We have much pleasure in recommending the above work.

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

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was stated that at the termination of a long night of four months' duration, they had about two minutes' daylight, then after twenty-four hours' night they had a day that lasted ten minutes, and after this the days increased in length, becoming longer and longer until the sun remained above their horizon for several months as it is observed during our Summer at the North "Pole" regions. I have also received confirmation from the Perth Astronomer Royal that there is a star which is practically a south "polar star," and that the southern constellations revolve round a central point as the stars revolve at the North Centre. As to the motions of the southern stars, it has been asserted that they cannot rise or set because the earth is a globe. But this is only assertion. The fact which we learn however is, that "certain stars in the extreme south have a different motion from those in the North."

By modern scientists it is deemed a legitimate deduction to conclude that the belief that the earth is a revolving globe moving rapidly in an orbit round the sun, with its axis of revolution inclined to the plane of the ecliptic, is verified by the fact that its "poles" are alternately illuminated by a long continued day lasting for a period exceeding one hundred ordinary days and nights.

But let us examine whether this phenomenon will afford any proof in support of the globular theory. In *South Sea Voyages*, by Sir James Clarke Ross, it is stated: "In lat. 65° 22' S, long. 172° 42' E., on Jan. 4th, at 9 p.m., the sun's altitude was 4°. The setting sun was a very remarkable object, being streaked across by five dark horizontal bands of nearly equal breadth, and was flattened in a most irregular form, by the greater refraction of its lower limb, as it touched the horizon at 11° 56' 51". Skimming along to the eastward, it almost imperceptibly descended until the lower limb disappeared exactly 17 minutes and 30 seconds afterwards. The difference in the horizontal and vertical diameter was found by several measurements to amount to only 5° 21" the horizontal being 32° 31", and the vertical diameter 27° 10' that given in the Nautical Almanac being 32° 34"."

At p. 207, vol. 1, it is said: "In lat. 74° 51' S, on Jan. 22nd, 1841, it was the most beautiful night we had seen in these latitudes. The sky was perfectly clear and serene. At midnight, 12 o'clock, when the sun was skimming along the southern horizon, at an altitude of 2°, the sky overhead was remarked to be of a most intense indigo-blue, becoming paler in proportion to the distance from the Zenith."

From these quotations it appears that Lieutenant Wilkes saw the sun set at a few minutes before 10 o'clock. Captain Ross, a few days before, said that the sun did not entirely set or disappear until 14 minutes past 12 o'clock—the sun remaining above the horizon two hours longer than it did to Lieutenant Wilkes a few days later in consequence of "unusual refraction." It is not stated whether the sun was seen in the northern or southern horizon; but as the earth is a plane, and the sun's path is concentric with the northern centre, it was skimming along to the eastward, beyond, or on the other side of the northern centre.

The sun rising at E (the east) would, during the day, move from east to west (from E to W); but during the night it would be seen by the operation of great refraction "skimming along to the eastward from W to S and E. Captain Ross saw this phenomenon, but not Lieut. Wilkes, who reports that the sun set a little before 10 and rose about 4 o'clock. Captain Weddle was in lat. 74° 15' S on Feb. 20th, 1822, and he stated that "the sun was beneath the horizon for more than six hours." Captain Ross in his record states: "at midnight, in lat. 74° S, the altitude being only 2°, the sun was skimming along the southern horizon."

In M. Chailu's book, *The Land of The Midnight Sun*, he says that between June 13th and 16th he sailed towards the Midnight Sun in a steamer leaving Stockholm for Haparanda, the most northern town in Sweden, 65° 51' N lat., 41 miles S of the Arctic Circle as marked on maps. It is in the same latitude as the most northerly part of Iceland.

At the North Centre "the sun is to be seen for six months." These quoted words are followed by the statement that the sun is seen at the Arctic Circle for one whole day, at the base of the North Cape from May 15th to August 1st. 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.

The known location of the Midnight Sun is in keeping with the statement that the earth and sea together form a vast plane—for, water being level is the best proof that the earth must be a plane, because if water is level, the land
about it is level, and this M. Chaillu unconsciously proves in his book.

If the earth were a globe God would not have given us the wrong order of Creation in the opening of the Holy Decalogue, wherein He distinctly states, that heaven is “above, the earth beneath, and water under the earth.” The laws of Nature (which were created by God) cannot be violated, and that it is impossible to look round a globe the annexed diagram will clearly illustrate:

An observer at M can see the sun at midnight above the horizon as shown by the dotted lines, that is, looking directly over the North Pole (M O); the horizon is a straight line tangential to the surface of the assumed globe at the point of observation. It must therefore be placed at right angles to the dotted line E M; but we will leave the reader to examine for himself the bearing of this case in an unprejudiced attitude. Then it will be clearly shown to be such an one, that for the observer at M to see the sun at midnight at P, whether it be from north or south of the globe, he would have to look downwards and his vision pierce through the globe for over 5,000 miles. The sun being seen there leaves the Newtonian philosopher with “a hard nut to crack.” No wonder that Haeckel entitled his book: The Riddle of the Universe. To get over the difficulties terrific distances have been assumed, and the sun has been asserted to be a million times larger than this earth, whereas there is nothing to prove that it is more than the reasonable diameter—about 30 miles—especially seeing that the sun cannot illuminate more than 90 degrees of the semi-surface of the earth, representing an arc of 5,400 miles with a diameter of 1,800 miles.

It seems evident while we cannot account for what Commanders Wilkes, Bison, Sir J. Clark Ross, and other navigators in high southern latitudes saw, namely, from January 10th to February 19th, that there was night, and also on the 2nd, 6th, 7th, 8th, 11th, 12th, 14th, 17th, and 19th of February—but no mention being made of the missing dates—we have concluded that the sun had been “up” on those dates, and that mention would have been made of so wonderful a phenomenon.

I say that while we cannot account for everything, nevertheless, it is evident that, according to the statements of recent navigators and explorers in high southern latitudes, similar phenomena, relative to the midnight sun in southern latitudes, is annually seen, as witnessed in the North. But while the sun can be seen at midnight far South on a Plane Earth, on a globe it would be an impossibility, because the observer would have to either look round the corner or to see through a solid globe.

It is self-evident that an orb, as the sun evidently is, would be more likely to give its light simultaneously in northerly and southerly directions over a Plane Earth, than if it were a globe; in fact, the globular theory of the earth is proved to be an impossibility through the evidence of the Midnight Sun in northern and southern regions.

We ask: Where and when, and by whom was ever a degree of longitude measured south of the Equator? We think that it never has been done. But if it could be done it would not settle the question of distance in the South, and the true shape of the earth.

When we speak of distances then we have done with “degrees” so far as longitude is concerned. We have no evidence of certain facts, special observations, and scientific experiments; therefore, if we use the evidence of our senses
in harmony with the Revealed Word, which is the Truth, we shall prove the truth of the words, that the sun's "going forth is from the ends of the heaven, and his circuit to the end of it."

It is a fact that the Midnight Sun at or near the southern "pole" (in the heavens) is seen at the same time in northern regions. Also, I believe that the Midnight Sun at the North "Pole" is visible at the same time in New Zealand. But it is near mid-day there. Therefore, we know the extent of "his circuit" in both the northern and southern heavens.

The sun is never seen above the horizon on the 21st December further north than the Arctic circle, 23½° from the northern centre, or 66½° north of the Equator. This is the hardest fact for the Newtonians to face that ever was put before them if they would face it fairly, instead of assuming to be able only to see the sun as far as New Zealand when it is known to be shining over the North Pole (so-called).

Now I will repeat another fact, often mentioned, namely, that the shape of the heavenly bodies and their motions have nothing necessarily to do with the shape of the earth, or with the fact that God "hath founded the earth upon her basis that it should not be removed for ever."

It seems evident that the sun's path, in his revolution around and above the earth, expands and contracts alternately. The movements in some respects may be compared to the mainspring of a watch, though the body of the sun moves per se, and when we speak of the northern and southern "declination," it is only another form of saying that the sun's path is nearest the polar centres at one period, and farthest away from them at another. Whether the sun's path was once very near to the earth's arctic (or polar) centre is not now under consideration, though, en passant, there are apparent evidences that the conditions and productions found within the tropics once existed in northern regions.

According to the testimony of different persons, equal days and nights occur when the sun is on the Equator, and long days and short nights occur at the extremities or when the sun is in the tropics. The longest days come in the northern parts when the sun is on the tropic of Cancer, and the shortest days in these parts when the sun is on the tropic of Capricorn, and vice versa for the southern parts.

The following diagram will show the impossibility of the North Pole, or the South Pole, ever receiving the sun's light if the earth were a globe.

Let this diagram represent the globe, with the tropic of Cancer 23½° N, and the tropic of Capricorn 23½° S of
the Equator. Eq representing the Equator. Let A represent the position of the sun from the earth, when in the tropic of Cancer. It is placed at a distance from the earth about equal to the earth's semi-diameter. This is more than its real distance from the earth by at least a thousand miles. But we have placed it further off than we need to in order to show the impossibility of the sun's ever shining on the North Pole, so-called. From the point A the centre of the sun when on the tropic of Cancer draw a line as a tangent to the sphere towards the North Pole, and produce it to A. It will be seen that this line does not touch the North Pole at all, so that according to the astronomers' theory the sun's direct rays should never be seen at the North Pole, not even when the sun has crossed to north declination and reached 23½° N. Much less would the sun's rays reach the North Pole when the sun is on or over the Equator at B, as the line Bb shows drawn as a tangent. This line would touch the globe further from the North than the line Aa. And of course it is worse still when the sun is in the tropic of Capricorn, as may be seen by the line Cc.

And the same line of reasoning shows that on the globular theory the sun never could shine on the South Pole, much less the midnight sun ever be seen there! If readers will draw their own diagrams carefully, and make them much larger these points will come out more clearly.

When the sun is over the equator, and the days and nights are equal all over the world, the sun could not be seen at either of the poles according to the spherical hypothesis; not even if we place it right away from the earth at D. But according to reports the sun can be actually seen at these places at the times indicated, therefore these facts prove clearly that there is something wrong with the globular theory.

That the sun revolves in a spiral orbit over and round the earth, is evident from observation; but some globularists say: "If the earth were flat we should always see the same stars wherever we might be—whether in London or Cape Town." Also: "If the earth were flat the sun would rise and set upon all the countries of the world at the same time." But this is not true.

(to be continued.)
What Is Man?
A "Development" or a Creation?

In conclusion we ought at least briefly to notice this ancient and important question. It is strictly germane to the subject yet Mr. W., I find, ignores it as a question, and quietly assumes throughout his article the unproved doctrine of human "development," or evolution. Of course the globular theory and the evolution theory go together; they are, so to speak, cousins german. Every evolutionist as a matter of fact is a globite or globularist; and every globite ought in consistency to be a believer in evolution. Some evolutionists stop with physical evolution; but others, more consistent, carry the doctrine into the realm of spirit, or "mind" as well as matter.

Mr. Wallace seems to be of the latter class. As a theosophist he evidently believes in the natural immortality of the soul or spirit; which he would call the "man." Whereas the Bible, agreeable to the facts of everyday experience, everywhere teaches that man, the real material man, though in temporary possession of "spirit" is mortal by reason of sin. At the same it sets before man "the blessed hope of eternal life" as the gift of God through our Lord Jesus the Christ. That splendid reasoner, Paul, clearly sets forth this doctrine as the peculiarity of the Gospel of Christ. He says that to them who by patient continuance in well doing seek for glory, honour, and IMMORTALITY 'God will render, or give, Eternal Life (Rom. ii. 7). A man does not "seek" for that which he thinks he is already in possession of; and so the theosophist, with others who may have unconsciously imbibed this pagan doctrine, refuse to come to the Christ that they may have this eternal Life (John v. 40).

The theosophist, moreover, not only imagines that his individual immortality will reach into the unending future, but he also believes that it has come down through millions of years from the dim and eternal past. In fact he claims that man is a sort of lesser god, that he does not surely die, but is slowly progressing through dreary ages, cycles, and re-incarnations towards a greater godship. Thus they not only deny the Creation as described in the Word of God, but they dethrone the Creator of the world as revealed therein; while they blindly accept the delusive promise, Ye shall be as gods knowing both good and evil." This phase of the subject is carefully concealed from the general reader, but it comes out near the end of the article under review. Mr. W. says that such thinkers as himself "believe that we ourselves are the SOLE and sufficient result" of the forces of this self-evolved universe. What is this but saying that men by "development" are, or may become, the only gods in existence. Thus belief in a fictitious universe leads men to set fictitious values upon their own individualities. Nature knows no such values, as may often be seen by its wholesale destruction of life both by flood and by fire; and the Bible, ever faithful to the facts of nature, and our own personal experiences, shows that because of Sin, Death at present reigns in the world; and that, at present, the Son of God "only hath immortality" (1 Tim. vi. 16).

Man's place in Nature is therefore that of a creature—a creature formed out of the dust and liable to return thereto (Gen. iii. 19). But the Gospel of the Christ comes with the glorious hope of a new Life, a new birth by a Resurrection (not a "re-incarnation") from the dead. Compare Dan. xii. 2, and John v. 28, 29. And this priceless boon is offered to anyone who will honestly obey the reasonable and necessary conditions. "For God so loved the world (this one and only world) that He gave His only begotten Son, that whosoever believeth in Him should not perish but have EVERLASTING LIFE."—John iii. 16. And whoever honestly reads the life record of this God Begotten Son must acknowledge that He is worthy of our faith and trust.

Thanks be to God for His unspeakable gift. May every true Zetetic strive to attain thereto.

ALBERT SMITH.

"Hatfield Villa,"
Gwendolen Road, Leicester.

June, 1903.
A DEFENCE OF PHILOSOPHIC DOUBT.

By Rectangle.

(concluded from p. 217).

But what about the Turanian languages? Do they show any such resemblances to the Semitic? Do the Negro and the Hottentot and the savage of Terra del Fuego make good their claim to be reckoned both men and brethren? Here the answer is a still more startling affirmative.

There is a very close connection between the various African languages. Dr. Latham says: "That the uniformity of languages throughout Africa is greater than it is either in Asia or in Europe, is a statement to which I have not the least hesitation in committing myself." Among these languages we have to number the chief of them—the ancient Egyptian. Now this we are able to inspect in its most ancient forms. The inscriptions enable us to trace it for more than 2,000 years before the Christian era. The result is that the Scripture account is most marvellously vindicated in more than one particular. The Egyptian presents us with a language intermediate between the three families of human speech. Latham and Bunsen agree in regarding it as intermediary and have called it "sub-Semitic." This means that the further we go back the more do the languages of the three families approach each other, and the more do they show the traces of their common origin.

Before I pass from this point, let me quote a passage from Sir W. Dawson's Archaia, which will indicate how very fully modern researches have disclosed the traces of the original unity of the human race. He says (pages 295, 296):

"To the north the Indo-European (Aryan or Japhetic) area is bounded by

A GREAT GROUP

of semi-barbarous populations, mostly with Mongolian features, and speaking languages which have been grouped as Turanian. These Turanian languages, on the one hand, graduate without perceptible break into the Eskimo and American Indian; on the other, according to Müller and Latham, they are united, though less distinctly, with the Semitic and Japhetic tongues. Another great area on the coasts and in the islands of the Pacific is overspread by the Malay, which, through the populations of Trans-Gangetic India (India beyond the Ganges), connects itself with the great Indo-European line. If we regard physical characteristics, manners and customs, and mythologies, as well as mere languages, it is much easier thus to link together nearly all the populations of the globe. In investigations of this kind, it is true, the links of connection are often delicate and evanescent; yet they have conveyed to the ablest investigators the strong impression that the phenomena are rather those of division of a radical language than of union of several radically distinct."

That is to say, that the Bible has clearly stated from the beginning what Philology is now dimly feeling to be the truth! Will any "advanced" friend tell us how this has come to pass if Genesis is not fully inspired? How has it been filled with the light of eternal truth, and not with the darkness of the age of Moses or of Ezra? One more result of investigation will complete this testimony. Professor Hommel, of Munich, has lately announced that there can no longer be any doubt that Egyptian civilization proceeded from Babylon.

This is another tribute paid by science to the truth of Genesis, which has made men heirs for thirty-three centuries of the knowledge that the human race dwelt together in its early days in the valley of the Euphrates.

Observers in other fields have come upon indications which tell the same story. "Latham," says Dawson (Archaia p. 296), "has shown that the languages of men may be regarded as arranged in lines of divergence, the extreme
points of which are Fuego, Tasmania, Easter Island; and that from all these points they converge to a common centre of Western Asia, where we find a cluster of the most ancient and perfect languages." In other words, "science shows not only that the race is one, but that its cradle was in Western Asia, in the very region in which Genesis has placed it. This is not strange to us who believe Genesis to be the very Word of God. But to those who believe it to be anything but the Word of God these facts are nothing short of an insoluble mystery, or

A STUPENDOUS REBUKE."

CONCLUSION.

Leaving out of the question the unthinking multitudes who are ever ready to believe whatever "science" propounds, and to spurn to-day what yesterday they worshipped, because the great god "Science" commands, it must be patent to men and women of thought that very much of modern so-called science is directly opposed to fact and common-sense. Science boldly avers that:
1. The earth is a globe, the product of evolution.
2. Man is the highest species of evolution, from lower forms through incalculable periods of time.
3. The sun and planets are superior to this earth, which is as a mere speck compared to the myriad (possibly inhabited) worlds around us.
4. The moon is a reflector, and not a giver of light.
5. The stars are millions of times larger than the earth.
6. All life having started by spontaneous generation, there is no room for a God in Nature (see Modern Review, October, 1880,) either to create or direct its forces.

On the contrary, the Bible consistently states from the first page to the last, that:
1. The world is a stretched-out structure built on foundations, and the result of Special Divine Creation.
2. Man is the result of Special Creation and was made perfect at one time.
3. The sun and stars are inferior to this (the only) world, which they were created to serve.

4. The moon is self-luminous—a giver of light.
5. The stars are small objects. Some of them will at a future time fall upon this earth, and it is manifestly impossible for bodies millions of times larger than the earth to fall upon it.
6. All life was created by Divine Power and made perfect at the start, and that God creates and controls all the "forces of nature," which without His sustaining hand would cease to be.

To the thinking man, an apology for doubting the conclusions of modern philosophical science is unnecessary; and when these conclusions can be shown to be devoid of truth, it behoves the truth-seeker to abandon them and to confine his investigations to channels, in which, with a mind perfectly free to be impressed by whatever discovery his researches may lead to, he may find out the matter at issue for himself.

A slavish obedience to the popular thing is unworthy of any man; and if men are to free themselves from the trammels of popular prejudice, it can only be by following a true free-thought method as indicated above.

SOUTH AND NORTH:
THEIR RESPECTIVE STARS AND MOTIONS, ETC.

It has been asserted by upholders of the globular theory that the earth has been proved to be a rotative and revolving globe because the stars in the southern "hemisphere" move round a south polar star in the same way that those of the North revolve round Polaris.

Therefore, in consequence of the foregoing assertion and the mythical conclusions and deductions derived therefrom, the Ed. wrote to Mr. Ernest W. Cook, Government Astronomer, Perth Observatory, West Australia, relative to celestial phenomena, star motions, magnetism, etc. That gentleman has kindly replied to many of the queries I put to him.
He says: “There is a point in our sky round which all stars appear to revolve. The axis of our largest telescope is directed precisely to that spot. It is not an absolutely fixed spot in the sky.” He goes on to say that the position varies from day to day very slightly. This variation is (he says) in our accepted theory caused by the attraction of sun, moon, and planets. There is not any star in this exact spot; in fact the spot itself varies slightly. There is, however, a small star called Sigma Octantis, and in reply to my question Mr. Cook says: “The sun and moon always appear to revolve round this point the whole year through.” Making some allowance for their gradual change in declination, i.e., their motion is more in the form of a spiral.

I am grateful to our esteemed friend, the noted Perth astronomer, for the valuable information he has kindly forwarded. For we are assured that no results of solid facts and true experiments regarding either northern or southern constellations could possibly reveal any proof of either the earth's mobility, or rotundity. In studying the laws of the universe the minds of atheistic astronomers are handicapped with the belief that because the sun and moon and the planets are globular, therefore the earth must necessarily be a globe, and they start off with the idea that the earth is a heavenly body—quite forgetting, or ignoring, the teaching of the Holy Scriptures. The earth is God's footstool, and it is “founded” that “it shall not be removed for ever.”

“Heaven is above, the earth beneath, and water under the earth; this is the true order of the universe as set forth in the second Commandment. And regarding the heavenly bodies, it is written, in the true account of Creation which comes from the Creator Himself: “God made two great lights; the greater light to rule the day, and the lesser light to rule the night: He made the stars also. And God set them in the firmament of the heaven to give light upon the earth.”

So far as any man does not believe these God-given statements his mind is warped; and to say the least he stands at a great disadvantage, of which we are assured.

We are stating a palpable fact when we say that the North Pole star is the centre of a number of constellations which move over the earth, in a circular direction, and those nearest to it, viz.: the Great Bear, etc., are always visible in England during the whole of their 24 hours' revolution.

Those further away southwards rise NNE, and set SSE; still further south they rise East by North, and set West by North. The farthest South visible from England—the rising is more to the East and South-East, the setting being to the West and South-West. As a matter of fact all the stars visible from London rise and set in a way which is incompatible with the doctrine of rotundity; e.g., if we remain all night on Hampstead Heath, standing with our backs to the North, and note the stars in the zenith of our position, we shall see that the Zenith stars will gradually recede to the North-West; the same stars rise towards our position from NE, demonstrating that the path of all the stars between ourselves and the Northern Centre move round the North Pole star ("Polaris") as a common centre of revolution.

This is just what they must do over a plane such as the earth is proved to be by Zetetics. Upon a globe, zenith stars would rise, pass over head, and set in the plane of the observer's position. Now if we watch in the same way the zenith stars from Sydney, Melbourne (Australia), New Zealand, Rio Janeiro, and other places in the South, the same phenomenon is observed—and we know (from special observations made) that the zenith stars rise from the morning horizon to the zenith of the observer, and descend to the evening horizon—and we are informed that from and within the equator, the North Pole star (Polaris) and the constellations Ursa Major, and some others, can be seen from every meridian simultaneously. On the other hand: in the South, the whole of the remarkable constellation of the Southern Cross cannot always be seen even as far north as Perth. Yet it appears that all the constellations of the South revolve around a southern centre, or pole. But, nevertheless, the earth has no such "pole" or centre, such as is maintained by globularists, and described in the extreme opposite point to N on paste-board globes and maps. The Cross, which is to navigators a token of peace, and according to its position, indicates the hours of the night, is not always visible—nor always seen far above the horizon just as the Great Bear is at all times visible upon, and north
of the Equator. Humboldt states, when he saw it, that it was strongly inclined, showing that it was rising in the East, and his account leads us to regard it as sharing in the general sweep of the stars from east to west in common with the whole firmament of stars—but in any case giving evidence that the earth is a plane.

Mr. Cook states; "I do not know where the South Magnetic Pole is situated. We hope to find this out on the return of the Antarctic Expedition." We shall be interested in studying this portion of the recorded results of the Expedition; and we trust that much helpful information will be the result.

But the existence of a South Centre in the heavens, commonly called a South Pole, around which the sun may turn in his appointed course in the heavens, disproves not that the earth is a plane, and immovable. Nor would it disprove an extended Southern Circumference beyond which God has not yet permitted men to penetrate.

(to be continued D.V.)

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

"THE EARTH'S" OBSERVATORY.

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

The smoke from the forest fires which is overhanging the North Atlantic States extends to Washington, and on Friday was observed at sea 600 miles away. It has even affected navigation at Baltimore.—Lloyd's, June 7, 1903.

It will be seen from the following paragraphs reprinted from the July number of Fast and Future, that someone has asked its Editor (Mr. J. B. Dimbleby) for a Bible text proving the earth has motion; and Mr. Dimbleby flounders about pitifully trying to prove it. Others can see his illogical arguments, and his pitiful floundering, and I pray that he may be led ere long to a knowledge of the truth regarding Creation himself.

SUNSPOTS AND ASTRONOMICAL SCIENCE.

To the Editor of The Earth.

Madam,—A statement about "Man's Place in the Universe," says the Savilian Professor of Astronomy, Oxford, and an argument founded upon it to which the name of Alfred Russell Wallace is subscribed, is deserving of our serious consideration; for we know that the statement is made by a keen, able and experienced collector of facts.

The earth and the sun, are indisputably the centre of the whole universe known to man, in the past and present history of the ancient and modern world. The earth, as we know it, is probably only twenty thousand miles in circumference. And at the Vernal Equinox, on the 21st of March, when the great luminous of light crosses the celestial equator, and is in right ascension, vertical to our earth, throughout its entire orbit of eight thousand miles in circumference. When therefore, Abbé Moreux, the Paris astronomer, declared that he had observed a remarkable increase in the solar activity, culminating during the past few days in a marked increase in the "fifth day," he was referring to the period of the sunspot cycle, at a distance of 20,000 kilometres, he must, unlike Dr. Wallace, sunspot with a diameter of 30,000 kilometres, he must, unlike Dr. Wallace,
be very inaccurate in his observations of natural phenomena in the highest heavens.

For a sunspot of a diameter of 30,000 kilometers represents nearly 19,000 geographical miles, and a circumference of 57,000 miles, which, if it were scientifically true, would inconceivably heat upon our earth of 24,000 miles in circumference, a permanent solar illumination, during a whole period of twenty-four hours, and deprive the earth and a sun of the alternative divine blessings of day and night, summer and winter, and the four seasons of the solar year. Which since the Creation of the Cosmos, have constantly predominated throughout the whole of the world.

If the Abbé Murieux will cast aside the Newtonian astronomical hypothesis, and his scholastic educational curriculum, he may readily discover that the earth is infinitely of greater magnitude than the sun, the stars, and the planets, which conspicuously adorn and beautify the celestial sphere.

The necessity of modern astronomical affirmations can never be harmonized with the observed phenomena of the heavens. Therefore our modern astronomers should discard the theoretical conclusions of mathematical calculations, and the unceasing results of telescopic observations, and wisely accept the inalienable determinations of the mariner's sextant, which according to the Nautical Almanac, rightly declares that the diameter of the sun at the earth's mean distance is 32 deg. 2 min. 36 sec., the result of 33 years' observations, 1851 to 1883, at the Royal Observatory, Greenwich, as determined by Professor Andrews. One minute of arc on the sextant represents a nautical mile, and therefore, the exact diameter of the sun is only 32 nautical miles, with a circumference of 96 miles.

What then, becomes of the Abbé Murieux' legendary sunspot of 33,000 kilometres in diameter, which evidently represents a hypothetical diameter of 19,000, and an illusory circumference of 57,000 geographical miles?

Mr. H. H. Turner, the Savilian Professor of Astronomy at Oxford, can now have no kind of scientific controversy with Alfred Russell Wallace, on his accurate declaration that the earth is the only place in the visible universe, where natural and vegetable organisms can live, move, and have their being.

Yours very sincerely,
St. Leonards-on-Sea.
Wm. M. DAVIDSON.

QUESTIONS AND ANSWERS.

ANSWERS TO H. LOCK, Esq.

(1) If, according to your theory, all the countries of the world are upon the top surface of a disc-like body, will you explain why they do not get their daylight simultaneously? Because it appears to me that the sun, from its great height, must shine upon the whole of the disc from sunrise to sunset.

The questioner assumes that the sun is a body much larger than the earth, located far away in space. Whereas as a matter of fact the sun is neither large enough nor high enough to shine over all the earth, but only over about half of it at once, the atmosphere deflecting the sun's rays from the earth when they fall very obliquely, so that darkness follows in those parts until the sun comes round again and is nearer. The sun's light does not travel in straight lines, but converges we believe, and by the refrangibility of the whole bulk of its rays it circles the earth.

The cause of the refraction is attributable to the rays passing through media of varying density in the atmosphere.

(2) Everybody knows that the sun's direct contact with the earth never extends beyond the tropics, and that it rises in the east and sets in the west; will you explain your theory of the earth's motions as a disc, to bear out these facts so completely as the old theory does.

The sun's direct zenith never extends beyond the tropics, but it never gets in "direct contact with the earth." While the evidence of our senses is opposed to the assumption that we are living on a whirling globe composed of land and water, we have also the evidence contained in the Scriptures, wherein we may learn, regarding the earth, God hath founded it upon the floods. —Ps. xiv. 2. Also in 2 Pet. iii. 5, it is stated that "by the Word of God the heavens were of old, and the earth standing out of the water and in the water." Therefore, while the earth may have a flat surface, the sun cannot move from its location; it is "founded upon the seas," and so far as progression is concerned it is motionless.

But the progression of the sun is a daily visible reality, its motion being in a spiral orbit, the limit of its circuit being within the tropics. The sun is never directly above any part of the earth north of the tropic of Cancer or south of the tropic of Capricorn. The first part of the question is correct in the statement that there are two small circles of a "celestial sphere" (so-called) situated each side of the equator, at a distance of 23 deg. 2 min. and parallel to its greatest distance N or S: if the sun be observed from any latitude a few degrees N of a circle of the tropic of Cancer for any period, it will be seen to describe an arc of a circle. "The sun also ariseth, and the sun goeth down, and hasteth to his place where he arose." To us the sun rises in the east and sets in the west—the reason being that it is the daily path of the sun so far as we in this part of the world are concerned.

(3) This question has been raised: Can a river run uphill? Scientific survey has always shown a fall in the bed of a river from its source to its estuary. The geographical term of "Watershed" goes to show that any river or set of rivers is conducted to the sea by the natural fall in the land that forms the watershed and when it has satisfied the requirements of man to interfere with a river's course as laid down by nature, they have had to resort to mechanical aid in the shape of locks and weirs. Will you give your fullest explanation of the point you raise here?

Water cannot run uphill, though appearances occasionally caused by local circumstances might lead to a different deduction. The direction in which water naturally flows implies that there is some amount of declination in the direction which the water takes; but this is not a proof of the roundness of the earth, but quite the contrary. In many instances the slope is almost imperceptible; e.g., for a thousand miles flows the great Nile toward the sea, and falls but a foot. Again, admitting that water flows to where there is a lower plane, yet the rivers are practically level—so level that they disprove a spherical earth.
"The sun knoweth his going down" according to the Psalmist and it is not for us to say that it "ought" to do otherwise than it does. As for the explanation of this phenomenon we must be content to wait for further light upon the subject. But whether we can explain the phenomenon or not of the southern midnight sun, of one fact we feel quite sure, namely, that water is level, and the Bible account of Creation is true, and the earth therefore is a plane.

ED. OF THE EARTH.

Why is it the sun is not visible all the night, especially as its light is so much greater than the stars? Ans.—We believe it is not so. It is less.

Ans. to F. W. C.—Let N S represent the north star, and A where the north star was seen ? By whom. It is said the north star cannot be seen beyond the Equator. The pages should be given in the "100 Proofs" and "Parslack's" book, as this would save time.

The sun does not radiate with equal force, or rather to equal distance, in every direction. It is important to notice this. The sun's light evidently travels further east and west than it does north and south. That is it travels further along the great circular course, moving round the earth than it does across. This should meet your difficulty.

Light and heat radiate equally in all directions when the sun is on the outer circle as it is on December 21st. It is known that the light gradually diminishes until, at about 20 degrees from the Northern Centre it shades almost imperceptibly into twilight and darkness. If then we take from this position to the Arctic circle it describes the whole extent of sun, or daylight, at a given moment on the shortest day. On June 21st the sun, by gradually contracting its path, has arrived at the inner circle; then the same length of radius will produce the circle which represents the extent of daylight on the longest day. On the shortest day the light terminates at the Arctic Circle, leaving all beyond in darkness—and, as the sun moves forward, the edge of the circle of light continues during the whole of its course to fall short at a certain point; hence, although it is daylight over the rest of the habitable earth some time during the 24 hours, the centre, N, is left in continual darkness; but when, in six months afterwards, the sun is on the inner circle (the tropic of Cancer) the light extends beyond the Arctic Circle, and, as it moves in its course, the centre (N) is continually illuminated.

The motion of the sun is a visible reality, which is entirely verified by the Scriptures. And if it be observed a few degrees north of the line called the Tropic of Cancer, and for any period before or after the time of touching or passing the meridian, it will be seen to describe a circle.

Mr. C. asks: "Why is it the sun is not visible all the night, especially as its light is so much greater than the stars?" The latter assertion we doubt, nevertheless it is a very fair question; but it has been answered more than once in The Earth Captain Parry and several of his officers when near the arctic circle, repeatedly saw, for 24 hours together, the sun describing a circle, and Mr. Campbell, United States Minister to Norway, with a party of gentlemen, went far enough north to see the sun at midnight, and they "slept into another day" without losing sight of the sun for 24 hours. The position of the sun is characteristic of the North, and this could not be if the earth were a globe.

The question might be asked. How is it that the earth is not illuminated all over its surface if the sun is several hundred miles above it? In order to answer this question the globularists have hypothesized the earth to be a spherical globe, and the sun to be an immense body located millions of miles away. But we reply: (1) if no atmosphere existed, its light would diffuse over the whole earth at once, and alternations of light and darkness could not exist; (2) as the earth is covered with an atmosphere, and darkness could not exist; (3) as the earth is covered with an atmosphere, and darkness could not exist; (4) as the earth is covered with an atmosphere, and darkness could not exist; (5) as the earth is covered with an atmosphere, and darkness could not exist.

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We were greatly favoured on Thursday, August 20th, by a Lecture, entitled "The Romance of Science," by Lady Blount. The night was inclement, but nevertheless the ladies gathered in the Lecture Hall to listen to the words of one who has but little concern with the world. The lecturer was quite at home with her subject, and the interest was sustained.

The lecturer gave them an eye-opener, and they could have listened for hours. Some of those who were privileged to listen will long remember it. Some of those who were privileged to listen will long remember it.
throughout her instructive discourse which set forth Truth according to the Scriptures, and disproved theory.

E. V. MULGRAVE (Minister).

My experience is contrary to what I was taught to believe, viz: that the earth is a globe. As a boy, in Jamaica, I used to ask my parents many questions about the earth; and my mother told me there were several points in Jamaica from which Cuba could be seen. Later I proved this to be true. In March, 1881, I went from Montego Bay to St. Ann's Bay; some companions went with me up the hills, and the morning being bright and very clear, I saw two small sails standing out from shore quite distinctly, about five miles off. Another sail was also visible, about 80 miles away, which I and my friends made out to be a barque leaving Cuba. This we saw with the naked eye.

One of my companions, a pilot boy, had a small telescope with a range of 40 miles, but on looking through the glass we could not see these ships; so the owner of the telescope, whose turn it was to watch for ships, stayed until he was able to ascertain that the vessels were going to Kingston, Jamaica.

I would suggest a few causes which prevent anyone seeing a ship a great distance away, although water is level:
1. The nature of the atmosphere. 2. The capacity of our visual organs.

E. V. MULGRAVE.

I must thank you for your most interesting lectures. The people were charmed with them. I asked one of your hearers (a teacher at a public school) what she thought of the lecture? She said, "It was good, but most startling." Please to accept our sincerest Christian regards, and we trust that the Lord will continue to bless you in your work.

E. V. MULGRAVE.

Dear Mr. Blatchford,—I am anxiously waiting for the appearance of your second number. I have simply been enjoying yourself at a game of shuttlecock with various forms of modern-day (so-called) science, and supporters of philosophical hypothesis to offer, to see how beautifully they pull down their own fortress. And how easily the sandy foundation of their scientific (?) blending of the doctrines of such theoretical speculators as Newton, Galileo, Copernicus, Socrates, Plato, Pliny, and others, with the doctrines of the Bible can be blown into space by the bombs from the enemy's camp. And well they deserve it for not building on the impregnable Rock—THE BIBLE.

I am, yours faithfully, W. PACKHAM.

Church of Christ, West Street, Auckland. July 18th, 1903.

Dear Brother,—Your post card received. I shall be happy to answer any questions that are within my power to deal with. It was because I found on my recent visit to England that some of my friends denied the existence of a southern centre that I had the photo taken for their benefit. I have more recently, and a better plate but no copies are yet printed.

The statement that "water is level" has been made sponsor for a theory of the shape of the earth which contradicts facts of southern positions and distances, i.e., the maps published to give the form of the earth on the plane theory do this. The admission of circum-polar stars south carries it with it the further fact that south is a definite point, and not an infinity of points as represented on these maps. The same circum-polar stars visible from my house, I have seen from Sydney, Melbourne, Adelaide, and Capetown. If North and South are points, what are East and West in reference to them?

The stars move in the same apparent general direction as with you. Looking north, all rise in the east (to the right), and set in the west (to the left). The main difference being that in your centre of vision are circum-polar stars, but ours sweep in curves from east to west. When you turn and look south you see curves, but looking south we see circum-polar stars. Making allowances for the difference of latitude and constellations the appearance to us looking south, is similar to your looking north. It is this I think, which has given rise to the confusion which I have noticed in allusions to southern appearance. If you could imagine all the stars fastened together on their meridians, and meeting at the two points, north and south; then an observer beneath them, looking north would see them rising to his right hand, but turning to look at the south meeting point he would see them rising to his left hand. Pardon this straining of the matter, but I hope it is quite clear to you.

The sun moves apparently from east to west, and we are within the portion of the circle he makes. In the month of January, this year, the setting sun shone in at my front door.

Yes, the length of day increases in summer, and shortens in winter as we go south. I copy the following from two almanacs for this year. One is published in Auckland, and the other in Christchurch (Middle Island).

\[
\begin{align*}
\text{Auckland—Sun rises January 1st, 4.44; sets, 7.23.} \\
\text{Christchurch— November 1st, 7.18; sets, 4.24.}
\end{align*}
\]

I do not know of any astronomical works published in the south, excepting the ordinary reports issued from the Observatories. To get of these usually appear in the Notices of the R.A.S., or in the Journal of the British Astronomical Association. Phillips, of Fleet Street, London, publish a revolving Planisphere for the South which is serviceable, and gives a good idea of the appearances of the southern heavens.

With kind regards, yours sincerely,

GEO. ALDRIDGE.

Dear Brother Aldridge, Sept. 3rd, 1903.

I have to thank you for your letter, received on Sunday last, August 30th.

I do not deny that you have in the south a centre around which the southern stars revolve. If some Zetetics deny this it is because they have not yet seen the evidence for it. But as you know that southern constellations revolve around a so-called south “pole,” so we know that water everywhere is level, and the earth (or land, see Gen. i. 10) therefore a plane. If the earth were a globe, according to popular belief, the surface of all canals, rivers, and seas, would be convex.

It is as inconsistent of the globularist to deny that water is level as it would be of me to deny your evidence about the southern stars. Both are evidently facts, and no fact should be contradicted. The fact that water is level is utterly inconsistent with the globular theory, but the motions of the heavenly bodies have, speaking generally, nothing to do with the shape of the surface of the earth. But you and I are both Christians, and we ought alike to respect the Word of the Creator. No part of the Bible can be more undoubtedly the Word of God than the Ten Commandments which God spoke on Mount Sinai. In the second commandment “God said” that “Heaven is “above,” and the water “under the earth.”

And you say, “the sun moves apparently from east to west.” Why not believe the evidence of your senses, that is, that the sun does move? The Bible says the sun moves; and the same good book says that the earth is established so that “it cannot be moved.” Can you give me a proof that the earth moves as astronomers affirm? I would like to see such a proof.

There may be, and I think there are, some difficulties yet remaining on the Zetetic side; but one thing is certain, our teaching does not tend to subvert the faith in the divine inspiration of the Bible. Zetetic side; but one thing is certain, our teaching does not tend to subvert Bible teaching. Where, then, should all Christians be found? Let us stand together on the side of God’s Word. You in the south could help us in the north.

I shall be glad to see your further photos. Please mark which way the stars revolve—your camera being of course pointed to the south.

With kindest regards, believe me, your faithfully,

ALBERT SMITH.