. For instance, Professor Laplace "supposed the solar system to have originally consisted of a mass of Gas in rotation"; and, lo and behold ! as it " cooled it contracted," and by consequence " rotated more rapidly, until at length, it became so much flattened, that it could no longer subsist in a single shape," therefore it began to evolve and "shed a ring." This loss is said to have caused the "central portion" to contract still further, until a second crisis arrived, when again by the process of physical evolution-not the man-monkey evolution of the Darwinians-"another ring was shed"; and then another, and another, ad infinitum, Subsequently these rings coaleced into planets, and the central portion formed the Sun !

Now, Sir, some time after this speculation had been accepted by scientists, there arose another Professor by name *Lockyer*, who by another supposition proved Laplace to be in gross error on the "matter," and taught us, that the immediate antecedent condition of the Sun and planets ("the earth," they say, "being a planet") was not gas at all, but, "that they consisted of a swarm of loose stones or meteorites"! Is it any wonder that Lord Bacon in his *Novum Organon Scienttarum*, ch. iv., speaking of the origin of systems of philosophy says, "if it (the origin) be false and erroneous, whatever immediately arises from it must of necessity be false also"? This is self-evident.

Now Lord Kelvin, the President of the Royal Society, at the anniversary meeting at Burlington House, on Nov. 30th, spoke of the sun's rotation, and thus contradicted Sir Isaac Newton, who, in his "Principia."

says that the sun is "immovable." How in the name of common sense can an immovable thing rotate? Will these gentlemen condescend to answer? If they do, perhaps they will also inform us how meteorites can overcome the frictional resistance of a rotating sun? How can meteoric matter overcome the frictional resistance of their seven motioned globe? If the orbital speed of this "globe" is "over one thousand miles a minute," what chance is there of meteoric dust falling on to such a flying Dutch Cheese-shaped affair? In the interest of the public whose money they spend, I challenge the Astronomer Royal, Lord Kelvin, or any official astronomer, to answer these and similar questions.

Lately we have been informed by a cheap Science Sifter, that "the Sun is a frozen mass eternal"! To say that these contradictions and speculations are more or less than absolute falsehoods would be superfluous. Therefore I await some reply; and no doubt we shall have to wait long enough.

J. WILLIAMS.

"SCIENCE SIFTINGS," SIFTED.

To the Editor of The Earth Review.

SIR,—The following is a copy of my letters to the Editors of "Science Siftings," with their replies. You will see by them, that although they say they will "endeavour to distinguish fact from hypothesis, truth from falsehood" (No. 1), yet when put to the test, they utterly decline to do anything of the kind.

JULY 9TH, 1892.

To the Editor of Science Siftings.

SIR,—In your issue for Juue 4th, 1892, you state, that, "the curvature of the earth is 8 inches for 1 mile, 32 for 2 miles, and keeps on increasing as the square of the distance for longer distances." Now by this rate the curvature of 90 miles is 5,400 feet. Therefore an object at 20 miles distance, the height of which is 1,000 feet, could not be seen at that distance. I presume that you are aware that there is another rate of curvature in existence which is the product of modern astronomy, viz :— 2'04 inches to the mile, multiplied by the square of the distance in miles ? Now, even by this rate it is evident than an object 1,000 feet high could not be seen at 90 miles distance, for it would be hid behind a curve, over 1,300 feet. Now I come to *practical facts*. The Eiffel Tower is not quite 1,000 feet high, but its top can be seen at a distance of over 90 miles !! Now Sir, let me ask you how on globular principles, this is to be rationally accounted for ? I trust in the interests of truth you will kindly publish this letter in your next issue, and your reply thereto.

SCIENCE SIFTINGS.

On July 9th, the following appeared. "The paradox referred to in your letter is apparent only. It is true that there are two ways of reckoning the earth's curvature : but one refers to the arc, the other to the chord of the circle. It was of the last that we spoke in the paragraph you refer to. Within moderate limits, it may be assumed that the chord of the terrestrial circle, joined the eye of an observer with the base of a distant vertical object, represents the hypotenuse of a right-angled triangle, of which the vertical object forms one of the sides. Hence the simple rule that the height of this object, when just visible, is proportional to the square of the distance along the chord, which, although not an absolutely accurate rule, is sufficiently nearly so for many practical purposes."

Comment on this is hardly necessary. But on August 20th, I wrote as follows ;---

AUGUST 20TH, 1892.

To the Editors of Science Siftings.

GENTLEMEN,—Permit me to call your attention to the introduction of yourselves to the public as given in No. 1 of "Science Siftings."

There you promised to "distinguish fact from hypothesis, truth from falsehood." This you have not done, for, to go no furthur, your reply to me in "S.S." of July 9th, is a direct contradiction of it! When you can prove your globe has two circumferences, then, and then only, will your reply be consistent with logical reasoning and common sense. You know as well as I do that your reply is not true, and that it is *only* theory and utterly false, hence it it you are obliged to have resource to *assumption*.

In Vol. i. p.38. you say, "since water finds its own level, it is compatible with the theory (*theory* mind) of a spherical or oblate World, that the sea is a plane of Water, &c.

Is it possible you do not see the contradiction which exists in this grandiloquent statement, with which is coupled the sarcastic question to a friend of mine about "tumbling over the edge"? "The sea being a plane" as you admit, the World cannot be a globe. How in the name of common sense can a plane of water be a part of a sphere or oblate globe? Do you not see that the thing is a practical and moral impossibility? Is that the reason why you told "E. J. Cooper" (Vol. II. No. 41. p.210) that "flat earth theories are kicked out of your columns"? I do not Sir want the $\pounds_{1,000}$ you offer, but I do want the truth of *practical science* to be known by the people, and I therefore challenge the Astronomical Editor to prove the earth to be a spinning and whirling globe, by an appeal to demonstrated facts found in Nature. I will prove it is *not*, if you have the manliness and courage to open your columns for the elucidation of the truth of the subject.

Yours respectfully, JOHN WILLIAMS.

P.S.-I enclose a £1,000 challenge in the hope that you will accept it. J.W.

THE FOLLOWING REPLY WAS GIVEN IN THE ISSUE FOR SEPT. 10TH.

"We cannot think of accepting your challenge. The "reward" of $\pounds_{1,000}$ is doubtless a hoax on the part of someone who has simply invented the American references. Not a cent could be recovered from anybody, upon the strength of such a "startling offer" as is published upon the hand-bill. Then apart from this, most of our readers have been educated past flat earth hypotheses. And if we devoted to these such an amount of our space as would be needed for the rigid demonstration of the motions and form of the earth, *Science* Siftings would be considered uninteresting, and its demonstrations redundant. Then our circulation would be converted from an increasing to a decreasing one. Probably this last consideration has not presented itself to you; but we cannot lose sight of it."—

So we see that these gentlemen evidently distinguish between truth and f_{1} s. d.; and they chose the latter. Comment is needless.

Yours &c., J. WILLIAMS.

Highly Educated.

By M. A. BUXTON. Miss Pallas Eudora von Blurky, Who did'nt know chicken from turkey. High Spanish and Greek She could fluently speak, But her knowledge of poultry was murky. She could name the great-uncle of Moses, The dates of the Wars of the Roses, The reason of things. Why the Indians wore rings Through their red aboriginal noses. The meaning of Emerson's " Brahma." Why Shakespeare was wrong in his grammar ; And she went chipping rocks With a little black box, And a small geological hammer. She had views upon co-education, And the principal needs of the Nation ; Her glasses were blue, And the number she knew Of the stars in each high constellation. She expounded the use of bacilli,

And learnedly lectured on calci ; Her costume was mannish, Her ways very clannish, 'Mongst the Cult and the 'Varsity foci.

She wrote in a handwriting clorky, And spoke with an emphasis jerky; High German and Greek She could fluently speak; But—she didn't know chicken from turkey.

From the "Yankee Blude."

EARTH-NOT A GLOBE-REVIEW.

TH R

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

APRIL, 1893.

No. 2.

and the second second

PRICE 2D.

To our Readers.

†N again presenting ourselves as it were before our readers we desire to thank all those who have since our last issue helped forward the cause of God and of Truth. Some have aided us by encouraging words, others by good service in spreading abroad our literature. and a few in nobly sacrificing of their means so that the Word of God may have free course, run, and be glorified. To all these the society owes its best thanks, and gratefully acknowledges its indebtedness. Let others join our ranks, and help us by their subscriptions to keep the *Review* afloat, like the trim little bark that she is, so that it not only may be published more frequently, but the burdens which are now resting on a few may be more equally borne by the many. The workers in the good cause freely give their time and their services; but printers, type-setters and others necessarily require paying for theirs. All honour to those who are making sacrifices for the truth. They have a peace and a pleasure in it now in saving the doubtful from shipwreck, and they will have an exceedingly great reward and joy hereafter.

A WORD OF COUNSEL.

But there are friends who are only just beginning to enquire into these matters, to see whether these things are so: they need a word of advice and counsel. It is *Patience*. Another word is *Perseverance*. You cannot expect all difficulties to be cleared away at once, in one number or in one pamphlet. The errors of a lifetime are not so soon eradicated. We have done something already if only to make you doubt the globular theory. You should demand proof of *that* theory first. When you find this is utterly baseless you will be the more disposed to entertain the truth. One correspondent writes a very good letter, but he manifests a little impatience and doubt. His letter is long, but we will quote the most important parts : He says ;—

"I cannot prove that the earth is a globe, or that the theories of Astronomers are founded upon anything more positive than human speculation; as it is evident, even from a cursory reading of astronomical works, that the proofs with which astronomers are satisfied are extremely flimsy, unsubstantial things. in fact, not proofs at all; being nothing more than strange coincidences, which can be multiplied to any extent, whether we take the globe theory or the plane theory for the starting point. For instance, while they find in the nebula theory that there are several different appearances which they term different stages of development, the astronomers have never yet seen a lower stage develop into a higher; in other words, they never saw nebula evolve into a star, nor even undergo any transformation, so much as even one step in that direction. In admitting this, they give away their own theory. Their argument is no better than that of the geographical evolutionist, who, seeing various forms of animal life, coinciding in appearance, with the various stages of human development from conception to birth, jumps to the profound conclusion that human beings were primarily evolved from just such animals, and in just such order, from protoplasm. With such facts of nature before me, I should rather conclude that the Creator designed to teach us that he has power to put life, and a certain amount of intelligence, even into matter framed just as we are before we are born, from germ up to fully-developed infant. This is perfectly logical and reasonable, while the other view is absurd, although it tends to magnify human wisdom. No wonder the Lord says "The wisdom of this world is foolishness with God."

Because, as with the astronomer, so with the geologist, not one of them can find any example, either living, dead, petrified, or skeleton, wherein a change from a lower order to a higher can be discerned, nor from higher to lower. All, so far as the evidence goes, remain on just the same plane in which they were created, no change of species being discernible. If God so chose to make them in the first place; what could hinder him from doing so ? These scientists are the wisest fools of modern Christendom. God has given them great talents of knowledge, wisdom, and influence, and they will shortly have to give account of them, as to why they perverted and wasted these talents in building air castles; when the same talents might have been used to advance God's glory in the way he has appointed."

This is a very good stricture on the astronomical and evolutionary theories extant; but even while hardly aware of it he is still very much entangled in the meshes of those theories, especially on the question of "degrees." We therefore propose to say a word or two about what are called

" DEGREES."

After stating that he is favourably disposed to the Zetetic position, our correspondent states what he thinks is an "insurmountable obstacle" to its acceptance and promulgation. As we are not at all afraid of this "insurmountable obstacle," and as we have in fact climbed over greater obstacles before, we will give it in his own words. He proceeds ;—

To show what I mean, I will take the circle called the equator, and dissect it. knowing that its circumference is not over 25,000 miles. The diameter is 7,920 miles, and radius 3,960 miles, which is also the distance from northern cend tre to equator. But the distance from North Pole to equator on a globe is about 6,250 miles. Therefore the difference in the length of corresponding degrees of latitude north of the equator would be considerable.

" DEGREES. "

Thus, 6,250 divided by 90° equals $69\frac{1}{2}$ miles, which is equal to one degree, 1° of latitude on a globe, corresponding also, according to "Parallax" to the actual measurement by the various Europeon Governments. (?)

But with a plane the following would be the figures. Radius, 3,960 divided by 90° equals 44 miles, equals 1° longitude. But it does not measure that way, being a difference of over 25 miles in every degree of latitude between the Zetetic theory and what SEEMS to be a well-established fact. And here is where the trouble comes in."

Now our friend (H.W.M). will make a very good Zetetic; and we only wish we had space to quote all he says, and all that we could reply. If we had the means we would publish a pamphlet on this subject ; but at present we are compelled to be brief. In the meantime we shall welcome all facts upon the subject which either our friends or our foes can send us. But we must beg of them to distinguish between fact and fiction. See more on this "degree" fiction in the new pamphlet just published entitled The Midnight Sun. There is a great deal of fiction about these so-called "degrees." There are "degrees" of latitude and "degrees" of longitude. We must distinguish between these. As our friend shews, on a "globe" with the circumference of 25,000 miles there would be 360 degrees in its circumference of about 691 miles to one degree. Now supposing the circle of the equator to have this circumference it would follow that a circular "degree" on the equator would be about this length although the earth be a plane. And circles of latitude north of the equator would have "degrees" of decreasing length, while circles of latitude south of the equator would have "degrees" of increasing length. We know, and it is admitted that these degrees do decrease north; but the question is, do they increase south? We believe they do, and we challenge any actual facts that they do not. But this is not exactly our friend's difficulty as given above. It seems to be this. A meridan of longitude on the "globe," from the equator to the "pole," would be as he says, about 6,250 miles, or one fourth of the circumference, but on the Plane such a meridian is only about 3,960 miles long. True. And 3,960 miles divided by 90° would give only 44 miles to 1° longitude, instead of $60\frac{1}{3}$. True again we reply. But who says that a meridian from the equator to the North Centre should be divided by 90°? The Globularists. Ah! friend, "This is where the trouble comes in " Do you see it now? There are only about $57\frac{1}{2}$ such "degrees" from the equator to the North Centre. The astronomers have "calculated" their 90° on the assumption that the earth is a sphere, and the FACT (attested by water being level) that the earth is a plane discredits therefore every so-called "degree" of longitude either north or south of the equator. The same assumption discredits also the

French Metric system, the metre being founded upon fancy—the globular theory and its meridional "degrees"—and not upon any well established fact found in Nature. But we cannot go into this subject now.

PROGRESS.

The truth is consistent with itself Let all Zetetics also be so. If water be level (and Dr. "Parallax" has settled that question for us) then the earth must be a plane, and no amount of astronomical conjuring with " degrees " ought to unsettle our minds. Water is LEVEL : this is our sheet anchor. The earth is MOTIONLESS: this is another. We have asked in vain for proofs of the earth's motion. Only one correspondent has attempted the proof. If space permit we shall quote some part of our reply published in a northern paper. Difficulties must send us forward, not backward. We are glad to see the cause is progressing. Addresses have been delivered in both islands by Messrs. Smith, Perry, Atkinson, Lake, and others, valiant defenders of the truth. The newspapers have been liberal enough to give us fairly goods reports, and to allow of subsequent correspondence. We tender our thanks to all those which have done so, and especially to the Hebden Bridge Times and Gazette, and the Ashton Reporter, for allowing such a copious correspondence to follow their reports of the lectures. This correspondence has astonished and alarmed some of our opponents, and pleased and encouraged our friends.

We only wish we had space for all of the letters on both sides. We would gladly print for our opponents if they would contribute towards the expense, as we have no fear of hearing both sides, *Magna est veritas et prævalebit*: Truth is mighty and must prevail.

"CATHOLIC BELIEF."

"The astronomical system which had prevailed in the world down to the seventeenth century is what is called the geocentric or Ptolemaic system, by which it was supposed that the earth was motionless and that the sun went daily round it, causing the days and nights ; and that the sun in the course of twelve months moved gradually forward and backward inside the equatorial zone in such a way as to cause the different seasons."

"This was the system received by the Arabians, the Chinese, the Persians, and the Europeans. "For," says an eminent French philosopher, "all the researches which have been prosecuted with the most scrupulous exactness have failed to bring to light any other astronomy than that of Ptolemy." In accordance with this theory, which is so strongly and constantly suggested to our senses, is of course the language of Revelation addressed to man. Such being the state of Astronomy from the remotest antiquity !" The Rev. Joseph Di Bruno, D.D.

After the above confession it requires some courage on the part of a dignity belonging to a church which is supposed to be infallible and unchangeable, and which condemned Galileo for teaching that the earth moves, to try to reconcile their present acceptance of the theories of modern Astronomy with their past history. Yet this is what the writer attempts; and his work is endorsed by the so called Catholic Archbishop of Westminster.

The writer admits that "till the laws of gravitation were *established* $(!)^*$ by Newton, all the Copernicans were reduced to mere probabilities. Hence we are told by Lord Macaulay that the founder in England of the inductive school of philosophy, Lord Bacon, rejected the *theory* of Galileo with scorn; and so did "Descartes." Bravo Dr. Bruno. It appears that we Zetetics are at least in good company as regards intelligence.

The writer admits that Galileo was brought before the Inquisition and condemned for his teaching in June 1633. He says that Galileo " was ordered to abstain from teaching, as a demonstrated fact, that the earth was in motion, as it appeared to be against the express words of Scripture. He was, moreover, sentenced to remain a prisoner at the good will of the Court, and to recite the seven Penitential Psalms once a week for three years."

The good Doctor then tries further to excuse his church by saying, "the Protestants of that age fell into the same mistake of denouncing as warmly as Catholics the rotatory system of the earth as clashing with Holy Scripture." In proof of this he quotes some correspondence about Kepler written in 1853, to the Editor of the London *Catholic Standard*. The letter is signed R. Raby, Munich. The writer says;

" I allude here to the condemnation of the celebrated astronomer Kepler by the Theological Faculty of Tubingen, in 1596, for affirming the identical scientific truth (?) which 37 years later got Galileo into trouble. The great majority of English Protestants, are, without doubt, ignorant of this interesting case, which I venture to think a very fair set off to their favourite story about Galileo."

"Bailli, in his *Historie de l'Astronomie Moderne* calls Kepler 'one of the greatest men that ever appeared on the earth,' and 'the true founder of Modern Astronomy.' When he wrote his celebrated work, whose lengthy title begins with the words, "*Prodromus Dissertationum Cosmographicarum*" &c., in which he undertook by argument (not by practical experiments, Ed. E.R.) to demonstrate the truth of the

* See article on " Gravitation."

Copernican system, NOT LESS REPROBATED AT THAT TIME BY THE PROTESTANTS OF GERMANY and ENGLAND THAN BY THE CATHOLICS OF ITALY, he had to lay it before the ACADEMICAL SENATE OF TUBINGEN for their approbation, without which in the regular order of things it could not be printed. The *unanimous decision* of the DIVINES COM-PRISING THIS SENATE was that Kelper's book contained *a deadly heresy*, because it contradicted the teaching of the Bible in that passage where Joshua commands the sun to stand still." Good !

On reading this we are led to ask where are the Protestants of England to-day? Where are consistent Catholics. Are they all alike gone over to the enemies of Inspiration? Is the predicted Universal Apostacy now setting in ; and infidelity rearing its callous face, or its masked forehead, in the name of a Science that is falsely so called, for a final conflict? It is quite time, however, in the face of these facts, that all true and devout Zetetics, by whatever name they are called, came forward to the "help of the Lord against the Mighty." We have plenty of matter for the exposure of this modern infidel "Science," if our friends will only assist us with the means.

"THE LAND OF THE MIDNIGHT SUN."

The above is the title of an interesting book by Paul B. Du Chaillu, in which he describes his journeys through Norway and Sweden, Lapland and Northern Finland. In this book the writer unconsciously gives us proof that the earth is not a revolving globe such as the Astronomers teach, although of course he tries to explain the phenomenon of the midnight sun in harmony with the astronomical theories he was taught at school. While we have no space here for these theories we shall try to find room for the *facts* brought before us; then we shall proceed to shew how these facts conflict with the globeearth doctrine, and how they harmonise with the truth that the earth is a motionless plane, with sun revolving daily above and around the North Centre, commonly but erroneously called the north "pole."

In his preface M. Du Chaillu says; "The title of the book is derived from one of the most striking phenomena in the north of the country, and one which I witnessed with wonder and admiration on many occasions." In chapter v. he states how, between the 13th and the 18th of June, he sailed "towards the midnight sun" in a steamer leaving Stockholm for Haparanda, "the most northerly town in Sweden," on or "near the right bank of the picturesque Torne river." The passage lasting about three days; while, he says, "The Bothnia was not yet free from ice." He proceeds to describe

The Journey.

"As the voyage drew to a close, and we approached the upper end of the Gulf of Bothnia the twilight had disappeared, and between the setting and rising of the sun hardly one hour elapsed."

Haparanda "is in 65° 51' N lat., and forty-one miles south of the arctic circle. It is 1° 18' farther north than Archangel, and in the same latitude as the most northern part of Iceland. The sun rises on the 21st of June at 12.01 a.m., and sets at 11.37 p.m. From the 22nd to the 25th of June the traveller may enjoy the sight of the midnight sun from Avasaxa, a hill six hundred and eighty feet high, and about forty-five miles distant, on the other side of the stream ; and should he be a few days later, by driving north on the high road he may still have the opportunity of seeing it."

This intrepid explorer then describes his journey overland from Haparanda to the Arctic sea, "the distance as the crow flies being over 5° of latitude to the most northern extremity of the land," but by the route about 5° on miles. The country is inhabited by Finns, who are cultivators of the soil. The Laplanders roam over the land with their herds of reindeer. The summer climate is delightful, and during the period of *continuous daylight* one can travel all night if he pleases."

Strange Nights.

Speaking of a station called Pajala, M. Chaillu says ; "From the high hills on the other side of the stream at this place one may enjoy the sight of the midnight sun a few days later. How strange are those evening and morning twilights which merge insensibly into each other ! to travel in a country where there is no night, and no stars to be seen ; where the moon gives no light, and, going further north, where the sun shines continuously day after day ! The stranger at first does not know when to go to bed and when to rise ; but the people know the hours of rest by their clocks and watches, and by looking at the sun."

We may mention that at Ranea, which skirts the Baltic, M. Du Chaillu was told they had snow on the ground so late as the 2nd of June, after a winter during which the thermometer had fallen to 40° and 45° below zero; yet at the time of his visit he saw garden peas " about two inches above the ground which would be fit for the table at the end of August or the beginning of September." Referring again to Pajala he says; " In these latitudes the snow has hardly melted when the mosquitoes appear in countless multitudes, and the people have no rest night or day." " The traveller is surprised to meet so maay comfortable farms, with large dwelling houses, which with the barn and cow-house are the three prominent dwellings."

"Between the stations of Kunsijärvi and Ruokojarvi ($\mathcal{F}ärvi$ means lake in Finnish) we crossed the Arctic circle at $66^{\circ} 32'$ N, or 1,408 geographical miles (?) south from the pole, where the sun shines for an entire day on the 22nd of June, and the observer will see it above the horizon at midnight, and due north. After that date, by journeying north on an average of about ten miles a day he would continue to see the midnight sun till he reached the pole. On the 22nd of September the sun descends to the horizon, where it will rest, so to speak, all day long; on the following day it disappears till the 22nd of March."

"When returning southwards at the same rate the traveller will continue to see the midnight sun in his horizon till he reaches the Arctic Circle, where for one day only, as we have seen, the sun is visible."

The Sun's Motion.

Further quoting from these interesting travels we read ;—" The sun at midnight is *always north of the observer*, on account of the position of the earth (?) IT SEEMS TO TRAVEL AROUND IN A CIRCLE, requiring twenty-four hours for its completion, it being noon when it reaches the greatest elevation, and midnight at the lowest. Its ascent and descent are so imperceptible at the pole, and the variations so slight, that it sinks south very slowly, and its disappearance below the horizon is almost immediately followed by its reappearance."

After giving the modern astronomical "explanation" of these northern phenomena, an explanation founded on half-a-dozen unproved and unprovable assumptions, the writer naively and unconsciously owns that *appearances* are against these assumptions. He proceeds ; "The nearer any point is to the pole the longer during this time" (from the vernal to the autumnal equinox) "is its day. The number of days, therefore, of constant sunshine depends on the latitude of the observer ; and the farther north he finds himself the greater will be this number. Thus at the pole" (the north centre?) "the sun is seen for six months ; at the arctic circle for one (whole) day ; and at the base of the North Cape from the 15th of May to the 1st of August. At the pole *the observer seems to be in the centre of a* GRAND SPIRAL MOVEMENT OF THE SUN, which, further south, takes place north of him." (*Italics ours*)

Thus we see, that in spite of educational bias and Newtorian belief, the truth will unconsciously and innocently crop up in any description which is true to the facts of Nature. But before we criticise these phenomena further we prefer first to give all the facts which the interesting writer of *The Land of the Midnight Sun* has so carefully gleaned for us. He goes on to describe

THE MIDNIGHT SUN.

How the Sun is seen.

"We have here spoken as if the observer were on a level with the horizon; but should he climb a mountain, *the sun of course will appear higher*; and should he, instead of travelling fifteen miles north, climb about 220 feet above the *sea level* (!) each day, he would see it the same as if he had gone north; consequently if he stood at the arctic circle at that elevation, and had an unobstructed view of the horizon, he would see the sun one day sooner. Hence tourists from Haparanda prefer going to Avasaxa, a hill 680 feet above the sea, from which, though eight or ten miles south of the arctic circle, they can see the midnight sun for three days."

"There are days when the sun has a pale whitish appearance, and when even it can be looked at for six or seven hours before midnight. As this hour approaches the sun becomes less glaring, gradually changing into more brilliant shades as it dips towards the lowest point of *its course*. Its MOTION is very slow, and for quite awhile it apparently follows *the line of the horizon*, during which there seems to be a pause, as when the sun reaches noon. This is midnight. For a few minutes the glow of sunset mingles with that of sunrise, and one cannot tell which prevails; but soon the light becomes slowly and gradually more brilliant, announcing the birth of another day—and often before an hour has elapsed the sun becomes so dazzling that one cannot look at it with the naked eye."

Nature Asleep in Sunshine.

Again, ascending the river Muonio, on the last day of June, M. Du Chaillu says; "I came to Kicksisvaara, the first boat station situated on a hill commanding a fine view of the country, and overlooking the river Muonio. The people were all asleep as it was midnight; the sun had become paler and paler, its golden glow shedding a drowsy quiet light over all the landscape, and a heavy dew was falling ; the house-swallows had gone to their nests, the cuckoo was silent, and the sparrows could not be heard," "How beautiful was the hour of midnight ! How red and gorgeous was the sun ! How drowsy was the landscape; Nature seemed asleep in the midst of sunshine. Crystal dew-drops glittered like precious stones as they hung from the blades of grass, the petals of wild flowers, and the leaves of the birch trees. "Before two o'clock the swallows were out of their nests, which they had constructed on the different buildings of the farm. How far they had come to enjoy the spring of this remote region ! I did not wonder that they loved that beautiful but short summer, or that they came year after year to the Land of the Midnight Sun."

8

Civilization North.

At a short distance from latitude 70° , near a place called Wind, on the banks of the Alten, a few miles from the sea, our traveller and writer says; "I could hardly believe I was so far north, the birds were so numerous." Near this place at Bosekop he found a village of "scattered farms, with a church, a school; several stores, and a comfortable inn." Bosekop is the seat of a fair, and "in winter is a place of great resort for the Laplanders; court is also held here." Here too he met with a "small society of educated people," with whom he spent a pleasant evening, and had a game of Tzg. He says; "I liked the game amazingly; at 11 p.m., the sun shining brightly, they bade me good night, and went to their homes, leaving me full of admiration at their simplicity, innocence, and gentle manners." There also, " in 70° of north latitude, in the quiet parlour of the hotel at Bosekop," he delivered a lecture, by request, on his travels in the Equatorial regions of Africa !

Of the Alten Fjord he says; "There is no part of our globe (1) where vegetation is so thriving at so high a latitude as on the Alten Fjord." He might have said that there is nothing at all like it in equal latitudes south !—How is this pray ?—" Near Bosekop, rhubarb, barley, oats, rye, turnips, and potatoes grow well, also carrots, strawberries, currants and peas. "The thermometer sometimes rises to 85° the warmest temperature during my stay being 63° in the shade, the coolest 55° ." Looking over a dreary waste, he says; "from the top of the hills the midnight sun can be seen as late in the season as on North Cape, but the scenery is not so impressive."

A Farewell View.

But we must conclude, for the present, with a brief description of the final view, from the island of Mageröe, the most northern land in Europe. The north Cape is its northern extremity. On the 20th of July, M. Du Chaillu hired a boat and landed on the island. He proceeds ;—" After a walk of several miles I stood upon the extreme point of North Cape, in latitude 71° 10', nine hundred and eighty feet above the *sea-level.*" Sea "level." (Hear, hear !). " Before me, as far as the eye could reach, was the deep blue Arctic Sea, disappearing in the northern horizon. Wherever I gazed, I beheld Nature bleak, dreary, desolate ; grand indeed, but sad. A sad repose rested upon the desolate landscape, which has left an indelible impress upon my memory."

"Lower and lower the sun sank, and as the hour of midnight approached, it seemed for awhile to follow slowly *the line of the horizon*; and at that hour it shone beautifully *over* that lovely sea and dreary land. As it disappeared, behind the clouds, I exclaimed from the very brink of the precipice, Farewell to the Midnight Sun."

" I had now seen the midnight sun from mountain tops and weird plateaus, shining over a barren, desolate, and snow-clad country; I had watched it when ascending or descending picturesque rivers, or crossing lonely lakes; I had beheld many a landscape, luxuriant fields, verdant meadows, grand old forests, dyed by its drowsy light; I had followed it from the Gulf of Bothnia to the Polar sea as a boy would chase a willo'-the-wisp, and I could go no further."

"I now retraced my steps to where we had left our little boat. The men were watching for us; it had begun to rain, and when we got back to Gjœsver I was wet and chilly, and my feet were like ice. I was exhausted, for I had passed two-and-twenty hours without sleep, but to this day I have before me those dark rugged cliffs, that dreary silent landscape, that restless Arctic Sea, and that serene midnight sun shining OVER ALL; and I still hear the sad murmur of the waves beating upon the lovely North Cape."

We must reserve our further remarks, for lack of space, until another issue of the E.R. But we thought it best that our readers should first have all the *facts* placed before them on this interesting subject.

We may also add that in response to the wishes of friends who have seen the article, we shall print the whole of it in separate pamphlet form, with diagrams. It will be ready with this issue of the *Barth Review* and cost 2d. per copy, post free. Friends willing to help on its circulation will please to communicate with *The Editor*.

FLABBY RELIGION.

"Much of the religion of the day is flabby indeed. It is afflicted with a sort of Saint Vitus's dance—now bending this way, and now that; and it is uncertain which way it will wriggle next. It is almost disposed to change our Bible for a science that, instead of tracing our origin to Adam, makes us only a better order of tadpoles; and instead of reading "Abraham begat Isaac, and Isaac begat Jacob, and Jacob begat Joseph," would read, 'The fish begat the reptile, and the reptile begat a marsupial animal, and the marsupial animal begat the inadrumana and the inadrumana begat the gorilla, and the gorilla begat the ape, and the ape begat the Darwin." Much of our modern religion begins with a eulogy of human nature, instead of an exposition of its utter downfall. It makes us sick to hear all this talk about the dignity of manhood. It is a heap of putrefaction, unless St. John was wrong when he described it as "wretched and miserable, and poor, and blind and naked."—*Talmage*.

But, Mr. Talmage, is not your own religion just as "flabby" when you deny that Joshua commanded the Sun to stand still? The Sun, not the "Globe," En. E.R.

THE AGNOSTIC'S CREED "We do not know anything, how can we know?" The Sceptic cried in despair : "Then how do you know that you don't know? O, oh !" Was the answer equal and fair ? You know that Creation; Without generation, Could never occur, I suppose ? That our ancestors were All covered with hair From the head right down to the toes? Oh, yes, you know these things, and many such more, Occurring in days of yore? If I were Agnostic, I never would boast My narrow contracted view; I'd try to be humble, at least, the most To think how little I knew : If I truly "believed," And was not self-deceived, That nothing could ever be known; I'd quietly walk, And more modestly talk, Nor assume such a lofty tone ; Lest wrong I might prove, and know less than I ought, And perhaps some less than I thought ! And if I weren't sure that there is not a God, I would not revile his Name; For fear I might merit his chastening rod, For having profaned the same : I'd be faithful indeed To Negation's creed, And own I didn't know all; That things might exist My poor vision had missed Upon and above this "dark ball;" In fact I'd not call it a "ball" till I knew The truth or not of that "view." I'd never " believe " that the earth is a " globe " A-whirling and flying through "space" Unless I could prove it-for fear one might probe My theory to my disgrace : Nor would I assume, Much less fret and fume. Because some are sceptical here : Agnostics don't know-Yet do they think so ?-But let us be honest and fair, Why only one Book in the world should we doubt, And swallow down everything else like a spout? I would not pretend to think "Science" was sound If truth cannot be known here ; Nor would I presume Social-science to found, It might seem funny and queer ! And I never would dare, At home in my chair, To tell how the world should be made : I wouldn't pretend To know its last end, Nor call its "Foundations" mislaid : And if I were ignorant of Heaven and Hell I would be silent as well. If I did not care for the trouble to find Whatever was good and right; 1 would not assume because I might be blind, That all men had lost their sight : Lest my footsteps should slide I would call for a Guide, To save me from pitfall or snare ; If 1 heard of relief, From a beggar or Chief.

Who had saved some men from despair;

I would test his claims on myself, on my eyes, I would indeed, were I wise!

CORRESPONDENCE.

Letters intended for publication in the "The Earth Review" must be legibly written on one side only of the paper, and must have some direct bearing on the subject before us.

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

All letters must be prepaid, and addressed,

" ZETETES," Plutus House, St. Saviour's Road.

Leicester, England.

NOTES.

Carpenter .--- Your poem shall appear in our next.

January 2nd, 1893.

Atkinson, and others.—Thanks for cuttings, &c. They shall be used as space permits.

Clarke, Belfast.—Report of lecture received. But this and several other interesting reports unavoidably crowded out. Oh for more space !

To the Editor.

as a heap. He layeth up the deep in storehouses." Let all the earth fear the Lord: let

Dear Sir,—Allow me to congratulate you on your New Magazine, which was in great requisition. Many thanks for a copy of the first issue. I shall be pleased to take fifty copies for free distribution.

I am one with you in that which is expressed in its pages, and I like it on account of its strict adhesion to the teaching of the Bible. I am also very pleased with the general appearance of the Magazine.

I sincerely trust this new and much needed organ may soon find a hearty welcome amongst all classes everywhere, so that it may not fail in its high purpose and noble aim.

We shall reap a rich reward if we hold fast to the Word of God in preference to that of man. For that Word when faithfully proclaimed will neither prove void, nor unfruitful. Let us therefore hope for *great* things and mighty victories if we hold on tenaciously to the Holy Scriptures; for the Word of God is "sharper than a twoedged sword," and therefore by it we may hope to conquer.

"By the Word of the Lord were the heavens made; and all the host of them by the breath of His mouth. He gathered the waters of the sea together

all the inhabitants of the world stand in awe of Him. For He spake and it was done. He commanded and it stood fast. Again, according to the Law of God" Heaven is "above," earth "beneath," and the waters of the sea "under the earth." And the Psalmist says that the World was so "established that it cannot be moved." But as the Apostle Peter says, some people are "willingly ignorant" of this order of things. But as these statements are from God, and are in direct contradiction to the evolution and whirling globe theory, we may with all assurance rest satisfied of final victory over such absurd and monstrous notions.

Let us fearlessly use "The Sword of the Spirit" which is the Word of God, for by it "He maketh the devices of the people of none effect."

Trusting that such will be the case with all the false theories of men, and that athiesm and infidelity will soon be uprooted.

Believe me, in the hope of Eternal Life.

Yours truly,

Bath.

LADY BLOUNT.

[We are much obliged to her Ladyship for her kindly aid and good wishes. If all our subscribers would only take a few extra copies for free distribution it would greatly help our circulation. ED. E.R.

BATTLE CREEK, MICH.

Dear Sir,-I have read with interest the first number of your Journel, and think it "fills the bill," the best of anything yet published. The preponderence of evidence is certainly in favor of the position you take, namely, that "the earth is established, that it cannot be moved," and that whatever the Creator says in His Word about His Created Universe, whether Sun, Moon, or Stars. Heaven. Earth, or Sea. must be true, and is true; whether anyone believes it or no. I congraulate you on the appearance, and "get up" of the Earth Review, as upon the true value of its contents, and I trust it will meet with the success it deserves.

Yours truly,

TERRA FIEMA.

[We welcome this letter from our American correspondent, who has written a good pamphlet on the subject for our Seventh Day Adventist friends over there. We will attend to the other letter sent us through him if our space permit. In the meantime our friends must have patience, and help us more if they would have us to print oftener. A few are making noble sacrifices. E.D. E.R.]

CONTRADICTORY.

Sir,—In the London Echo for March 28th, 1892, we are informed that, "it is a great mistake to suppose that the Sun is stationary," Now Sir Isaac Newton in the third book of his Principia supposes that the "centre of the system of the world is immovable."

- 1.—Are not these statements contradictory.
- 2.—If the first statement is correct, is not modern astronomy proved by its own savants to be based on "A GREAT MISTAKE."?
- 3.—Is this the "false basis" on which "the whole of the astronomical science is founded," as reported in The English Mechanic for January 4th. 1889?

Yours, &c.

BALAAM'S ASS.

New Oriental Bank, 40, Threadneedle street, London, E.C. 7th Jan., 1893

Dear Sir,-I own there are difficulties in believing the earth is a globe, for instance the rates of curvature given in popular books are inconsistent and misleading. But I find it quite impossible to believe the earth is flat. I hope you will allow me space to say why. If the earth and sky were two great parallel wheels, with the north pole as a common centre, AS THE ZETETICS SAY, the southern stars would be near the rim of the revolving or sky wheel, and would all rush across the visible heavens of New Zealand together. (I say rnsh because, being near the rim, they would have much further to go than the stars we see, which are nearer the centre). Now they do not do as they should do according to the Zetetic theory. Leaving aside other evidence, I will quote Mr. Runciman. He is a Zetetic, but a candid one, he lives in New Plymouth, N.Z. He writes to me. "The Southern Cross never sets in N.Z.," and " if you look at Proctor's Star Atlas, map 12, and place a pin in the centre" where Proctor shows the south polar star) " and move the map round about, you have exactly in one revolution what occurs in our southern sky every 24 hours.

Now how can the earth possibly be flat when facts like these so pointedly contradict it? The sky is better evidence than small tracts of water.

Yours,

CALDWELL HARFUR.

Our correspondent C.H. lies between two difficulties. He must choose the least. The earth is either flat or spherical. Can he suggest any other form? If a plane, the stars in the southern sky would hardly seem to "rush across the visible heavens." as he says, unless we were nearer to them than we are. An express train seems to creep along the mountains when seen at a distance. No doubt the stars move more rapidly in southern latitudes; for when the sun has 2310 degrees south declination, we are informed by travellers in the south that he seems to set much more rapidly and more suddenly than he does in the north. In fact they have no twilight there. This is quite in harmony with the plane truth. Respecting the Southern Cross, we want direct evidence, not hearsay evidence, of those competent to observe and competent to describe their observations in clear language See Carpenter's article "How is it ?" We do not acknowledge the evidence of a "Star Atlas," not even by Proctor, who declined to debate with Parrallax. When the planets, and the sun and moon, have great southern declination, they still revolve around the North Centre. Why should not the southern stars do likewise? At what "degree" of south declination do they turn off in another direction? But even if all the southern stars revolved in a direction different from that of the planets, what has the motion of the stars to do with the shape of the earth ? No more than a revolving light in a lighthouse has to do with the shape of the rock on which it is built. We don't go up amongst the stars to find out the shape of the earth, no more than we gaze up at a gas chandelier to find out the nature of the floor of a public hall.

Water has been proved by Parallaz to be really "level," in his great work Earth not a Globe. Therefore the Earth is a plane. If our correspondent thinks he can overthrow Dr. Birley's proofs we invite him to try, $E_{\rm D}$. E.R.

GRAVITATION.

SPECIAL NOTICE. The Parallax Company.

To the Readers of the Review.

Dear Friends,—It is proposed to form a Company whose object will be to purchase the plates, and issue a revised, and cheap edition of the work entitled, "Earth not a Globe," by our late esteemed friend "Parallax" (Ds. B. R.) The price of the shares will be placed at the lowest possible figure, so that every Plane Earth friend may participate in the re-production of the grandest and truest scientific literature, that was ever placed before the world.

Will those who are interested in the spread of Zetetic Astronomy as founded by Parallax," kindly communicate as soon as possible, (enclosing stamp for reply) with the Secretary.

Universal Zetitic Society.

32, Bank Side, London, S.E. [N.B.—Permit me dear friends to take this opportunity of asking for your support in our contention for the truth of Zetetic Astronomy. Membership is placed at Six Shillings; Associates at Two Shillings and Sixpence per year. Members and Associates will receive a free copy of every publication issued by the society. Full particulars can be obtained from the Secretary, by enclosing a stamp for reply. J. WILLIAMS.

"THE MYSTERY OF GRAVITATION."

To the Editor of The Future.

(REFUSED).

Sir,—In the National Review for January, 1892, there is an article by J. E. Gore, with the above title. The writer commences by saying, "The law of gravitation discovered by Sir Isaac Newton is believed by astronomers to rule with absolute sway throughout the length and breadth of the visible universe."... "Gravity acts in proportion to the mass, and inversely as the square of the distance. This is the *law* of its action. But the enquiring mind is tempted to ask, *How* does it act? What is the mysterious mechanism which produces gravitative action between two distant bodies unconnected by any material bond? We cannot from experience gain any explanation of action at a distance." After this confession Mr. Gore proceeds to give or quote a number of hypotheses, or "scientific" guesses, as to how bodies can act at a distance while "unconnected by any material bond." He does not go

GRAVITATION.

to the root of the matter and question the existence of this mysterious something called "gravitation"; he only proceeds to enquire *how* it may possibly act upon the most distant planet, comets, meteors, and revolving double stars?

Now, Sir, would it not be more scientific first to prove the existence of such a force, before proceeding to enquire how it acts? I think so. But as the writer speaks of "Newton's discovery of universal gravitation" he perhaps thought this enquiry was unnecessary. But before enquiring, for instance, how the sun manages to pull at the moon, or how the moon pulls at the earth-without any connecting rope or chain-I should like to know how and when Newton "discovered " that such action does take place at all ? Can any reader enlighten me on this point ? As far as my reading goes, at present, it seems to me that Sir Isaac Newton invented the idea of "universal gravitation " rather than discovered such a force ; and that he invented it because it was necessary to his mathematical device of a revolving and rotating earth and sea globe. This is a very important question. Was "universal gravitation" a real discovery, or was it a mere "scientific" idea and invention? I affirm it was the latter; and I deny that the idea of solar or stellar gravitation has any true basis in the facts of nature. I shall appeal to the article in question in support of my contention, which article was written by a Newtonian.

First, I ask, why is there so much "mystery" surrounding this doctrine of gravitation? In his *History of Physical Astronomy* Professor Grant says; "Whether gravitation is a quality inherent in, and necessarily coexistent with, matter, or whether it is a principle essentially distinct from it, and operating merely on its constituent parts, is a question which, in all probability, is destined for ever to prove irresolvable to the most penetrating inquiries of the human mind." That is, to put the question in plain words, Does "matter" itself attract? or is there something else distinct from matter which does all the pulling? The learned Professor says that he does not know; and that "in all probability" no one ever will know! What is this but a veiled confession that the astronomers themselves know nothing at all about it? That it is all philosophical hypothesis or scientific guesswork.

In a letter to Dr. Bentley, dated February 25, 1692-3, or about ten years after his supposed "discovery," Newton makes the following confession ;—" That gravity should be innate, inherent or essential in matter, so that one body may act upon another *at a distance*, through a vacuum, without the mediation of anything else, by and through which their action and force may be conveyed from one to the other, is to me SO GREAT AN ABSURDITY, that I believe no man who has in philosophical matters a competent faculty of thinking, can ever fall into it. Gravity must be caused by an agent acting constantly according to certain laws; but whether this agent be material or immaterial, I have left to the consideration of my readers." This is very kind of Newton, and very flattering to the penetration of his readers ! He leaves it for them to decide; and they now appeal to him ! I agree with him, however, in saying it is an "absurdity" to believe that bodies can act at a distance—and such distances !—and that they can pull one another about like the great "globes" of the universe are said to do; and this too without any chains or couplings ! Yet at another time Newton seems to fall into this very absurdity.

Newton says (Optics, b. iii. app. query 31); "Have not the small particles of bodies certain powers, virtues, or forces, by which they act at a distance? What I call 'attraction' may be performed by impulse, or by some other means UNKNOWN to me." On which the above mentioned writer very properly remarks ; " This passage clearly shows that even Newton's penetrating intellect was unable to frame a satisfactory theory of gravitative action." Then why, I ask, believe in such an absurd and occult property? Newton confesses the idea to be an " absurdity "; yet he is compelled to adopt that absurdity himself, or to confess that gravity acts by some means "unknown" to him. Another time he supposes this secret force to be a "universal repulsion," which of course is the very opposite of "universal gravitation," or attraction. But as Taylor remarks, " This ingenious scheme of universal repulsion leaves no room for that self-repulsion of matter exhibited in the phenomena of elasticity "; and, as Mr. Gore reminds us, these "phenomena have indeed proved insurmountable difficulties in all kinetic theories of gravitation." This confession is honest.

Thus the best Astronomers are all at sea respecting gravitation; and they are each propounding theories respecting it which are mutually contradictory and destructive. Yet this baseless idea of gravitation, acting on all bodies, and in all conceivable directions and distances, is a fundamental doctrine lying at the very basis of the teachings of Modern Astronomy. It is one of its main pillars, if not its chief support. Without solar gravitation the "globe" ere this would have flown off at a tangent into "space," and would probably before now have collided with some "other world than ours"; and we should have been suffering, or consigned to, a worse fate than that with which we were threatened last November owing to a predicted "collision between the earth and a comet"! See The Earth Review for January. However, as we have fortunately survived this catastrophe, I would modestly ask any of our learned scientists to try to explain for your readers, how the sun can possibly " pull " at the earth at the distance, we are told, of ninety two, or ninety three millions of miles ? What is

16

the connecting rod or coupling between the two bodies ? What chain exists between them ? of what are its links composed ? and where is it attached ? Is the force incessant, and if so what keeps it up ? Does the sun exhibit any loss of energy or force for such tremendous and constant dynamic expenditure? Does the force come out from the sun to the earth, or vice versa; and if so, why does it turn back suddenly on reaching that or any other body? These are practical questions. No locomotive that we know of can drag the railway carriages after it unless they are first carefully coupled on to it, and by some extraneous power. Why should the sun or moon be able to "pull" at the "globe" with all its weight of mountains, seas, and continents, "unconnected by any material bond "? Such an action has never been known to take place on the earth. Then what reason is there for supposing it takes place in the sky? The idea is unreasonable, contrary to universal experience, and as Newton was obliged to confess, philosophically absurd. Yea, it is so great an "absurdity " that he says ; I believe no man, who has in philosophical matters a competent faculty of thinking, can ever fall into it." Now, Sir, I believe the same ; and I am delighted to be in harmony with so great an authority as Sir Isaac Newton on this point. But for the present I must conclude.

> Yours faithfully, ZETETES.

December 28th, 1892.

THE SHAPE OF THE EARTH.

To the Editor of " The Future."

(ALSO "DECLINED.")

Sir,—The letter of "Enquirer" in the January issue of *The Future* is as good an example of a bit of special pleading as I have lately met with. He calls himself an "Enquirer," but his correspondence reveals the fact that he is much more anxious to prove that "the earth is a globe" than to find out the true shape of the earth. However, I will with your permission briefly notice a few of his points.

He owns that appearances at least are in our favour. He writes ; "Parallax also *said*, 'Water is level.' This is seemingly true, but not an absolute truth." Now, Sir, it is well known that Parallax spent days, and weeks, and months not in merely "saying" but in proving experimentally that *water* is *level*; while "Enquirer," though admitting that this is "seemingly true," merely *says* this is "not an absolute truth." Now let "Enquirer" *prove* his assertion, and the victory will be his. He might also at the same time explain the difference between ruth and what he is pleased to call "absolute truth." Enquirer further says, "That water appears level is due to the compensating effects of refraction." He gives no experimental proof of this: he only affirms it on his own authority. Besides, if water "appears level," as undoubtedly it does, I should like to know why we must think it convex? I should like to know too what refraction would take place in looking through a medium of unvarying density, as the atmosphere for instance at a uniform height above the level of the water? "Parallax" was careful to test the density of the atmosphere during some of his experiments; so that an "instructed person" can " deny or doubt" the assertion of "Enquirer." In fact, Sir, it is the "instructed" person who is best able to do so. It is the uninstructed person who swallows down all modern astronomical theories.

Again, "Enquirer" admits that, "Were the earth a plane the horizon at sea would seem to arise about us like the sides of a bowl, just as in fact our horizon does." This, doubtless, is true; and it is a source of satisfaction to Zetetics, or real Enquirers into the truths of Nature, to find that natural appearances are always in our favour, and in favour of the truth that the earth and sea form an outstretched plane. Nature is no deceiver. She lies not like the following unsupported assertion; "It (water) is declared to be *level*—all the same, it *lies* around the spheric surface of the earth, just as the oceans do." Yes, friend, "just as the oceans do." No more ! "The spheric surface of the earth." This is a fine example of the old *Petitio Principii*, a tacit assuming, or begging of the very question at issue ! I would advise "Enquirer" to take a few lessons in logic before he again appears in print, on this subject at least.

We have the same complaint to make with respect to the vague and illogical argument which he advances to prove that the "degrees " of longitude converge south of the equator. He innocently yet frequently uses terms which quietly assume the question at issue ; namely, that the earth is a globe. He talks of the "latitude" of places north and south of the equator; and assumes that these latitudes and " degrees " though calculated and given to us on the hypothesis that the earth is a sphere, represent actual facts. He refers to "Great circle" sailing ; and " ventures to state," on this supposition, what the distances are he wishes us to compare. This may be all very satisfactory-to himself, and to others who wish to prove a foregone conclusion ; but it is not so to true Enquirers. He compares two sailing routes or distances, one running generally from north to south, and the other running from west to east ; instead of taking two parallel circles, or arcs, both running east and west, but one north and the other south of the equator. He " ventures to assert " that the distance from Teneriffe to the Cape is 5,000 miles ; and that from the Cape to Hobart Town,

THE SHAPE OF THE EARTH.

18

6,100 miles or less ; and, without knowing how long the Royal Mail Steamers to New Zealand actually stop at these places he "ventures" further to say, "I feel assured that enquiries properly made at the offices of these great companies, as to how it happens that they only allot nineteen days for a run which is *twice as long as* another for which they allot fifteen days, would be lucidly replied to." This sentence certainly needs some elucidating, whether our friend "Enquirer" has made *his* enquiries " properly" or not, at the offices in 34, Leadenhall Street, London, E.C. He probably refers to what he thinks the distance ought to be " on the flat earth theory"; for one would think that twice 5,000 miles would be 10,000 miles.

Yet our critic, in the face of all these assumptions and ambiguities, suavely affirms that "this is all practical and clear !" It almost seems a pity to disabuse his mind of this pleasant hallucination; but the truth demands it, and in all fairness to us. Sir, I hope that you will allow it. You profess to want "facts," so do we. Yes, Sir; we want something more definite and more lucid than "Enquirer" gives us. We want facts, not guesses. "Enquirer" himself seems rather doubtful of his "facts," for he says; "If the facts I have given you are substantially correct" (as if *facts* could be anything else !) it is certain that the earth is not a plane, and that water is not level."

Ves, yes, friend, "*if*" your figures were facts; and "*if*" water was not level but convex, then the earth would be a globe ! "IF"!! Now let "Enquirer" clear his premises of assumptions; let proper enquiries be instituted, and let those enquiries, as he says, be "properly made"; then let the argument be restated, this time "lucidly"; and "if" he can prove that the degrees do converge south of the equator, or that water *is* convex at its surface and not "level," *then* we will own that appearances have deceived us, that Nature has played us false, and that the earth after all is *not* a motionless plane, but a mighty mass of globular land and water, rolling its prodigious weight on nowwhere, in what is called "the plane of its orbit," and supported in that plane by a mysterious and invisible arm, outstretched from the sun, ninety three millions of miles long, and facetiously called "Gravitation"!

I am, Sir, yours faithfully,

"ZETETES."

January 17th, 1893.

"Standing order 14 House of Commons, denies convexity. There is no allowance to be made for it. None in making the Suez Canal, 80 miles long. None in making the Canal in China, 700 miles long. None in making the Manchester Ship Canal; working from a level datum line no allowance is required at all." I. SMITH.

CUTTINGS AND REMARKS.

CUTTINGS AND REMARKS.

The "Crust of the Globe "! or The way they cook

" Science."

"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 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 probably not 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 discomfiture, 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 taxpayers' 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 forgotton the incident-surpress him, and boldly appropriate to themselves the credit of his work.

The geological secret of the Highlands, while the unlocking of which Sir Archibald Geikie is now credited, was really made a puzzle for more than half a century 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 crystal-line 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. Murchinson, not to put too find 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. But in the Natural History School of Aberdeen University it was scoffed at. The late Dr. Nichol, 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 conscientice* 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 Geological 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 GLOBR* 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's paper made in 1883, he was fain to send his surveyors to goover 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 enlogising 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. 14th, 1893.

*In the above article we have "Science" exposing "Science"? Is not this idea of "the crust of the Globe" the greatest blunder of all and the basis of all the other geological "blunders"? (ED. E.R.)

IS WATER HORIZONTAL ?

"Parallax" the modern and experimental discoverer of the true shape of the earth and sea is dead, but his living testimony was, Water is horizontal. John Hampden Esqr. who nobly defended the truth, is also dead, but his living testimony was, Water is horizontal. William Carpenter, another noble defender of the truth; whose One Hundred Proofs that the World is not a Globe, has forced the astronomers into a dogged silence, says "Whenever experiments have been tried on the surface of standing water, this surface has always been found to be level," i.e. horizontal. The Zetetic Society lives, and its united undeviating testimony is, Water is horizontal. Is this testimony true, or is it false? Let practical witnesses give their testimony, and I defy any official Astronomer to contradict them by an open and direct appeal to the surface of Water, either on lake, river, or sea, in any part of the World.

First. "Parallax" says, "Experiments made upon the sea have been objected to on account of its constantly—changing attitude. Standing water has therefore been selected, and the following experiment made."

"In the County of Cambridge there is an artificial river or canal, called the 'Old Bedford.' It is upwards of twenty miles in length, and passes in a straight line throught that part of the fens called the 'Bedford Level' The water is nearly stationary, often entirely so, and throughout its entire length has no interruption from locks or watergates; so that it is in every respect well adapted for ascertaining whether any and what amount of convexity really exists. A boat with a flag standing five feet above the water was directed to sail from a place called 'Welche's Dam' (a well known ferry passage), to another place called 'Welney Bridge.' These two points are six statute miles apart. The observer, with a good telescope, was standing in the water, with the eye not exceeding eight inches above the surface. The flag and the boat were *clearly visible throughout the whole distance* ' as shown in the following diagram.



PROVING WATER TO BE LEVEL.

"From this experiment it was concluded that the *water does not decline from the line of sight* / As the altitude of the eye of the observer was 8ins., the highest point, or the horizon, or summit of the arc, would be at one mile from the place of observation; from which point the surface of the water would curvate downwards, and at the end of the remaining five miles would be 16 feet 8 inches *below the horizon* / The top of the flag, being 5 feet high, would have sunk gradually out of sight, and at the end of six miles would have been 11 feet 8 inches *below the eye line* !" This simple experiment is all sufficient to demonstrate that the surface of the water is parallel to the line of sight and is therefore Horizontal, and that the earth cannot possibly be other than A PLANE !" Second. Mr. W. T. Lynn of the Royal Observatory, Greenwich in his "First Principles of Natural Philosophy" says, "the upper surface of a fluid at rest is a horizontal plane. Because, if a part of the surface were higher than the rest (and on a globe one part must necessarily be higher than the rest !), those parts of the fluid which were under it would exert a greater pressure upon the surrounding parts than they receive from them, so that motion would take place amongst the particles and continue until there were none at a higher level than the rest, that is, until the upper surface of *the whole mass of fluid became a horizontal plane.*"

Third. Professor Airy in his "Six Lectures on Astronomy" says, "guicksilver is perfectly fluid, its surface is perfectly horizontal."

JNO. WILLIAMS.

(To be continued).

SOUTH LATITUDES.

" It is a well ascertained fact that the constant sunlight of the North develops, with the utmost rapidity, numerous forms of vegetable life, and furnishes subsistence for millions of living creatures. But in the South where the sunlight never dwells, or lingers about a central region, but rapidly sweeps over sea and land to complete in 24 hours the great circle of the Southern circumference, it has not time to excite and stimulate the surface, and therefore even in comparatively low Southern latitudes everything wears an aspect of desolation.--*Parallax* in " Earth not a Globe."

The bones of musk oxen killed by Esquimaux were found North of the 79th parallel, while in the South, man is not found above the 56th parallel of latitude. Polar Explanations.—Read before the Royal Dublin Society.

A SONG.

We do not foist a paste-board Globe on every British school, Nor vote for children's brains to rack with *Theory's* tangled rule; Nor Teach foul Falsehood's right to reign though donned in wig and robe, Nor quench astonishment in youth when told the earth's a Globe !

Raise high the Truth; knock down the lie! and blow a mighty blast; By showing how for so-called Science the Lie rose in the past; Proclaim the thousands driven mad, and others nigh entranced, Through grinding-in the Globe-man's Lie, and Protoplasm's dance.

Record how "Parallax" once fought, and Hampden's Clarion tongue; Tell how "Zetetes," Carpenter, have borne the Standard on : Of other heroes, young and old, in every land and clime; And let the Truth which must be told resound along the line.

On, onward ! Flatten all the globes in every British school, Nor keep the Right upon the rack while Falsehoods proudly rule ; Let honest Truth, not lies, prevail through England's fair domain Then Right shall rule and Truth shine o'er the World's extended Plane. ICONOCLAST,

EARTH- NOT A GLOBE - REVIEW

平岩温

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

No. 3.	JULY, 1893.	PRICE 2D.

SPOILED CHRISTIANS.

Being the substance of a Sermon preached by the Editor in Monk's Road Chapel, Lincoln, Sunday morning, May 14th, 1893].

"Beware lest any man spoil you through philosophy and vain deceit, after the tradition of men, after the rudiments of the world, and not after Christ." Col. 2:8.

We have, in the words of the text, a note of warning addressed to Christians. It will not be denied that Christians need preaching to sometimes as well as the world. Paul's letters, exhortations, and warnings, were addressed to believers. A faithful minister has need at times to preach something more than what is commonly and superficially called "the gospel." He is commanded to "preach the Word," and the Word of God refers to a great many subjects, some of which are sadly neglected, as for instance the subject of Creation. Yet this subject of Creation stands out at the forefront of the Holv Scriptures. which Scriptures were written for our learning. But many in our days, and, alas ! many professed Christians, prefer to take their learning regarding the construction of God's Universe from other sources rather than from the revelation which the Creator has given us. In fact they prefer human philosophy and vain deceits with the traditions of men rather than the statements of the inspired prophets and apostles. If a "scientist," with half a dozen letters of the alphabet tacked on to his name, should come down to lecture on the stars, or the Universe, he is listened to by multitudes with open ears, and mouths ; and his words are considered far more reliable than those of the holy men of God who spake and who wrote as they were moved by the Holy Spirit. We do not disparage learning or true science; but there is a great deal abroad now which as Paul says, is only "Science, falsely so-called." 1 Tim. 6: 20. That is, this so-called "science" is not true knowledge, or the

 $\mathbf{24}$

SPOILED CRISTIANS.

THE EARTH REVIEW.

knowledge of truths, or facts, found in nature or the universe; but it is merely speculative learning, deceptive philosophy and worldly tradition. Now these traditions, these worldly philosophies, make the Word of God of none effect, as the Saviour said. Mark 7 : 13. So that when God speaks to us on the same subject we either deny His Word, or take it in an unnatural sense to accomodate it to the teachings of men, and so it becomes of none effect to us. Hence the need of this word of warning, "Beware;" that is

BEWARE OF PHILOSOPHY.

Beware of Science that is falsely so-called. There are those who think this word of warning is not needed, and who do not like philosophic subjects referred to in a sermon. But while we ought not to preach philosophic sermons, which, alas ! is becoming a common practice ; yet, if the Spirit of God inspired Paul's statement, we ought to lift up a voice of warning *against* human philosophies, and show how they are undermining faith in the teachings of the gospel. I propose therefore to do so this morning in connection with the question of Creation and the shape of the Earth, in which you know I am so much interested. I am interested because I see how by false views of Creation and false theories of the Universe, our great spiritual enemy is subverting the faith once delivered to the saints. You who are here know how human traditions have nullified much of God's Word, especially the great truth of Life through Christ alone; and I am thankful to think that God has raised up men in Lincoln to proclaim to the ends of the earth the primitive and gospel Hope of Eternal Life. But if subtle philosophies and a false science are allowed to undermine all faith in the Sacred Writings it will soon be useless to preach to perishing men the gospel of a new and better Life through Israel's Coming Messiah. When men, through a false "Science" have lost faith in the Bible then those who now ask what the shape of the earth has to do with Salvation, will find it has something to do with damnation if not with salvation; for men will be damned, or condemned, through unbelief. And it is most remarkable that a false system of Cosmogony is at the basis of nearly every form of heresy and unbelief.

I therefore feel it my duty this morning to warn you; for although you may think your own faith is at present firm, that of others is actually giving way, as I shall proceed to shew, and I trust that some of the young men I am now addressing will yet be raised up, not only to preach the Gospel of Resurrectional Life through Christ, but also be enabled to defend the integrity and soundness of the Holy Scriptures on this great Creation subject. For if the foundations be destroyed what will the righteous do? It is not by accident that God has placed the subject of Creation in the forefront of His Revelation. He challenges our allegiance as Creator. But if the first chapers of Genesis are wrong, and the earth is a whirling Globe, evolved out of a hot cinder thrown from the sun; and if, as a part of this evolutionary scheme, we have sprung from "Bathybius"—a jelly-fish kind of slimy mud ascideans, mammals and monkeys, then the gospel of Jesus Christis a useless superfluity. If all around us on this so-called "planet" is unlimited "space," and if there be no heaven near and above us, then the resurrection and the ascension of Christ are myths, or allegories, to be explained away, as they are being explained away, by clever "Christian" sophists in harmony with the new astronomical philosophy.

"WHERE IS HEAVEN?"

To shew you that I am not drawing a fanciful picture I will quote from a sermon published in *The Christian World Pulpit*, March 29th, 1893. It is by the "Rev." Geo. St. Clair, F.G.S., preached in West Grove Church, Cardiff. It is headed, "Where is Heaven?" and the text quoted was;—"As they were looking He was taken up, and a cloud received Him out of their sight." Acts 1:9. You would hardly expect to find a man denying that heaven is a locality placed above us in the face of such a text. But it is not the first time such a text has been craftily handled and finally contradicted by those who wrest the Scriptures to their own destruction. And on what basis is Christ's Ascension to a local heaven denied by this professed man of God? The new Cosmogony. The earth is supposed to be a globe, surrounded by— "space"— so if there is no local heaven the term "heaven" refers to a "state" of feeling, or a condition of being, not to a place at all ! The preacher says:—

"In 1492 Columbus sailed Westward in search of the East Indies, and thirty years later Magellan actually sailed away from Europe in one direction and returned in the other, having voyaged all round the world. It was thus shown that the earth is a globe. Previously the common notion had been that the earth was flat, and heaven a little way above the clouds, and the place of the dead—the wicked dead, if not all the dead—somewhere underneath. These were ancient ideas and the fact that we find them in the Bible is one proof that the Bible is an ancient book. The Bible writers had been educated to believe that God had laid foundations for the earth, or supported it on pillars. Heaven was His throne, the earth His footstool. If the earth opened you might go down alive into the pit or abyss, like Korah, Dathan, and Abiram. In New Testament times these ideas were still traditionally current, and when the Apostle Paul declares that in the name of Jesus every knee shall bow, of those in heaven, those on the earth, and those under the earth, he intended it as an enumeration of all the provinces of the Universe."

The above paragraph clearly shews what the Bible writers had been "educated to believe," both in old Testament and in New Testament times. But this "Rev." Fellow of the Geographical Society says ;" The

2

WHERE IS HEAVEN?

THE EARTH REVIEW.

progress of knowledge leads us to look *differently* at some of these questions." This is a polite way of saying that Bible writers were all wrong. How do we know that they were wrong? Because Magellan sailed round the world, and "*thus* it was shown that the earth is a globe." And this is called "the progress of knowledge." Knowledge indeed ! I am not going to give you a Science address this morning—I shall be happy to do this, God willing, another time—I am going now to keep strictly to the Bible aspect of the subject, so I will dismiss this specimen of scientific progress by saying that such "knowledge" would enable you to prove any island, say Australia, to be a globe, if you could only sail round it ! This would be further " progress" of the same kind ! But what I want you to notice here is this, the idea that we are living on a sort of shooting star, or planet, is made the basis, not only of denying the existence of heaven as a locality, but, as a result, also denying one of the fundamental articles of the Christian faith ; namely,

THE ASCENSION OF JESUS CHRIST.

Of course this is consistent. Bemove heaven millions upon millions of miles away, or deny its existence altogether; then it logically follows that the resurrected body of our ever blessed Redeemer did not "ascend" there ; and according to this, he does not now sit at the right-hand of the MAJESTY ON HIGH to make intercession for us. In fact it is more than suggested by this writer that the material body of Jesus never rose again; so that the Apostle Thomas was deceived and the other apostles. And if Christ be not raised from the dead, we are yet in our sins; then they also who have fallen asleep in Christ are perished; and we, like the deluded apostles, are of all men most to be pitied. I Cor. 15: 14-18. But thanks be to God, in the face of all the evidence for the bodily resurrection and ascension of the crucified Nazarene, we can say with the gifted Paul; "But now is Christ risen from the dead, and become the first fruits of them that sleep"; and not only so, but that "He ascended up on High," and led forth a multitude of captives. See Eph. 4 : 8. margin. But I want you to see where these false philosophies are leading men to. To covert and open denial of the leading facts and doctrines of the Christian religion. You ought to know these things. I shall not weary you with quotations, or I might instance other writers besides, but I must give one or two extracts from the sermon already quoted to convince you of the dangers incurred in harbouring a false system of Creation, or Cosmogony. The preacher went on to say :--

"Heaven will extend all round the globe in every direction. If we found reason to fix heaven, or God's throne, in some special locality, such as the Sun, or the larger luminary around which our Sun is supposed to revolve, we could not say that heaven is above our heads, because the Sun is never in the zenith to people outside the tropics, and because the earth rotates daily, so that what is above our heads at midnight is beneath our feet at noonday. . . . Similar considerations apply to the supposed central Sun in the Pleiades; and even if we could get there we should perhaps find that the great luminary in the Pleiades was moving round a Sun more masterful and huge in an altogether different region of the heavens. We cannot find the centre of the universe, and we do not know whether it has one."

This is a sad confession to make on the part of a man and a minister who professes to be a Christian. It reminds one of Mary's complaint; "They have taken away my Lord and I know not where they have have laid him." It is the hopeless wail of "Science" without the historic facts and hope of Redemption.*

But I must read another extract from our "Christian" scientist and preacher to show how he further tries to steal away all our tangible hopes and supplant them with vague and so-called "spiritual" immaterialities. He goes on to say in his sermon ;—

"Nor is the question of distance at all ridiculous, if we are going to look at the matter in this material way. Dr. Thain Davison has suggested (*The Quiver* for January) that the pivot of the starry universe (supposed to be in the Pleiades but if in the constellation of Hercules no matter) is the peculiar residence of Jehovah, the metropolis of creation, the palace of the King of kings. Upon this a newspaper writer remarks that Sirius (a star which is really really nearer than the Pleiades is so immensley distant that a traveller proceeding 2,000 miles a day would be 150,000,000 years in getting there, and Adam and Eve would not yet be very far on the way."

So that on the basis of absurd star distances, calculated by modern astronomers upon a fanciful parallax, we are asked to give up the ancient apostolic ideas of heaven; and to believe that the apostles and the prophets with all the worthies of old had mistaken notions thereon. Yea, more ; we are required to give up our hope of the resurrection of the body, based as it is upon the Resurrection and Ascension of the glorified body of Jesus the Christ. And we are invited to do this too at the bidding of a gentlemen who dares to take for his text, " As they were looking He was taken up, and a cloud received him out of their sight." Acts 1:9. Could sacrilege go further? Yet in the face of all the evidence to the contrary he affirms concerning Christ's material resurrection body, "He did not take it to heaven with Him." Then we enquire. What became of it? Was even the sceptical Thomas imposed upon after all? But the reason this "Fellow" gives is one quite apart from the evidences for the resurrection. We are told that "a material body cannot throw off the influence of gravitation and leave the earth." You see historic evidence of facts must be laid aside to give way to modern astronomical assumptions; and no assumption is more baseless than the modern idea of universal gravitation, as I have shewn elsewhere.

* See also the following article headed, "The Hopeless Wail of Science."

HOPELESS WAIL.

THE EARTH REVIEW.

Whether therefore you now see it or not, I firmly believe that a general apostacy from the truth is ripening, based upon the unfounded assumptions of "Science"; and that therefore, there is

DANGER AHEAD!

Before I conclude I would warn you, friends, of the great danger which crosses our path here. Professors of science who profess also to be Christians place more confidence in their so-called "science" than they do in the Word of God. They wrest the Scriptures, under the plea of spiritualizing them, to make them suit their scientific, or unscientific, theories. For instance, in the sermon quoted, in answer to the question. What became of Christ's body? we read ;--" This difficulty is met by the supposition that it was not the physical body of Jesus which rose from the dead, no more than it was the fleshly body that ascended ; but that the whole range of these after death appearances of the Lord belong to the spirit world." These modern scientists, whether christian or infidel, seem as anxious to get rid of the physical body of Christ as the scribes and pharisees of old. Why? Because, say they, heaven is not a place, but only a state of feeling; and a body requires locality. And there is now no heaven shining above us, it is all empty and endless "space." Hence this false prophet says; "When once we have laid the body down we have done with it." Thus the Resurrectional hope as well as belief in the Ascension of Christ is undermined.

Friends, we are evidently living in the "perilous times" predicted by the apostle Paul ; and there are many traitors already in the Christian camp. "Beware"! The great apostle Paul bids you "Beware." If you lose faith in the heavenly and well attested verities which lie at the foundation of our hope you will lose Eternal Life; and if you think that your own faith is firm yet come to the rescue of others by helping us to remove the stumbling blocks out of their way. You may save vourselves as well as your children. A man last week was walking down the line in or near the station at Leicester. He doubtless thought he was safe. He knew the line well, and was, I believe, a worker on the railway. But his back was towards an approaching engine. There was no one near to warn him; no friendly sign admonishing him to "Beware of the trains"; and so the engine rapidly overtook him and killed him on the spot. A single cry would have saved him. May the apostolic warning save us. And when we see our friends liable to be led away with a baseless science, a science such as the apostle Paul speaks of which is "falsely so called," then let us take heed and re-echo the inspired warning which God Himself has given us through his faithful servant. It is

"Beware lest any man spoil you through philosophy and vain deceit, after the tradition of men, after the rudiments of the world, and not after Christ."

THE HOPELESS WAIL OF SCIENCE.

As going to press we are also reminded of M. Zola's hopeless wail of Science, as recorded in the Westminister Gazette of May the 20th, 1893. The Editor remarks ;—"In proportion as science advances, it is certain that the ideal slips away." So spoke M. Zola last night at the Paris Association of Students, curiously following up Professor Huxley's Romanes lecture, and that tendency to "round upon progress" which we spoke of yesterday. He, too, is of opinion that science or evolution does not, for the moment, show the way to the land of promise." The editor then quotes M. Zola as saying ;—

"Experiment, it is said, has done its work and science is incapable of repeopling the heaven that it has emptied, of restoring happiness to the souls whose artless tranquility it has ravished." But we are suffering only from the inevitable fatigue that attends long voyages. Distressed, we sit at the edge of the far-stretching plain of the opening century, and rather than take up the onward march into this unknown country, we would have preferred never even to have come so far, but to have died far back on our course beneath the stars. But science had ever promised truth ; and yet how pitiful, how touching, the cry of those who have lost their illusions and know not where to look."

Yes! These men allow what they call "science" to spirit heaven away from them, and then like poor orphans they bewail their sad condition. They cannot say like the true Christian can say ;--- '. Our Father who art in Heaven," because the idea of boundless "space" has spirited it away. M. Zola, however, tried to comfort himself with the fact that "Science had ever promised truth." It may have "promised" truth; but, like many besides who make large promises, it seldom fulfils those promises. We desire truth, and truth only, at whatever cost; and as many can testify, we have made some sacrifices to obtain truth, and the freedom to proclaim it. But we ought to be well assured that it is the truth we have, whether in Science or in Religion, lest we only part with one set of "illusions" for another. Hence the need of the apostolic injunction ; " Prove all things : hold fast that which is good." Scientists have been "educated" in the globular theory from childhood; and we doubt if ever a man of them has honestly examined into the foundations of his belief. We have, and so we pity their forlorn condition ; but we must, nevertheless, expose their unscientific and delusive assumptions, especially as they would rob us of a well-founded hope.

ß

THE MIDNIGHT SUN.

THE MIDNIGHT SUN .- Continued.

Proof that the Earth is not a Globe.

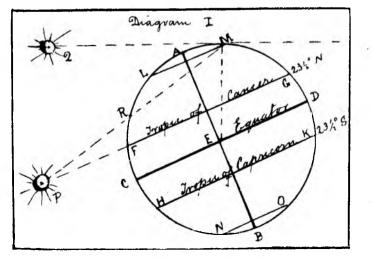
Having given the facts connected with this interesting enquiry, we now proceed to show how those facts utterly conflict with the globular theory, and how beautifully they harmonise with the plane-earth truth. To do this effectually we must have recourse to diagrams. As these increase the cost of printing we hope our friends will make it up by doing what they can to increase the circulation of our paper. We willingly give our services, but we cannot expect the printers to do so. We will now refer to diagram I, which represents the sea-earth world according to the globular theory.

Let A C B D represent the "globe," rotating upon its "axis" A B. (see next page). The line C D will represent the circle of the equator midway between the "poles" A and B.

The line F G will shew the position of the tropic of Cancer said to be $23\frac{1}{2}^{\circ}$ north of the equator, which is the highest north declination the sun attains on or about midsummer day, June 24th. Let P represent the position of the sun directly in a line with this tropic at this period. In this position it would be mid-day on the side of the earth next the sun along the meridian L F N; and it would be midnight on the opposite side along the meridian M D O.

Let L.M. represent the Arctic Circle said to be $23\frac{1}{2}^{\circ}$ from the North "Pole" A, or about $66\frac{1}{2}^{\circ}$ of north latitude; which latitude, or circle, runs across the northern parts of Norway and Sweden or Scandinavia.

THE EARTH AS A GLOBE.



Now we are credibly informed by travellers that in this latitude, and at or about the above mentioned date, a spectator at M can see the sun at midnight, above the horizon, looking directly over the north "pole" in the direction MQ. The horizon is a straight line tangential to the surface of the sphere at the point of observation, and it must therefore be placed at right angles to the dotted line E M running from the centre of the sphere to the latitude and position of the observer.

But we have already alluded to the fact that the sun is never seen directly over any part of the earth north of the tropic of Cancer; that is, the sun is never more than $23\frac{10}{2}$ north of the equator. Persons living further north than this have always to look in a southerly direction for the sun at noon; and it ought therefore never to be seen to the north of them at any time, so we must place the sun in the diagram somewhere on the line P F G. Let it be placed at any point P. Now it is manifest that for an observer at M, near the latitude of Haparanda, to see the sun at midnight at P, over the tropic at Cancer, he would have to look downwards and be able to see right THROUGH THE "GLOBE" for about five or six thousand miles along the dotted line M R !! I am not aware of any traveller who claims this ability; nor yet that the "globe" to oblige the astronomers, becomes transparent at this period : I am not aware that any spectator of the phenomenon of the midnightsun has to look down at all upon this gorgeous spectacle. The traveller sees it above his horizon, and the higher he ascends the higher the sun is seen. Therefore the earth cannot be a globe; and thus the midnight sun is a splendid and periodic witness to the fallacy of this absurd unscientific and infidel hypothesis.

Further Assumptions needed.

We are well aware of the further assumptions the astronomers make to get over these difficulties; and we are quite prepared to meet them when occasion requires. They have first to remove the sun millions of miles from where we know and can see that he is ; and then they have to assume that he is millions of times larger than he is. In fact assumptions vitiate their whole system. For the midnight sun to be seen, as it is, by a spectator at the point M looking directly over the north "pole," it would have to be placed somewhere on or above, the line M Q, say at Q. The further off the sun is placed from the "globe" and the greater divergence there would be between its proper place at Q, above the northern horizon, and its hypothetical position at P. If the spectator could look right through the earth and sea the sun ought to be found on the line G F P to satisfy the conditions of the globular theory ; but as a matter of fact it is found many thousands (and according to astronomical ideas many millions) of miles north and away from where it ought to be. I fear that the sun has not yet been converted to the Newtonian way of

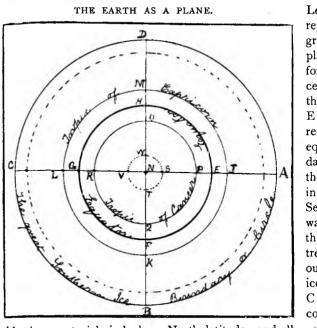
1.1

thinking or of acting. Its course of conduct is rather inconsistent with modern scientific "belief "—and there are philosophical creeds as well as religious "beliefs "—and it is very well known that the behaviour of the moon is even more outrageous, considered from an astronomical point of view. There may be some little excuse for the moon in her wayward wanderings, considering her changeable character and the sex generally applied to her; but surely the sun ought to keep his place better with respect to the "globe" than to go out at nights staring at travellers nearly at the "north pole." But perhaps, if they could only see it, he is staring with astonishment at some of their unphilosophical ideas; and if their "scientific" consciences be not utterly seared he must stare them out of all countenance with such ideas.

There must be something sadly wrong *somewhere*, for both luminaries regularly to shew their smiling faces in positions both when and where they ought never to be seen. How is it ? Perhaps " gravitation " gets a bit slack at times, and kindly allows them these little excursions ! However, we planists have no need to complain, although it rather frets the Astronomers. Why should the sun not visit the north pole, and make a considerable stay there too, for the benefit of Arctic explorers ? But here is the strange part of the question. Why is he, and why are they, so partial to the north "pole"? Why not try the south sometimes in the same way? It seems rather strange : does it not? Very! How is it that vegetation, flowers, fruits, birds, animals, men, civilization, &c. cannot be found so far south as they can north? The Plane truth explains it. However we will now proceed to show how simply the phenomenon of the Midnight Sun can be explained in harmony with the truth that the earth is a vast outstretched and motionless plane with the sun circling above it in a spiral orbit around the North Centre.

THE PLANE TRUTH.

The earth and sea together form a vast circular plane. The surface of standing water has been abundantly proved to be *level*. We cannot repeat the evidence here; but those who want it may find the evidence given in an excellent book by "Parallax" (Dr. Birley) which has never yet been answered. This book though out of print at present may be reprinted before long, or as soon as the necessary means are available. Oh! Is there no one with sufficient means, *and sufficient love of the truth*, to do himself so great an honour and the truth so great a service? (But see a letter in the April number of the "Earth Review.") However, to our subject. As water *is* level, the earth *must* be a plane.



THE MIDNIGHT SUN.

Let ABCD represent the great circular plane, with N for the north The centre. thicker circle EFGH will represent the equator or sun's daily path at the equinoxes in March and September, half way between the North Centre N. and the outer Southern ice circle A B CD. A 1 1 countries i n -

side the equatorial circle have North latitude; and all outside it South latitude. Let the outer and thinner circle J K L M represent the tropic of Capricorn, or the sun's expanded and daily path in our mid-winter, and the New Zealand mid-summer; and the inner and thinner circle P Q R O the tropic of Cancer, or the sun's contracted and more northerly path or circle at the time of our mid-summer and the southern mid-winter. The small dotted circle S T V W will show the position of the Arctic circle, and the larger dotted circle near the outer circumference, the Antarctic circle.

" Degrees."

Now a glance at this diagram will reveal another very popular fallacy in connection with this subject. There cannot be ninety "degrees" of the ordinary geographical extent, between any point on the equator and the north centre. The number and the length of "degrees" of latitude north and south of the equator have been "calculated" on the *assumption* that the earth is a globe. But as the "level" of the surface of the sea proves the earth to be a plane these "degrees" are so far misleading. If we allow 360 degrees for the equatorial circle E F G H, there would be, in distance about $114\frac{1}{2}$ of *such* "degrees" in its diameter say from E to G, or F to H; and only about $57\frac{1}{4}$ of *such* "degrees" in its radius, or from the equator to the so-called "pole," or North Centre. So that if we take all the "degrees" as equal, in length the distance from any point G, on the equator, to the North

10

THE MIDNIGHT SUN.

Centre, N, instead of being 6,250 miles, or one quarter of a meridional *circle* of 25,000 miles as the astronomers assume, it would really be only about 3980, or a little under 4,000 miles. We should have to substract about one-third. But more about this "degree" delusion another time. See *Earth Review* for April, 1893.

THE SUN'S SPIRAL PATH.

Now when the sun is on or over the equator, say at the point G, it is acknowledged that its light extends to the North Centre, at the point N. Therefore the distance G N represents the distance which the sun's rays can pierce through our atmostphere, in a *northerly or southerly* direction, so as to show the full body of the sun to an observer north or south. Hence when the sun is on the tropic of Capricorn in our mid-winter, say at the point L, its direct rays cannot be seen beyond the point V in the Arctic Circle V W S T. Hence all who live within the Arctic Circle at this season of the year are in darkness as far as the sun's direct rays are concerned, the distance L V being the same as the distance G N. But when the sun's daily circular path has contracted towards the north so as to bring that luminary to the point R in the tropic of Cancer at our midsummer, then it is evident his rays must shine right across the whole Arctic Circle from R to S, the distance again being the same as that from G to N.

A Plain Proof.

So that if the earth be a plane with the sun moving over it as already described, a spectator on or near the Arctic Circle at the point S ought to see the sun at midnight at the point R as he looks over and across the North Centre. But this is just what the spectator in such a position *does* see according to the abundant evidence already adduced. Therefore the earth is again clearly and abundantly PROVED TO BE A PLANE. In such a position on a plane the spectator although in a high northern latitude, must necessarily look still further *north* to see the sun at midnight as he circles round the North Centre ; but on a globe, as we have already seen, where the body of the sun never attains more than $23\frac{10}{2}^{\circ}$ north declination, a spectator in such a position, $66\frac{10}{2}^{\circ}$ north latitude, would, (if he could see the sun at all) be compelled to look *downwards* through the "globe" and in a *southerly* direction. This cannot be done, and if it could the sun would not be found there ; therefore again the earth is not a globe.

A Faithful Witness.

Thus the sun in his movements becomes a grand and solemn witness to the truth of God and a stationary and outstretched earth. As M. Chaillu. in spite of his astronomical education and bias, is constrained

honestly to confess that it seems to be the sun and not the earth which revolves. He says "It," the sun, "seems to travel around in a circle, requiring twenty-four hours for its completion." Hear, hear! And since by plane triangulation the sun can be proved to be a comparatively small small body and not more than three thousand miles away, we need not wonder at this It is surprising how near the truth our Arctic explorer comes when, forgetting his astronomy, he simply and honestly describes the phenomena he witnessed. He further says ;-"At the pole the observer seems to be in A GRAND SPIRAL MOVEMENT OF THE SUN, which further south takes place north of him." Well done M. Chaillu! We thank you for your honest and noble testimony. It agrees with that of the inspired Psalmist when he said; "The heavens declare the glory of God ; and the firmament sheweth his handywork · · · In them hath He set a tabenacle for the SUN which is as a bridgegroom coming out of his chamber, and rejoiceth as a strong man TO RUN A RACE. His going forth is from the end of heaven and HIS CIRCUIT unto the ends of it. and there is nothing hid from the heat thereof." Psa. 19: 1-6.

Let us then, in conclusion, again unite with the Psalmist, in his song of Praise; "To Him that by his wisdom made the heavens; for His Mercy endureth for ever. To Him that STRETCHED OUT the earth *above the waters*; for His mercy endureth for ever. To Him who made great *lights*; for his Mercy endureth for ever. The sun to rule by day; for His Mercy endureth for ever. The moon and the stars (all "lights" only) to rule by night; for His Mercy endureth for ever." Psa. r_{36} : 5-9.

"The sun may be seen at midnight in Hammerfest, in Norway, the most northerly town of Europe. It contains about 3,000 inhabitants, whose principal business has to do with the fisheries." E. P. W.

Considering the diameter of the sun is 888,646 miles, (?) the three thousand fishers must have plenty of room to move about in. I should imagine the sun-fish would require little cooking. For this valuable piece of absolutely original information about the sun, our little planet is indebted to SIFTINGS.—*Fearson's Weekly, Jan. 21st.*

Extract from a letter written by a passenger on board the "Iberia," Orient Line, R.M.S.—At noon on Thursday, 27th of September, we were 169 miles from Port Said; by the ship's log, our rate of steaming was 324 miles in 24 hours. At 12 p.m. we were along side the lighthouse at Port Said, it having become visible at 7-30, when it was about 58 miles away. It is an ordinary tower, about as high as Springhead (60 feet) lit by electricity." According to modern science, the vessel would be 2,182 feet below the horizon. J. C. AKESTER.

THE GLORY OF GOD.

By LADY BLOUNT.

The heavens declare the glory of God And the firmament shows His power : In their Maker, God, let the nations all trust, As their shield, their strength and tower. For he speaks to man in Nature ; And the stars write out His Word. Day unto day They utter their great Creator's love, Though His voice be never heard.

R BFRAIN.—Let us trust in Jehovah, for He will deliver us, Let us rest in His Love and take Him for our guide For His mercy endureth for ever and ever; For each of His Creatures the Lord will provide.

The "pillars" of the earth are the Lord's, He hath set the world thereon. He established it fast, that it cannot be moved, For the Word of our God is strong. It shall not be removed for ever, Though the ages pass away He spake the Word Who rolls the sun in his course along ; And who dare that word gainsay ?

REFRAIN.—Let us trust in Jehovah, for He will uphold us, And His word in the heart giveth life like a fire, He is slow unto anger and nigh those who call on Him. And to each one who seeks He will grant his desire.

As a canopy spread o'er the earth's outstretched plane, Is the firmament, or sky, It divides the waters beneath from those Above its grand dome on high, And the lights in perfect order all Fulfil their appointed way He hangs o'er the earth For signs and seasons, for days and years, And to rule by night and day.

REFRAIN.--We will trust in Jehovah, His Word shall not fail us, By His Word in six days were all things at first made, It is life unto man who lives not by bread only, And firm as the earth's great foundations He laid.

The gifted authoress has set the above Words to Music, which may be had from her Ladyship, West Brow, Coombe Down, Bath.

CORRESPONDENCE.

CORRESPONDENCE.

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

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

Letters must be prepaid, and addressed to the Editor of the Earth Review.

" ZETETES," Plutus House, St. Saviour's Road, Leicester, England.

NOTES.

" Globe."-Anonymous correspondence not noticed.

E. Breach.—Your letter is good and interesting. But it proves too long for publication, in this number at least. Our space is very limited. With increased means we would gladly enlarge our borders. At present Letters must be short.

G. Revell.—Glad you like the Satire. Yes, the "globe" is spoken of in an ironical sense. Too late to quote in this issue what you say about southern stars. See Carpenter's Article, How is it?

D.N.—You sent 10d. instead of 1s. 3d. for "six copies altogether" of the E.R. We, are, therefore, not "encouraged," even "financially," by your illogical letter. We don't deny that men can sail round the earth; but you fail to see that a thing may be round and flat too. Though a Christian, you deny the Bible account that the Earth is "established" on "foundations" so that it cannot be moved.

C.H.-Both your letters are much too long for our limited space. You own that "small areas of water may be flat." Then it is for you to shew that larger areas are spherical. We should be glad to make the Review a monthly if you could find us the means. Friends at least, might take a few copies of each number for free distribution. This would help, a little. Respecting "degrees" you have misquoted us. On page 3 April Review we said ; " There are only about 571 such 'degrees' from the equator to the North Centre." Such "degrees" referred to distance, or lengths of "about 691 miles to one degree," not to divisions of a supposed circle. Quote fairly ! We deny solar and stellar "gravitation," not simply because we "cannot explain how it acts," but because it never yet has been proved to act at all. Can you prove it ? If the sun "attracts," or pulls at the moon. why does it allow the moon to go from conjunction to opposition every month ? Is the sun's "pull" weaker during the increase of the moon than during the decrease ; or is the moon more "wayward " at such times ? Your "strongest argument against the flat earth" is not so unanswerable as you suppose. Your triangle consists of straight lines, of course; and so you assume that the sun's light travels in a straight line through a long distance of the earth's atmosphere! Hence your absurd and fanciful conclusions. No wonder Mr. Carpenter did not think them worth replying to.

If this is your best you had better try again ! Publish a pamphlet for yourself, with your diagrams; and we will shew you whether Zetetics can be accused of a " conspiracy to ignore the truth they dare not attack." Or, if you prefer our pages, guarantee us payment of the printers' bill to the proportion of pages and diagrams required ? The " conspiracy to ignore the truth " is on the other side, friend. For other points in your letter see the article headed "Our Critics," which also answers other correspondents. ED.

Mr. Carpenter, author of "100 Proofs the earth is not a globe," writes respecting the Bedford Canal Wager saying ;-I beg to say that " there is only one man living besides Mr. Alfred Russel Wallace who CAN give 'a true and detailed account' of this transaction, and that he will be happy to do this; but that it has been done over and over again, in pamphlet form, and before the people took that interest in the question they now do. I was with Wallace the whole week and watched his winning ways !" W.C.

The following note was received by a Zetetic, Mr. W. Bathgate, from a gentlemen in Napier (lat. 40°) New Zealand.

Ост. 9тн. 1880.

"Dear Sir,-Last night at 12 p.m. the Southern Cross was setting in the south : and I could only see three stars. The Cross turns round, falling over towards the south, and its change of position, which is regular, shews that it must rise and set.

Yours respectfully, J. W. WORBOYS."

Major A.P. of the R.E.—Your statement that "231° should be measured from the centre of the earth " is replied to in the article entitled, Our Critics.

The sun and moon may float in ether, being comparatively small and light, etherial bodies; but the earth is not an heavenly body, and being heavy and solid it could not possibly "float in space." Your diagram is incorrect : the line E F should be *parallel* with M Q, and parallel lines never meet,—ED. E.R.

Letters to the Editor.

Dear Sir.—It having come to my Answer.—No; but ... the earth turns notice that letters sent me containing Postal Orders have been lost in transit through the post, I herewith beg to inform our friends that a printed official receipt, or a temporary acknowledgment is always sent by return of post for all such monies received. Therefore should they not receive either one or the other let them at once notify me that the Post Office authorities may be communicated with.

Yours faithfully, JNO. WILLIAMS.

Dear Sir,—"The smoke of the Globe" thickens around me, can you help me out of it?

In Joyce's Scientific Dialogues (p.73) we read :

Question .-- Is there any axis belonging to the earth?

round once in twenty-four hours, so astronomers imagine an axis (exists) upon which it revolves as upon a centre.

How can an imaginary axis, "incline or slope over 231 degrees out of the perpendicular," as it is said to do so (p.82) in these Dialogues? Where's the proof of it? BALAAM'S ASS.

The slope or "inclination of the Axis" is also "imaginary," like the greater part of modern theoretical Astronomy. ED. E.R.

SEA LEVEL.

Sir,-In August last I, with several other friends, being in Oban for a holiday, took a trip for a day in a small yacht on Loch Lorne, and being a glorious sunshiny day and so calm that

not a ripple was seen, and being becalmed for an hour about mid-day we observed a good many sights of various kinds. Amongst other things that we saw was a yacht, which the captain told us was twelve miles distant. We saw all the masts and part of the hull, and to get a better view of her we took our binocular opera glass (a good one). Now, sir, would'nt it require a funny curvature table either with or without the odd fractions to explain how we saw the hull of that vessel twelve miles off? According to a table furnished by the present Astronomer Royal recently, it ought to have been 66 feet below the line of sight ; but the "table" that we saw it from was the side of our vacht, and we concluded the sea was level. And sir, I have in my possession a letter from the engineer of the Ship Canal Manchester, saying there is no need to make any allowance for curvature Perhaps someone can tell me which end of the Suez Canal is the highest, and how much curvature was allowed for in its construction, and where he may find the "tables" for it.

Yours respectfully,

JOHN SMITH. Siddal, Halifax.

" PARALLAX " TRIUMPHANT.

Dear Sir,-You are doubtless aware of the one-sided "controversy" (?) going on in "The Future" respecting the shape of the earth. The editor is evidently afraid of his readers seeing our side, consequently he declines to insert my letter in reply to "Enquirer" and so warns me, that I am "not to touch his figures" of "The Future." In his letter to me, I was amused to find that he is so simple as to think that he has found a man who can with the magic wand of Theoretical Refraction, "vitiate, invalidate and nullify" all the practical " proofs of the shape of the carth, or the configuration of the surface of Water"! He says, "after "Enquirer," has finished his demolition of "Parallax" &c. "Demolition" indeed ! Why, the editor knows as well as I do, that the evidence of "Parallax" being practical, is by consequence, invulnerable. He further says, "Morrison's 'New Principia' is much superior to any of either your productions, or those of 'Zetetes ' and ' Parallax ' together.'' Well, if he refuses our evidence let

CORRESPONDENCE.

him accept the evidence of "Enquirer." who in the April issue says," but it is known to all that the surface of fluids at rest is level for all practical purposes for quite short distances beyond all possibility of disproof." Yes, quite so, the Zetetics reply-" for ALL PRACTICAL PURPOSES "----and that's why our " Jack Tars " when they go to sea take Mercator's chart which shews him that the water is level, and the sea a vast irregular plane! You see sir, the sailing of ships is a very practical thing, and consequently requires practical facts to navigate by, so "Jack" just lets the Globe roll down the scupper hole. But is it possible that "Enquirer" and the Editor of the "The Future" are so biased as not to be able to discern, that when anything is "level" for all practical purposes," it must be absolutely level, and consequently cannot be a part of a curve? Yet "Enquirer" says plainly, that, "the level is a curve"!! Well I say this is a level falsehood, to prop up a lying theory. But of course theoretical purposes are not "practical pur-poses" and this is why "Enquirer" very kindly "leaves others to discuss whether it is proper to use the word 'level' in respect of the surface of fluids at rest" You see Sir, how these Newtonians play their conjuring tricks with simple language, using words with a double meaning to bolster up their false teaching ! "Enquirer" proceeds by informing us that "Were the earth a plane"-and he shews that it is for "all practical purposes"- 'Were the earth a plane, the horizon at sea would seem to arise about us like the sides of a bowl, just as in fact (mark this please) our horizon does when a balloonist sees it from a great height." Why a London Dust Cart man could tell him that when he saw the horizon as he passed over from Southend to Sheerness it was like a piece of a side of a bowl before him when he was looking seaward! I defy any man to refute me when I say. that upon any ocean the horizon seems to arise about us like the sides of a bowl: and therefore it is the identical phenomenon that is seen by balloonists. If this is not so, why does the sailor :--"climb the mast to see his native shore"? Yes, Sir, "Enquirer" has shown that the earth is a plane! You cannot see over a curve, until you have surmounted it; and the "offing" as it is called, is always at a distance, Professor M. Bougour states that "when a

man stands upon a level plane, it does not seem to rise sensibly, but at some distance from him." "Enquirer" says "a dead level would appear as a bowl," But "Enquirer" did not say which side of the bowl was to be uppermost! But doubtless as "there is neither up nor down in space," he will be able to conjure his bowl to suit his theory, and further blind those who are already astronomically hypnotized.

But I must refer again to the "demo-lition of Parallax." I suppose that the hour of burial will be notified in "The Future." To those who have never thought for themselves on the subject, the "demolition of Parallax" attempted by "Enquirer" in the May issue of "The Future," may appear "unanswerable," and the more so since we are not allowed to reply, lest we should break the nice glass case the Editor has put over his friend. What a valuable " controversy " it will be when only one side is allowed to be heard ! "Enquirer" says, "I grant at once that if curvature only has to be considered. 'Parallax' has proved his case. But I am about to prove (he wishes he could) that curvature is not the only matter to be considered." But I ask, who said that curvature was "the only matter to be considered "? I am afraid we shall prove that "Enquirer" is suffering from curvature mania. " Paral'ax." never in any experiment considered it as. "the only matter to be considered," and neither does any Planist that ever lived, either before Copernicus, or after him! Are misrepresentation and falsehood the only weapons our opponents can use to spin their occult Globe with?

"Parallax" was a thorough and practical scientist, who knew the globular theory in all its ramifications. The refraction he denied is the refraction I deny, and I herewith challenge "Enquirer," the Editor of "The Future." and any astronomer, to prove the existence of, viz: his theoretical refraction. Why it is like trying to prop nothing up against something. "Enquirer " says, it is " always in action." Now let him face me and prove this statement. "Parallax" says "re-fraction can only exist when the medium surrounding the observer is different to that in which the object is placed." Now says "Enquirer," this " conclusion of 'Parallax' is of the greatest consequence." Granted says you know.

the Planist. But says "Enquirer "-"it is wrong." Then we reply, prove it. But before you do, it will be as well to remember that those who teach earth curvature assert that "when refraction exists one tenth is added to the distance." Now you see that the schoolmen teach that there are times when refraction does not exist don't you ? And now I will shew you how they prove it :--

"James—I should like to see an experiment to confirm this." i. e, the existence of refraction.

Tutor-I have no objection : in every case you ought to require the best evidence that the subject will admit of " (Hear hear). Bring me your multiplying glass: look through it (A Hotten ot wants to know if "it" is " another medium "?) at the candle \cdots for by the principle of refraction, the image of the candle is seen in as many places as the glass has surfaces." We reply, of course it will. Joyce's Scientific Dialogues. It is quite amusing to see the array of "facts" " Enquirer " produces in support of this "demolition "! Why we could make him a present of plenty of such. Here's one for his consideration. Perhaps he will account for the phenomena in The Future. It is from Shanklin, I.W. "I see at low tide, from my window, which is 22 feet above high water mark, a window in a house on the English coast with the telescope on a clear day, just above the horizon. As the tide rises this is cut off from sight. I am still unflooded, and that other house looks contented when the tide goes down again. How is this ? "

Now "Enquirer" what was your refraction doing that it did not "raise" that house "visually above its true place of being," seeing that you assert, "that the refractive powers of the atmosphere have inherently and constantly this elevating power," and that "the effect of refraction is shewn to be constant"? 'The scientist who wrote it declared he could not account for it only " by supposing that the curve of the earth came between him and it "! I suppose he meant the curve of the water, for when the tide was out he could see the house. Or does "the curve of the earth " come in and go out with the tide? I should like to know,

Now Sir, I cannot notice all "Enquirer's" facts, which are better proofs that the earth is a plane rather than a globe; but I will notice the first. He says; "General Roy drove thirty pickets 100 feet apart, so that their heads appeared in a right line. This was in the afternoon. In the morning the heads of the pickets exhibited a curve concave upwards. (Trig. Survey. Vol. 1, p. 175): Object and observer in one mcdium. This is enough."

Doubtless "this is enough" for one who has a theory to sustain, but it is not enough for one who is honestly investigating phenomena in quest of absolute truth. It should at least have been apparent to " Enquirer "-though he says, and he emphasises it ; that refraction in effect is always in action "that there must be some different cause of the morning as distinct from the evening phenomena. But No!" this is enough," so long as he thinks it will demolish " Parallax " If refraction is " always in action," why did the picket heads not present the same appearance in the morning as they did in the evening? If refraction is "always in action" causing things to "exhibit a curve concave upwards " how came it about that the picket heads at any time appeared in a right line" Is "a right line" a part of a "curve"? If the "refractive powers of the atmosphere have constantly this elevating power," why were the picket heads not elevated in the afternoon ? "Enquirer" says, "the effects of refraction are shewn to be constant," Hence he contradicts himself ! for he says, " refraction is variable in its effects." How can the effects of anything be constant when they are variable? Is this a specimen of the "claptrap" that "may be dismissed as worthy only of the Tegaro Academy of Sciences," that "Enquirer" makes mention of ? yet, this is the way "Enquirer " hopes to " demolish " Parallaz. He must stand informed-for he is evidently ignorant of the fact-that scientific instruments are used to indicall the existence or the non-EXISTENCE of atmospheric refraction. When the reading of those instruments are found to be unaltered from what they were when exposed to the atmosphere, it is for "all practical purposes," proced that refraction does not exist. See "Parallax,", ip. 31-33. "Enquirer" must know that when he says, "they seem to have no knowledge of, or no regard

for, the effects of Refraction " he says what is utterly false. "Enquirer " asks for "the facts" of the Bedford Canal experiment of 1870, while the Editor of the Future privately refuses to insert our letters! In the February Future" he said "the curvature you deny is imaged there before you." Is it! and pray to what extent? If "only 5 feet was declared to be certainly shewn " why did Mr. Coulcher say, "the sketches showed a depression at the end of six miles of about 20 feet. not allowing for refraction." Like " Enquirer " he contradicted himself to support the globe theory! I wonder what "Enquirier's " refraction, "which is always in action," and " constantly elevating things," and causing them to "present a curve concave upward" was doing then? According to Mr. Coulcher and Professor Wallace, it presented a curve concave downwards! which is the right way of that ugly curve "Enquirer"? You know that the rate of curvature in six miles is 24 feet, Why was it not found? You know it cannot be found? You know it cannot be found anywhere in the world, hence your trickery about " refraction." That the earth is not a globe is as evident as that the sun is shining. Every practical test proves we are right. Even " Science Shillings " declares it, for in the issue for May 20th, we read, "the Nile has a fall of only six inches in 1,000 miles ! " " Enquirer " says " all optical objections were disposed of by a specialist before the umpire gave his decision." Is he ignorant that it was only the "specialist's " assistant who gave the decision, and in doing so, " to k into consideration the theory of the earth's rolundity" and afterwards requested Mr. Walsh to "defer his decision "? Does "Enquiver " consider that that fact " is one more convincing proof of the rectitude of the award of the umpire "? Let him "enquire" more. In conclusion I would just notice the most important "fact" of the whole transaction. "Enquirer" says, "it will be noticed that the three-mile signal is below the optical centre of the theodolite, and the six mile signal is below the three-mile signal." But this gives only two signals. Where was the third signal? Why did Mr. Wallace omit to put up the third signal? Is it an act of honesty to break an agreement? Was not the signal that was omitted the

OUR CRITICS.

THE EARTH REVIEW.

most important one in the field of view, because the results to be accurate should have been the outcome of the fulfilment of the agreement. Evidently water is level and they know it for

they dare not put up that third mast or signal and try the experiment again ! Yours, &c., A HOTTENTOT. This letter is too long.—ED.

Cuffings.

THEORETICAL ASTRONOMY.

Astronomers are very fond of boasting of the wonderful exactness of their science, and that it is based on the principles of incontrovertible mathematics; and of ridiculing astrology as a *pseuda*-science. The exactness belongs to practical and not to theoretical astronomy. For example, when the writer learnt the principles of astronomy at school, he was taught that the Sun was exactly 95 millions of miles from the earth; now-a-days astronomers say that this was an error, and that the Sun is only 92 millions of miles distant. Newton made the Sun's distance to be 28 millions of miles, Kepler made it 12 millions, Martin 81, and Mayer 104 millions ! Dr. Woodhouse, who was professor of astronomy at Cambridge about fifty years ago, was so candid vs to admit the weakness of the Newtonian speculations. Woodhouse wrote : "However perfect our theory, and however simple and satisfactorily the Newtonian hypothesis may seem to us to account for all the celestial phenomena, yet we are here compelled to admit the astounding truth that if our premises be disputed and our facts challenged, the whole range of astronomy does not contain the proofs of its own accuracy."-The Future, Feb. 1892.

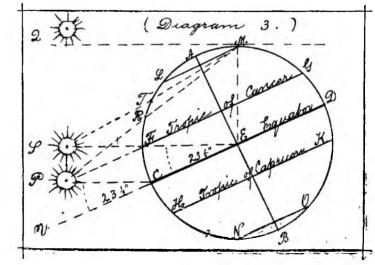
"A GEOLOGICAL BLUNDER."

"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 all the credit of some of the most remarkable discoveries of the age which have been really 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 on 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 began to do this by cooly consficating the achievements of private and independent workers for one of the managing partners of the great firm of Huxley, Geikie, Dyer and 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 should 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. Extract from an article in *The Daily Chronicle*, Feb. 2nd, 1893.

OUR CRITICS.

The pamphlet we lately published entitled *The Midnight Sun*, the latter part of which is found in the July number of the *Earth Review*, has fallen like a bomb into the camp of the enemy, and has created some consternation amongst our opponents. A few are trying to show that our conclusions are premature, and our diagrams, especially, Diagram I, not correct. Fair controversy will do good. Anonymous correspondents we shall not notice; but the criticisms of one or two who have honestly sent their names we shall reply to. Our only object is truth. But friends, and foes, should remember that our means are limited. We have been to the expense of another diagram to shew the points of our objectors. We will take our correspondent C. H as a typical objector, as his criticisms approach nearest to those of a "scientific" character.

Referring to Diagram I, he says ;—" The sun should be overhead at the point F, but it is not. It ought to be on a prolongation of the line E.F. not G.F." THE EARTH AS A GLOBE.



03

• 21

how is m?

THE EARTH REVIEW

As this is the chief objection of other critics, and one of our own friends as well, we will take up this point first, and elucidate it by reference to Diagram 3. It is thought that the sun ought to be placed at S in a line with E.F., and not at P in a line with G.F.P. Why so? Because S is vertical over the point F on the "globe" while P is not. True. But our critics forget that the Tropic of Cancer is not on the earth but up in the heavens ! This fact has been overlooked or forgotton by all our critics. Perhaps we were not sufficiently explicit on this point. The line F.G. is marked across the "globe," for the sufficient reason that we cannot put it above the paper; but it really represents a line and a position in the heavens where the sun is found in our Northern summer. Hence we prolong this line G.F. to P, and place the sun at P; where it ought to be. Our critic further says ;—"You assume the sun to be small and near." No ! we reply. We can see that the sun is comparatively small compared with the earth, and we know that it is near from the data given us by the astronomers themselves. How? Thus :---

When the sun is in the tropic of Cancer we are told that it is 232^{10} north of the equator, or the line C.D., which is an imaginary line resting upon the earth. Let this line be produced to V, and from the point C, on the surface of the earth, draw the line C.P. making $23\frac{1}{2}^{\circ}$ with the line D.C.V. Then, where this line C.P. crosses the produced line G.F.is the position for the sun to be placed in, namely at P. No! cries the objector, "the $23\frac{1}{2}^{\circ}$ should be measured from the point E, at the centre of the earth." Oh ! We retort : Who says so ? The astronomers, of course. Why? Have they ever been inside the earth and seen the sun from the centre of the "globe" in the position of $23\frac{10}{2}$ north of the equatorial plane? We never heard of but one philosoper who confessed he had been down below-into hell?-for his instructions! This was the pagan Pythagoras, who was the originator, though perhaps not the inventor, of the spherical idea. Then why should the sun be placed at S? Because the enemies of the truth tell us to place it so. No, No !! friends, it wont do! We must place the sun where it is seen, " $23\frac{10}{2}$ north of the equator," if you like; but as seen from the point C on the surface of the carth, and not $23\frac{1}{2}^{\circ}$ from the centre, where it never has been seen. And this is where we have placed it.

NOTHING GAINED.

However, as we have truth on our side we can afford to be generous, and although truth is still truth, yet for arguments sake, we will put the sun at S, where our critics want it, in a line with E.F. produced. Now draw the line M.T.S. from the position of the spectator at M on the Arctic circle at midnight, to the sun at S. This line M.T.S. will be the spectator's new line of sight, instead of the line M.R.P. Both have to pass through the "globe" for several thousands of miles! Suppose M.T. is about 5.000 miles and M.R. 6,000 miles, what have our critics gained? Is it easier for them to look through five thousand miles of land and water than six thousand? If so they are welcome to the difference if it relieves them any.

Now the only way our friends can, get out of these difficulties is by assuming that the sun is about 93,000,000 of miles away and more than a million times larger than the earth, contrary to the testimony of our senses as well as to that already adduced. Let them give us a single proof of these assumptions, but one not based upon nor begging the the question at issue, and we will yield. But our critics must be at the expense of their own diagrams, and not think to claim about one half of our space under the plea of a paltry subscription for one year's Reviews. We must be fair to our friends, the few who nobly bear all financial burdens. We have been accused of trying a money-making venture ; but let our accusers try an opposition journal and see how that paper would pay. Yet one on the popular side ought to pay. We have often wondered how it is that there is no popular astronomical journal got up by our friends the astronomers. But, doubtless, although they have the means, they have good reasons for not submitting their scientific theories and faiths to the open discussion of a cheap periodical. -See further replies to C.H. under Correspondence.

How Is It?

It has been noticed that "explanations" very often fail to explain ! A case in point is that of the motion of the stars when they are said to travel as the hands of a watch. If we look downwards upon a watch as it lies upon the table, the circle described by the hands may be correctly spoken of as a righthand circle. It is the circle described by the phonographer when he writes "s-pr" in contradistinction to the circle in "s-p," which is a left-hand circle. The St. Louis Republic is quoted by the Baltimore Sun as follows :-- " The way Cyclones Turn.-The question is often asked : Why do cyclones, 'whirlwinds' and tornadoes all persist in the polar whirl of from right to left? Astronomical speculators have supposed that all the planets once existed as rings of thinly scattered matter around the sun, and that these rings were annular segregations from a vague, irregular, scattered mass that turned one way in spiral courses, thus determining the direction in which the rings revolved, and all the rest from this took the same course. 'But,' you say, 'why did the nebula revolve at all?' It grew from chaos, and chaos, presumbly, possessed an inherent motion from right to left. This being the case, from that time to this, sun moon, stars, planets, cyclones and tonadoes have adhered to the original habit." Now, it may appear strange to say that this means nothing at all; but it is a fact! If the "astronomical speculators" taught us that sun, moon, planets and stars all revolved as we see them, there would be no difficulty in the matter at all: but they do not. And the description would answer just as well if we were told that the motion was from left to right; since every circle may be said to go either way indiscriminately! So that, as the old showm in said : " you pay your money, and you take your choice !" But, when we want to get at the truth, this mode will not answer.

22

, 23

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

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

Baltimore, Maryland.

WM. CARPENTER.

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

EARTH-NOT A CLOBE - REVIEW,

邪用服

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

and the second se		
No. 4.	OCTOBER, 1893.	Price 2d.

SHIPS AT SEA.

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

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

PERSPECTIVE LAWS.

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