

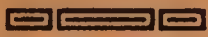
A Reparation



Universal Gravitation a
Universal Fake



The Earth
an Outstretched Plane



Sun, Moon and Stars
Small Bodies Near the Earth



Astronomical, Scientific and
Biblical Evidence

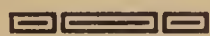


By C. S. DeFORD
Fairfield, Washington
U. S. A.

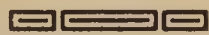
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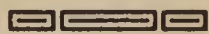
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AUTHOR'S PREFACE.

To me truth is precious. I love it. I embrace it at every opportunity. I do not stop to inquire, Is it popular? ere I embrace it. I inquire only, Is it truth? If my judgment is convinced my conscience approves and my will enforces my acceptance. I want truth for truth's sake, and not for the applaud or approval of men. I would not reject truth because it is unpopular, nor accept error because it is popular. I should rather be right and stand alone than to run with the multitude and be wrong.

The holding of the views herein set forth has already won for me the scorn and contempt and ridicule of some of my fellowmen. I am looked upon as being odd, strange, peculiar; as being a little weak-minded; as having a broken wheel or a slipping cog in my mental machinery. But truth is truth though all the world reject it and turn against me. I will scorn their contempt and cling to truth still.

I shall be pleased to receive any fair, kindly, courteous criticism of these views from any of my readers. But please read the little volume through before you condemn it or its author.

Yours for Enduring Truth,

C. S. D.

A Reparation



I feel that in choosing the above title to cover the following pages I have taken an appropriate one, because I believe there are many ancient and simple truths which have long lain crushed, marred and hidden beneath the rubbish of tradition or even of science, falsely so called. I believe that a terrible breach has been made in the true science of the universe and the Creation. Therefore, it is eminently fitting and proper that a reparation of the breach, a "restoration of paths to dwell in" should be attempted and made. And I am glad to know that as regards the science of astronomy this attempted reparation and restoration has been in progress for about half a century, and that it is now making permanent, though somewhat slow advancement. I am also happy to have the privilege of supplying a little material and doing a little labor on this grand structure. I make no claim to entire originality in the ideas presented herein, though I do claim originality in part. I have tried to follow the maxim of some good thinker, who said: "Think for thyself. One good thought known to be thine own is worth a hundred gleaned from fields by others sown." Though I have thought for myself, yet I have not scorned to glean from other fields, on the principle that a borrowed tool is better than no tool at all. But these borrowed thoughts are now my very own and none can ever rob me of them. However, I cheerfully and freely give them over to you, and most earnestly beseech you to think them over until they become yours also. "There is that which scattereth and yet increaseth."

Wherein I present the thought which I have gleaned and which is now mine, I do not deem it necessary to always indicate the fact by marks of credit; but where the thought is given in an author's own words I shall take care to indicate it so by proper marks. I make my statement as brief as is admissible to permit of clearness. I am not an eloquent man. Eloquence consists in saying a hundred words and meaning but one. I am blunt enough to just speak out the one word I mean and let it go at that. It is easier to understand and remember one **pointed** word than a hun-

dred vague ones. I wish to get merely the skeleton facts, the framework of truth before the minds of intelligent, thinking people, and **they** may clothe it with oratory, may dress it in the gewgaws of eloquence if they so choose.

My whole, sole and only object in writing this little treatise is to uphold the account of the Bible as to the Creation, order and arrangement of the things of the material universe, which account is flatly disputed by modern theoretical science. Skepticism concerning the Bible is growing in the popular mind in an alarming manner, and to show you that the chief basis and foundation of this skepticism is belief in modern theoretical science, I make you the following quotations:

Thomas Paine, in his "**Age of Reason**," makes this observation respecting theoretical astronomy and the Bible teaching respecting the shape of the world, etc.: "That the two opposing beliefs can be held together in the same mind is impossible. He who thinks he can believe both has thought very little of either."

The Freethinker of October 16, 1892, says: "There is something in Christianity calculated to make it hostile to science. The Bible gives a false account of the origin of the world; a foolish account of the origin of man; a ridiculous account of the origin of languages. It tells us of a universal flood which never happened.

* * * It was, therefore, inevitable that the church should oppose such sciences as astronomy, geology and biology, which could not add to the authority of the Scriptures, but might easily weaken it. Falsehood was in possession and truth was in exile or a prisoner."

To the above let me remark that no science ever weakens the authority of the Scriptures; therefore, the Church and Christianity never were and never will be "hostile" to science. But it is assumption and hypothesis masked as science to which Church and Christianity are hostile.

The Agnostic Journal of January 5, 1889, has this to say: "The account of Creation in Genesis is obviously inconsistent with the real facts, both as regards the relations of the earth to the sun and moon and to the stars. The account * * * involves not only physical impossibilities, but is directly opposed to the most certain conclusions of geological and zoological science. The true history of the human race has been the direct contrary of that given by the Bible."

And if it were possible to make it plainer that infidelity rests mainly on modern science, and modern science positively contradicts the Bible, I ask you to hear what Robert G. Ingersol, in his debate with the late T. De Witt Talmage, had to say: "If it shall

turn out that Joshua was superior to La Place, that Moses knew more about geology than Humboldt, that Job as a scientist was superior to Kepler, that Isaiah knew more than Copernicus, then I will admit that infidelity must become speechless forever.”

No proposition could be more clearly established than the one just preceding these quotations. Then, since the Bible declares that “In the beginning God created the heavens and the earth,” etc., and our scientists and skeptics declare that to be a false account, it is very proper to inquire, what was the origin of things?

The development or evolution theory might appear somewhat plausible if only you can supply something to develop. But “nothing to start with would develop nothing.” It is clearly manifest that we must take either the Bible position on the origin of things or we must accept the evolutionary theory. Only one of these two views is open for our acceptance. I, for one, accept the Bible account, and this little effort is meant to sustain that account as against modern so-called science.

If it can be shown that the Bible gives a true account of the order and arrangement of the material universe; or, in other words, if it can be shown to be true in its Cosmogony, then we shall have successfully impeached modern astronomical science, showing its testimony to be absolutely unreliable and therefore worthless.

Evolution

Argument is scarcely necessary to prove that the things of the visible universe, in their very nature and in their wonderful activities, adaptability and fitness for certain ends, show that they are the results of intelligent design, plan, intent, purpose and workmanship. They all work together harmoniously to accomplish definite results. Surely this proves beyond reasonable controversy that some great Being, possessing life, mind and power designed, planned and executed his plans to accomplish these definite, sublime and magnificent results! And what has the contrary theory to offer instead? Only blind, dead, fatal and unintelligent “evolution” without life, mind, object, design, plan, intent or purpose is supposed to set up and at haphazard, hit or miss, catch as catch can efforts to accomplish these sublime and beneficent results. The supreme folly of such a claim is most glaringly manifest. It is amazing to me that any intelligent mind can entertain it. Just the question of sex is sufficient to refute the whole doctrine of evolution. How is it that in producing the living organisms evolution

managed to get the sexes? How did it manage to get some animal beings male and some females, each sex with its peculiar organs of sex, fitted and adapted to the process of reproduction and not re-evolution? And why does evolution stop production and turn the business over to the sexes to engage in reproduction after their peculiar way? Did it **intend** to do that? Was that its plan, its intent, its purpose? Why are not all animals male and no female? or all female and no males? And how is it that production was not continued by evolution and not reproduction established and continued in and for and by the sexes? Has like always begotten like or has it begotten unlike? This is not waggish ridicule, but is pertinent to our subject. If there was no intelligent design by the Maker of the universe, how is it that all the material things around us show intelligent design? Was this all done by chance, by the material and forces of nature acting of themselves? As well to believe that a steam or an electrical engine was constructed by all its parts coming together of themselves and arranging themselves into the perfect machine **of themselves**; or "to believe that the whole of the Bible was printed by the different types and printer's letters coming together of **themselves** and arranging themselves into words, sentences and chapters, with all their sublime and immortal lessons." Absurd! Exceedingly absurd!

No person in this world will ever contend that a man can make even a toothpick without intelligence, plan, intent or special purpose. And no person in the world will ever contend that you can get anything out of an empty bag; or that you can get out of the bag something it does not contain. No being could ever impart a quality or qualities he did not himself possess. Therefore, if the Maker and Builder of this universe did not possess life, mind and intelligence He could not impart these qualities to any of his creatures. The full and perfect philosophy of the case is enunciated in this language: "He that formed the ear, shall he not hear? He that formed the eye, shall he not see?" And we may prudently ask further: He that imparted life and mind, shall he not pre-eminently possess life and mind?

Now, we know that the world has produced great and noble men, men possessing great minds and intelligence. We **know** that they **do** possess these qualities. Take great inventors, for instance. They have produced some wonderful and valuable machines. **Now**, whenever the evolutionist will furnish me a man or set of men whom we **know** possess life and mind, and that man or set of men will invent and perfect a machine and impart to it life and mind

and the **POWER to REPRODUCE ITSELF** (its own kind), then I shall become an evolutionist. But I have no apprehensions on this line, as I am fully persuaded that what is now found to be impossible with living, intelligent and organized **man** has always been and always **must have** been impossible with dead, unintelligent and unorganized matter. Evolution (a mere idea) not possessing life and mind **could** not and **did** not impart these gifts.

But as we **must** pass on I wish to record but a few thoughts on the subject of

Geology

We do not intend on any account to dispute everything passing under the name of science, certainly not in practical science. Indeed, we believe there is truth included in the various systems of science. But we contend that all **true** science (for the word science is from the Latin **scientia**, which means knowledge) will be found to agree with the Bible record of things.

The geologist finds certain conditions, certain facts, certain substances in certain places and conditions in the earth's crust; but to deduct from these imperfect data when or how these conditions arose or when or how they became fixed facts is impossible for them to do. The fact that a certain mineral or stone is found in a certain place and in certain conditions proves nothing as to its origin or duration. It only proves the existence, qualities and conditions of that substance. I dismiss the subject of geology as wholly unreliable to prove anything as to the origin or duration of material things, submitting, however, the following quotation from "Geology." by Skertchley, p. 101, copied from Zetetic Cosmogony, p. 46, by "Rectangle:" "So imperfect is the record of the earth's history as told in the rocks, that we can never hope to fill up completely all the gaps in the chain of life. The testimony of the rocks has been well compared to a history of which only a few imperfect volumes remain to us, the missing portions of which we can only fill up by conjecture. What botanist but would despair of restoring the vegetation of wood and field from the dry leaves that autumn scatter? Yet from **less than this** the geologist has to form all his ideas of past floras. Can we wonder then at the imperfection of the geological world?"

Some geologists inform us that this earth had its origin in fire, others in water; some contend that it will become extinct by a burn out, others by a freeze out; some by a dry out, and others by a drown out. Unreliable guesses! What do they **know**?

But since I have assigned myself more particularly the task of writing on another subject I cannot now stay further to discuss the theories of evolution or geology, but I recommend you to think on these subjects and to question them further as I have herein led your minds to do. I must now proceed to the consideration of

Universal Gravitation

As a fundamental proposition on this I will state that I believe the theory of universal gravitation to be a universal fake. What is gravity? A definition of the term is proper at this point, so I give it in the language of its supporters.

Prof Laing, an American astronomer, author of a small textbook on astronomy and inventor of Laing's Planetarium, says that "gravity is the **pull** all bodies exert upon each other." Popular Science Recreations, by G. Tissandier, pp. 486 and 487, says: "Gravitation is the **force** which keeps the planets in their orbits." Also, "Every object in the world (universe) tends to **attract** every other object in proportion to the quantity of matter of which each consists."

"Gravity is the **tendency** of all bodies in the universe to **pull** all other bodies down upon themselves." That is, in other words, gravitation tends to make all bodies rush together into one vast mass. The above, as nearly as I can now recall the words, is the definition of gravitation by H. U. Stephens, a recent writer on astronomy in a Young People's paper. Webster's Unabridged Dictionary describes it as "The **tendency** of a mass of matter toward its central body; the **tendency** of all matter in the universe **toward** all other matter. The act of **being drawn toward** something." So to simplify it as Laing has done it is the tendency in all bodies to exert a pull on all other bodies, or it really **is** the pull, according to the scientific theory. Sir Isaac Newton formulated the law of universal gravitation which he is credited with having discovered as follows: "Every particle of matter in the universe attracts every other particle with a force directly proportioned to the mass of the attracting particle and inversely to the square of the distance between." Encyclopedia. That is to say, the greater the mass or the nearer it is, the greater will be this attractive force, this pulling tendency; and the less the mass or the greater the distance, the less will be the so-called attractive force.

And now, since we have before us the meaning of the term and the law of the action of this mysterious power, we inquire: What is its relation to the science of astronomy and what is its import-

ance in connection with that science? Let Sir Robert Ball, Astronomer Royal of Great Britain, in his "Story of the Heavens," p. 82, tell us: "The law of gravitation WHICH UNDERLIES THE WHOLE OF ASTRONOMY." "The force which keeps the planets in their orbits." G. Tissandier.

Hence we see that astronomers themselves consider gravitation absolutely necessary to their system; indeed, the very foundation of it all.

But I deny that there is any such force in existence, and I may express my denial in the language of Sir Isaac Newton himself, written in a letter to his friend, Dr. Bentley, just a short time before the death of Newton: "That gravity should be innate and inherent in matter, so that one body can act upon another at a distance, is to me so **great an absurdity** that I think no one who has, in philosophical matters, a competent faculty of thinking, can ever fall into it."

I agree with Sir Isaac, for I, too, think it so great an absurdity that none who has thought competently in philosophical matters can ever fall into it; and as evidence that it **is** a universal fake, an absurdity and an impossibility for its action to be such as is claimed for it, I present you the following propositions, any one of which **by itself** clearly proves my premise; much more do all of them together prove it, and so they wholly disprove the supposed universal law.

First. Take the old-fashioned teeter board balanced on a bench thus:

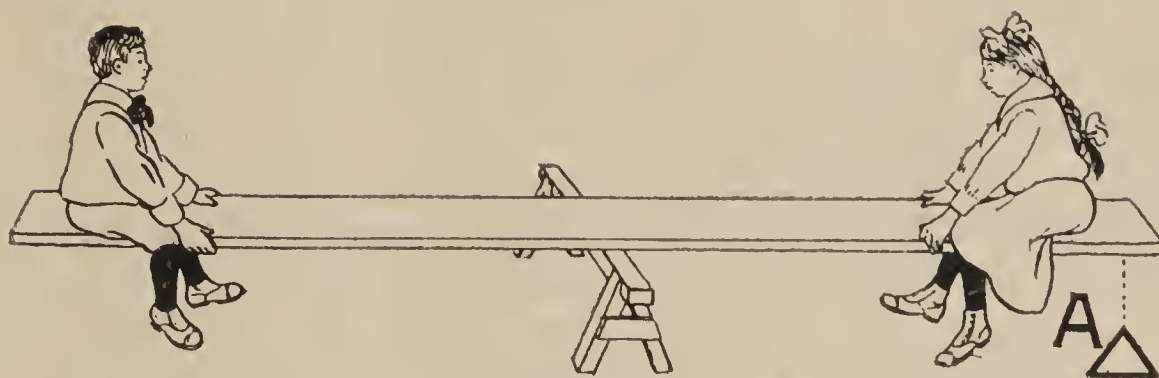


Fig. 1.

Jack and Jill, weighing fifty pounds each, occupy opposite ends of the board. Now, Jack's weight exactly balances Jill's weight, and her weight exactly balances his, and **neither** of them could lift a pound more than his or her own weight when attached to the opposite end of the board as the block "A" in Figure 1. In other words, we have mass acting against equal mass, equal weight against equal weight, equal force pitted against equal force;

and just the instant either side exerts a greater force than the opposite side the law of equality is violated and it becomes unequal. Jack's weight is all employed in balancing up Jill; all the force, power, pull or gravity exerted by Jill is exhausted in neutralizing that of Jack, so that **neither** of them could exert a force on anything beyond an equal mass. So **now**, take our globe (?), our earth or any globular mass and consider it in the light of this principle as illustrated by the following diagram. Every mass of matter, whether smooth or rough, regular or irregular, **must** have within itself a center of gravity according to this universal law. That center is the pivot on which the mass must balance. See Fig 2.



Fig. 2.

This may represent the supposed globe cut into halves, the flat surface of one-half facing you. Now, the center of the globe is called the center of its gravity and, theoretically, that is correct. Gravity is said to act toward the center of the mass. Now, on the principle of the teeter board, section "F" and section "H," and all sections of the sphere exhaust all their force, power or pull on their opposite sections, the center being the pivot on which the whole mass is balanced. So section "F" cannot reach out and pull "A" toward itself, because it exhausts all its force on "H," an equal mass on the opposite side of the pivot, the center. And "H" can not reach out and pull "K" toward itself, because all its force is exhausted on "F," an equal mass on the opposite side of the pivotal center of the greater mass. Remember, mass "F" equals mass "H;" therefore, the attraction of mass "F" must equal the attraction of mass "H" and so neutralize it. If "F" can pull "H" toward itself and **more too**, then "H" is not equal to "F" and the law of equality would be destroyed. But every mass **must** have a pivotal center and cannot act beyond its own circumference. I refer to dead, unorganized matter and not to living beings. Therefore, it is utterly impossible for any sun, planet, globe or mass of matter to exert the power of attraction outside of its own circumference; because every particle of matter in that mass has its equal, neutralizing force on the opposite side of the center of

the mass, the opposite end of the teeter board. Or is it true that section "H" ignores section "F" and directs her attractive force out towards "K" to pull "K" down toward herself, while the attractive force of section "F" passes over, under, around or through section "H" and exerts itself in pulling "K" toward "H" instead of exhausting the force of "F" on "H," its equal mass on the opposite side of the center? How is this? Suppose we take two balls of metal each containing exactly the same kind and the same quantity of matter. Place those balls against each other. Will they not each exert an equal force on the other? They will if this law is true. All the attractive power of the one is met, balanced, neutralized by the other, so that neither of them could "attract" anything else. If you cut one of these balls into halves and place those halves together the one must balance the other and so neutralize the other's force. It would, therefore, be impossible to exert a force outside of its own circumference. The balls would each retain their weight, but inherent weight is a very different thing from extraneous gravitation or a pull from something outside a body.

Hitch together two horses of equal strength, tail to tail like Samson tied his foxes, and let them pull against each other. Where will they move to? Will not each exhaust all his strength on his opponent and not move him? Then how could they pull on some other object at the same time? There can be no "center" without equal masses in opposition. Matter could only exist in the aggregate and **never** in the segregate if this law of universal gravity were true. Separation then is impossible.

To illustrate the idea further, we may say that the action of this gravitation, the central "tendency" of this force would be like the action of the "irresistible object coming in contact with the immovable substance;" or, like the gingham dog and the calico cat—they surely would "eat each other up." neutralize themselves. Equal, opposing forces prevent motion.

But when shall I stop on this point? When the mind enters the great labyrinth of truth it is led on and on and on in its pursuit, and seems to find no place of rest.

Second. If there is a force of gravitation as taught by our scientists, then the action of that force violates the law of action of all other known forces. All known force is eccentric, expansive, outward, that is, repulsive. This is the opposite to attraction. The force of dynamite is eccentric, expansive, outward, repulsive. So is the force of steam, powder, heat, electricity, gas, air, lightning and even the living cell. All these forces are exerted eccentrically.

They are expansive and, therefore, repulsive. They operate outwardly from their centers or sources. So, then, if matter exerted any force at all, it would be eccentric, repulsive, instead of attractive, concentric, and bodies would be driven apart instead of drawn toward each other. And we see the action of all force to be outward, repulsive. Steam bursts a boiler, powder speeds the bullet, lightning splits the tree and wind topples over houses. Even the force which lifts the apple to your mouth is eccentric. Only by some intelligent, mechanical device can force be made to draw objects concentrically. Such a device may be observed in your arm lifting an apple to your mouth. Now, since all **known** force is expansive, repulsive, outward, by analogy we say if there **is** such a force as gravitation it must be like all other forces; and, therefore, it would be repulsive, not attractive.

Coal oil, vegetable oil, animal oil (fat) are all combustible. If any other kind of oil exists anywhere, by analogy we say it must be combustible also. So it is if gravitation exists. The nature of **that** force must be similar to the nature of all other known forces.

Third. The sun is supposed to be the center of universal gravitation, and the greatest of all bodies in the known universe possessing gravitation. But on a principle hinted at in proposition second, the sun could not possess the power of gravity, as it is a hot body. Heat is expansive, it is eccentric, it is repulsive. Let the reader carefully consider the following quotation I make from the pen of one of the savants, and then let him estimate in his own mind about how much gravity is possessed by a body of so great heat. "The sun is a fiery ball one million three hundred thousand times larger than our earth; and several thousand times hotter than the most powerful electric furnace. The sun is pouring forth enough heat **every second** to melt a column of ice two and a half miles square reaching from the earth to the sun; and in eight seconds of time it could turn the column from solid ice to steam." This equals 581,250,000 cubic miles of solid ice. Quite hot! Now figure out how much "attraction of gravitation" a body of such immense heat would have. Do not our scientists **know** that they **teach** that it was that eccentric, outward, expansive, repulsive force of the nebulous mass, a portion of which still composes the sun, which originally "threw off" the earth and the planets? Was it not the repulsive force of heat which threw them off? And now do they want us to believe that the same force **attracts** that which it formerly repulsed? If so, what reversed its action? Is repulsion attraction? And on the principle of the repulsive force of heat how much attraction would "the most powerful electric fur-

nace" exert on a fly, a wild goose, or an airship? And on this principle how great would be the gravity of this earth, with its hot and molten interior, having only a thin shell or crust surrounding this molten matter, so thin that it is frequently burst in some volcanic eruption? On this principle it is positively certain that neither the sun—a fiery, nebulous, seething mass, nor the supposed molten interior of "the globe" would ever "tend to draw" anything "toward its center or toward itself." Is it the "attractive" force of the sun's heat which melts the great column of ice mentioned above? Is it the attractive or the expansive force of heat which melts ice and pops our corn?

So clear is this that I say again that universal gravitation is a universal fake, because it is an unfounded assumption.

Fourth. It would seem absurd to look for any further argument to overthrow "so great an absurdity" as gravitation, yet point after point has to be met. Let us consider

Tides

Our scientists tell us that the tides in the ocean are caused by the attraction or pull of the sun and moon on the water; high tide occurring at the time of new moon when both the sun and moon are on the same side of the earth and both "pulling together." Thus they are said to pull the water up away from the earth on the side next to themselves, and even are supposed to be **pulling the earth** away from the water on the side opposite to themselves. They illustrate it this way:

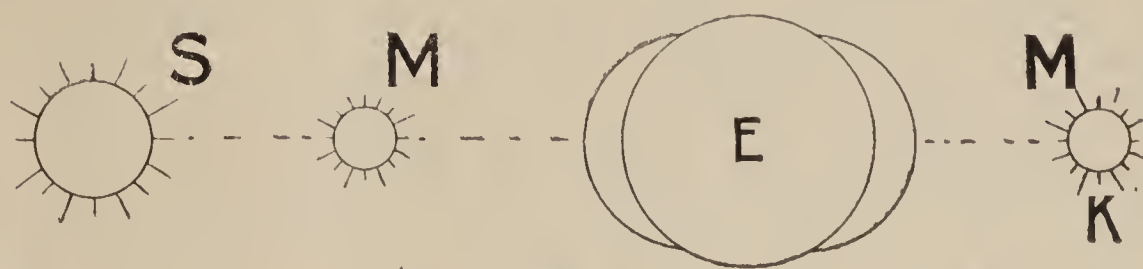


Fig. 3.

But a high tide occurs also at time of full moon when the moon has passed to the opposite side of the earth from the sun or around to "K." Then the two bodies are pulling in opposite directions.

Now, if it were true that the force of gravity caused the tides, pulling the water in the ocean up and dashing it onto the shore fifty to one hundred feet high, would not tides be seen and felt on ponds, lakes and inland seas? If gravity can and does

lift the tons and tons of those vast waves in the ocean and dash them onto the rocks on shore, would the same power not affect a ton of water in a tank a mile inland? Must water be in the ocean before gravity can get a hold of it to pull? I have the authority of the Youth's Companion, Boston, Mass., of October, 1909, that "there are no tides in the Mediterranean Sea." What is gravity doing or **not** doing there? Why should no force of gravity be felt on that vast area of 1,000,000 square miles? Why can not gravity get hold of the waters in that sea? Is it too fresh or too salt?

If gravity is so powerful as actually to lift this vast earth and pull it about and away from the waters on the opposite side from the sun and moon, why can it not lift a man or a feather off the earth when directly under the sun? Would not any other force, wind for instance, move smaller, lighter objects before moving the larger and heavier ones?

And if it is indeed the moon's pull which causes high tides (or any tides at all) it certainly follows that high tides would be on any given meridian at the same time the moon passed that meridian, that is, always directly under the moon. But Sir Robert Ball, in his book "Time and Tide: A Romance of the Moon," on pp. 18-24, tells us that such is not the case. He informs us that at some ports this is true, but in some places it is low water directly under the moon when the moon is on the meridian of that place. Here is what he says: "Even around our own coasts the discrepancies are such as to utterly discredit the theory (of equilibrium, or high tide always under the moon) as offering any practical guide. At Aberdeen the high tide does not appear till an hour later than the doctrine would suggest. It is two hours late at London, three at Tynemouth, four at Tralee, five at Sligo and six at Hull. This last port would be, indeed, the haven of refuge for those who believe that the **low** tide ought to be under the moon. At Hull this is no doubt the case; and, if at all other places, the tide behaved as it does at Hull, then it might follow that the law of **low** water **was** generally true. But then this would not tally with the condition of affairs at the other places I have named; and to complete the cycle I shall add a few more: At Bristol the high water does not get up until seven hours after the moon has passed the meridian. At Arklow the delay is eight hours, at Yarmouth it is nine, at the Needles it is ten hours, while lastly, the moon has nearly got back to the meridian again ere it has succeeded in dragging up the tide on which Liverpool's great commerce depends. Even ports on the vast ocean give a very uncertain response. Kerguelen Island and Santa Cruz might seem to prove that the high

tide occurs **under** the moon; but, unfortunately, both Fiji and Ascension seem to present us with an equally satisfactory demonstration that beneath the moon is the invariable home of **low** water." So then these facts show that there is no connection between the moon and the tides. This is an astounding admission on the part of Sir Robert and fatal to the theory of gravity and the tides.

From a little work called "The Earth a Globe," p. 48, by David Nield, pastor of the Church of God, Wellington, New Zealand, I copy this statement "At Tahita, one of the South Pacific Islands, they have high tides at noon and midnight all the year round, without variation." Both Sir R. Ball and this gentleman contend for globularity. I ask does the sun and moon or the sun or moon always pass the meridian of Tahita "at noon and midnight all the year round without variation?"

Let us look at it from another standpoint.

Go to any good library and investigate. You will find that the scientists will tell you that our earth is eighty-eight times the size of the moon. Also that the force of the sun's gravity on the earth is to the moon's gravity as three is to five. That is, while the moon exerts five pounds or units of force on the earth the sun exerts three pounds or units. Then while the moon exerts **one** pound or unit of force the sun exerts three-fifths of one unit. Then the two together exert but one and three-fifths units against eighty-eight units of gravital force exerted by the earth. The earth acts at home. She is on the defensive. She holds onto the particles of her own mass with a force of gravity of eighty-eight against one and three-fifths. Now, will you tell me that the sun's and moon's pull can overcome more than forty-four times the earth's pull and cause the tides? Thus it is allowed our earth is exerting more than forty-four times the pull of the sun and moon! Does not this prove again that those bodies have nothing to do with pulling the tides up?

Devastation Certain

Fifth. Remember now that the attraction of gravitation, or the pull of the sun and moon on this earth is said to be strong enough to **move** the earth—to pull it away from the water and so to produce tides. Our earth is said to spin on its axis, equatorial speed, at the rate of seventeen miles per minute. Now it makes no difference as to results whether it moves against stationary objects or whether it is stationary and objects move against it. Take two

balls of equal size and weight, throw "A" against "B" with a definite force, a definite effect will be produced. Now throw "B" against "A" with equal force and an equal result will be seen. Bump your head against a still object and it hurts just the same as though you were still and the object struck you with equal force. So now, though we know it is not claimed that the force of gravity is a material substance, any more than that the force of dynamite is a material substance, yet we know the destructive power of dynamic force. So let a wind force or a steam force or a dynamite force or an electrical force or the force of gravity, whether in a push or a pull, strong enough to move this vast earth, pass over its surface at the speed of seventeen miles per minute and note the results. If it were a pushing force, everything would be mashed down and driven into the sea and earth; if it were a pulling force, everything would be lifted bodily off the sea and earth, and in either case the whole face of the earth would be devastated. No wind, hurricane or cyclone strong enough to move this earth has ever been known; yet a very gentle wind moves light objects; and hurricanes and cyclones are very destructive. There have been some terrible explosions of dynamite, nitroglycerine and other explosives which have destroyed much property and many lives, but they did not shake the earth. Horrible earthquakes have swallowed up cities, destroying thousands and thousands of lives, but they did not move the earth. These disasters were caused by the force of these destructive agencies. What, then, must be the result of the force of gravity passing over the surface of this earth at the rate of seventeen miles a minute, if that force is great enough to move and does actually move the earth? We don't feel this force, but we do feel the force of the slightest wind. How we have been fooled! Even more: The whole so-called globe itself would be moved out of its place and, according to the philosopher's third law of motion, it would pass on forever in a direct line unless again interfered with by some power outside of itself. Shall I quote you that law? It expresses simply the inertia of matter thus: "A body at rest will forever remain at rest unless some power outside of itself starts it into motion. A body in motion will continue to move on forever in a rectilinear course (straight line) unless some power outside of itself interferes with that motion." This defined means simply that no dead body can either start or stop itself. Yet we are gravely told it can **pull** something else toward itself! Profound philosophy! I wonder these great thinkers do not **think** on their **thoughts**. But now, the sun being 1,300,000 times larger and therefore 1,300,000 times stronger than our earth, and pulling

the earth toward himself, when once he got the earth started into motion as he does in the case of tide production, that motion must necessarily be in the direction of the pulling power, the sun; the earth must inevitably be drawn into the sun, as that pulling is constant and persistent. The greater pull of the sun must overcome the weaker pull of the earth, even though the earth resisted; but the earth is pulling the sun toward itself, or itself toward the sun and **not** resisting. A fisherman pulls in a fish. What does the fish do? If gravity **pulls**, when the sun got the earth started it would draw the earth to itself. But if it **pushes** it would drive the earth farther and farther away from the sun all the time.

Again gravity, if existing, extends outwards direct from the sun to the earth and is constant and persistent, its force is felt from pole to pole. Let us imagine gravity like a great sheet of iron held down from the sky to earth, the earth spinning against that sheet of force at the rate of seventeen miles per minute, bumping our heads, houses, trees and mountains against this great, solid wall of force and we can easily conceive the terrible destruction that would follow! Is there not such a wall of **force** against which we are whirling faster than at hurricane speed if gravity does reach down and actually move the earth? If our sea-earth globe is spinning, does not gravity change its point of contact coincident with the movement of sunlight and the turn of the earth, so that it has to be getting a fresh hold every second? But as there are no such disastrous effects experienced, we can but logically conclude there is no such cause. Gravitation is a myth invented to support the flying globe myth.

“If gravitation is always welling outwards from the sun, how can it **draw** anything towards the sun unless on reaching that object it suddenly reverses its force and turns back? Why should it turn back on reaching the earth and want to bring “the globe” to the sun? Had it met the earth sooner would it have turned back sooner? If a man wants to pull anything towards himself, he first extends forth his hand, and then on reaching the object draws it back. How does gravity do it?”

Concentration

Sixth. Our astronomers gravely tell us that “all bodies have a tendency to rush together into one mass” by means of the force of the attraction of gravitation. In fact, this **force is this tendency**. A swarm of bees surrounding their queen nicely illustrates the position and supposed arrangement of “the myriads of suns and

worlds" which are said to surround "our globe." A swarm of bees do all rush together into one mass whenever they have the **tendency** and make the attempt. What is to hinder them? There is nothing between them but "empty space," exactly as it is with the planets. And this "tendency" of the planets to "all rush together into one mass" is constant and persistent; therefore, they are always making an attempt to "rush together." How is it then, that they cannot accomplish their purpose?

One writer soberly informs us, and possibly he believes it, that the planets are "anxious" to all rush together, and that the nearer they approach each other the greater their "anxiety" becomes, so that at last it is "two-fold." So I just as soberly ask, Why do they **not** "all rush together into one mass," as there is nothing between them but "empty space?" And this "anxiety," this "tendency," this gravitation is constant and persistent, so that the planets are constantly making a persistent attempt to rush together. "It is a clumsy device for the astronomers to invent another 'force' to hinder the planets embracing one another. They call it the centrifugal force. It flows from the center. But this is just what gravity is supposed to do, to go forth from the center."

Just think of it. Nothing between yourself and wife but "empty space," she anxiously, constantly, persistently tending to rush to you, you attracting, pulling her with "a force directly proportioned to the mass" of your attractive person, and still a persistent, repulsive force forever preventing her embracing you! Well, some **philosophy** is very profound; some **science** is a little hard to grasp! And mind you, that **pull** of yours, together with her persistent tendency to rush to you is what prevents her from rushing off into space. So there she stands, poor thing! Pity some way cannot be "discovered" whereby bodies attracted and pulled and tending to rush together may be enabled to rush.

Here, therefore, we have the ridiculous spectacle of an attractive force constantly and persistently pulling everything toward everything, and another force just so constantly and persistently driving everything from everything. And these two forces must be equal, or the greater one must have overcome the weaker one and all must have rushed together into one mass, or all have been driven farther and farther apart. If they are equal forces then everything is at a dead standstill, because equal, opposing forces prevent motion. Try it. Do you see or hear or feel the earth and the planets whiz?

Now I see in this two-force position a positive violation of the scientists' dictum when they tell us that "Nature is not super-

fluous. Where only one thing is needed she does not use two." In this case and all such cases Nature is not only superfluous, but she is superfluously superfluous, because she is here using **two** forces where **none** is needed. If it was intended by God or Nature that a body should stand still, why should a force be set to act on that body to pull it up, and an equal force to act in an opposite direction to keep it down? It is monstrously absurd!

I soberly state that the conclusion is absolutely unavoidable that if gravitation existed the earth, sun, moon, stars and planets would all rush together into one mass, that it had been done long ago. Nay, even more: That all these bodies never would have been separated by "empty space" from their primitive "nebulous mass," if all matter and all atoms of matter have this constant, persistent "tendency to rush together into one mass," this perpetual attraction, this constant, persistent and everlasting pull. As I have previously stated in this discussion, matter could exist only in the aggregate or in the one vast mass, and **never** in the segregate or the individual body.

Since we know that all force is eccentric, outward, repulsive and not attractive or concentric; and since we know that no such condition as described above has obtained and never will obtain, therefore we know that there is no such constant, persistent, powerful "tendency" or attempt, and universal gravitation is a scientific myth—a universal fake.

A Dead Standstill

Seventh. As a concluding argument on the gravity question I submit the following:

The force of gravity is directly outwards from the sun to the earth and planets our scientists inform us. It is this "pull" from the sun that **holds** the planets in their orbits and **prevents** them from rushing off into space. The planets are all trying their best to rush to the sun and the sun is working overtime in a mighty effort to prevent them from rushing off into space by pulling on every one of them by all the power of every particle of matter in his vast mass. Probably that hard work is what keeps him so hot and red-faced. I may seem to repeat, but that is one way to secure emphasis.

We are told that the planets once **did** rush off into empty space from their primitive, nebulous mass. Something stopped them in their mad rush. It was the gravity, pull, attraction of the sun which stopped them. A mov-

ing body is a resisting body. It takes more force or power to stop a body moving **away** from you than it takes to draw **in** a still body to you. Therefore, if the sun continued to exert the same force on the planets after he got them stopped that he did to **stop** them they would be drawn back to the sun as previously argued. If the sun's centrifugal force exceeded his attractive force, the planets have rushed on forever off into space. If attractive and centrifugal forces are equal, then the planets are at a dead standstill.

If these two forces exist in matter now they must have always existed in matter. They therefore existed in the nebulous mass which originally composed the universe. If equal now they must have been equal then. Therefore, the planets **never left** their primitive mass. Equal opposing forces prevent motion. Matter, then, exists only in the aggregate and not in the segregate. Then there **are** no planets.

But now, this force is not focused at some one point on the earth's surface, nor on a line or belt extending from pole to pole, but is directed to the whole half of its surface covered by the sun's light. The claim is that the earth is suspended, actually hung "in space" from the sun by means of the force of gravity attached to it. Fasten a cord to a ball and suspend it from your hand and you have a fine illustration of it. You can spin the ball thus suspended in a lateral direction, keeping the one side constantly toward the hand, the other side would remain constantly **away** from the hand. While thus tied and suspended you could never spin the ball vertically on its axis toward the hand, nor bring all the parts of its surface alternately toward and from the hand, except as you wound up the string, constantly shortening the distance between the ball and the hand, the ball finally reaching the hand. Now let the hand represent the sun, the cord represent gravity and the ball the earth. While thus suspended by gravity neither the earth nor any planet could spin on an axis nor revolve in an orbit around the sun causing day and night and the change of seasons. If the cord of gravity still held fast to the sun it must slip round and round the sun as the earth circles in its orbit round and round the sun. Otherwise, if the point of attachment to the sun remained the same, the cord of gravity must wind itself round and round the sun until the earth is drawn to him.

I want you to stretch your imagination so far as to consider gravitation as a material substance fastened to both earth and sun, like the string between the ball and hand. There! Now you **see** the gravity tied to the earth and sun. The force of gravity

must be broken before these motions could take place. Gravitation does not seize the globe along some westerly belt and give it a mighty pull eastward and then let loose and grasp again, but its impulse is steady and constant. And while the force of gravity is acting, pulling at the western side of the circular area covered by it, it is also pulling at the eastern side, the southern, northern, central portion and the whole half of its surface so the globe never could spin while this force is applied to it on every side. And if its force were broken so the earth could spin it would fall away from the sun off into space and pass on forever in a straight line.

So, I say, that instead of gravity **causing** the planets to spin, if acting as the scientists postulate, it would stop the motion of every body in the universe and bring them all to a dead standstill. Let **your** face represent the sun and **my** face the earth. The force of gravity from your face pulls equally on my forehead and my chin, on my right ear and on my left ear. Now I could not raise my chin up, because the force of gravity on my forehead would hold it down; I could not turn my forehead down for the force of gravity on my chin would hold it up. I could not turn my head to either side because the force on my ears, being equal, would hold my face steadily and immovably fixed in one position. And if our earth were tied to the sun by this cord of gravity it could never spin, and the one side would be held forever under the scorching rays of a fiery sun in perpetual day with never changing summer season, while the Antipodes would remain in the gloomy darkness of a frigid and eternal night of winter. Therefore, since no such conditions are known, I am **forced** to the inevitable conclusion that no such pull exists and that Universal Gravitation is a universal fake. It is one of the greatest deceptions ever foisted upon an over-credulous world.

Weight

But the question will arise: What is weight? Weight is scientifically (?) defined as "A measure of the force of gravity." A common experience or two will illustrate what weight really is. And as I have shown conclusively in the foregoing argument that there is no such thing as universal gravitation, it is evident, without further proof, that weight is not "a measure of the force of gravity." It is merely a comparison of mass with mass as regards density, solidity and compactness.

Let a man and a horse, walking side by side, pass across swampy ground. They will both sink in. The man will sink some and the

horse will sink more. We say the horse sinks in deeper because he is heavier than the man. Say the man weighs on scales 170 pounds and the horse 1,200 pounds. This is said to be the measure of the force of gravity on the two bodies. But it is really a comparison of mass with mass. The horse sinks into the mud more deeply than the man because he is the greater mass. And the horse's mass is not acting against the mass of the man's body, but each, horse and man, act against a mass of mud, the greater mass of the horse's body compared with his bulk, displaces a greater mass of mud than the man's body displaces, so the horse sinks in deeper than the man. And each sinks into the mud because each presents to the mud a more solid and compact mass than the mud which it displaces. Now let the man and horse walk across the same ground when it is frozen or dry. Will they sink in? Do they weigh less on the scales? They weigh exactly the same on the scales, but now they meet a solid, dense, compact earth, solidified by freezing or drying. They weigh just as much on the solid earth as they weighed before; that is, gravity pulls just as hard at one place as at the other, just as much at one time as at the other.

The same fact is shown by a boy of one hundred pounds weight swimming in a pond of water in summer and skating across the same water frozen in winter. The boy weighs as much in winter as in summer, but the ice is solid and the water is a liquid, so he walks on ice and swims in water. Let him stand on ice till it melts under him. He is no heavier but sinks. Why?

Drop a stone from a bridge into water below. The stone passes through the thin air, the more solid water into the mud below, and comes to rest on the solid earth beneath the mud. The solid earth was unyielding, the mud more yielding, the water still more so and the air most of all.

But why do not objects fall upward? Gravity is supposed to act in every direction, especially upwards, while weight tends downward. We must be careful to distinguish between inherent weight and extraneous gravitation. If gravitation were strong enough to move the earth as it is said to do in producing the tides, it certainly would pull all loose objects away from the earth before it could move the earth, and so they **would** fall upwards. Objects must move in the direction of the movement of the force which moves the object. And science tells us that the combined pull of the sun and moon on the earth moves it in producing tides. How **can** a sound mind admit the idea that the earth **is** moved by gravitation, when men, houses and other detached objects remain undisturbed? The wind which would throw down your house would

hurl you off the roof before it would move the house. Yes, some winds would throw you off the roof and **not** move the house. And when it **did** throw you off it would carry you in the direction of its own motion. And **you** would say at once that the force of the wind was **outward** from its source.

The Builder and Maker of all things has fixed and ordained a position and place for all things. When moved out of that place they naturally seek it again. We admit there is a force compelling, driving things downwards to the earth. That great Being, "who upholdeth all things by the power of his word," has ordained that when free to do so they seek their own level of stability or equilibrium. There is a power behind the facts and laws of nature. We freely admit it. We recognize that power as emanating from an intelligent Being, the great God who created us all.

The poet and philosopher, Goethe, calls gravitation "A hocus-pocus, an unnatural theory."

"Attributing such a power to mere matter, **which is passive by nature**, is a supreme illusion." So says Professor Bernstein.

Albert Smith of Leicester, England, a present-day writer on this subject, remarks: "If we ask what gravitation is, no man on earth can tell us whether it is solid, gaseous or liquid. I think it is all gas."

Here I rest my case. Universal Gravitation has been tried at the bar of Reason and it has been found to be a universal fake, an unsupported hypothesis, a gross delusion.

A Plane Earth

Gravitation is the force which "keeps the planets in their orbits," which holds the earth to the sun and prevents it "rushing off into space," and which causes the earth to spin on its axis, causing the succession of day and night. Thus have our scientists taught us.

But in the foregoing argument on the gravity question, I consider that I have shown conclusively that there is no such force in existence as universal gravitation; therefore, it follows without argument that if my position is true, then this earth is at rest, it does not spin on an axis to cause day and night, nor revolve in an orbit round the sun, causing the change of seasons. It follows, too, that the sun, moon, and stars are in motion over and above a plane earth.

Now, laying aside the philosophical phase of the subject, I wish to present some of the physical evidences that this earth is an out-stretched plane.

In the first place it **looks** to be a plane. On those vast prairies of the Mississippi valley of North America and the llanos and pampas of South America the eye is wearied with looking at objects away in the distance with no obstruction between and no limitation except the natural limitation of visual power. Mr. C. Darwin makes the following statement in his book "Voyages of a Naturalist," p. 166: "The guanaco, or wild llama—Mr. Stokes told me that he one day saw, through a glass, a herd of these animals which evidently had been frightened and were running away at full speed, although their distance was so great that he could not discern them with the naked eye."

Scientific Testimony

Observations with the eye and practical tests agree. I quote "Chambers' Information for the People," p. 59: "In North America, the basin or drainage of the Mississippi is estimated at 1,300,000 square miles, and that of the St. Lawrence at 600,000; while northward of the 50th parallel, extends an inhospitable flat of perhaps greater dimensions. * * * Next in order of importance is that section of Europe extending from the German Sea through Prussia, Poland and Russia, towards the Ural Mountains, presenting indifferently tracts of heath, sand and open pasture, and regarded by geographers as ONE VAST PLAIN. So flat is the general profile of the region, that it has been remarked, IT IS POSSIBLE TO DRAW A LINE FROM LONDON TO MOSCOW, WHICH WOULD NOT PRACTICALLY VARY FROM A DEAD LEVEL."

The "Atlas of Physical Geography," by T. Milner, M. A., states that: "Vast areas exhibit a **perfectly dead LEVEL**, scarcely a rise existing through 1,500 miles from the Carpathians to the Urals. South of the Baltic **the country is so flat** that a prevailing north wind will drive the waters of the Stattiner Haff into the Oder, and give the river a backward flow 30 or 40 miles.

"The plains of Venezuela and New Granada, in South America, chiefly on the left of the Orinoco, are termed llanos, or level fields. Often in the space of 270 square miles **THE SURFACE DOES NOT VARY A SINGLE FOOT.**

"The Amazon falls only 12 feet in the last 700 miles of its course; the La Plata has only a descent of one thirty-third of an inch a mile."

In the book "Nature and Man," by Prof. W. B. Carpenter, pp. 320 and 321, we find this language: "Nothing seems to have

struck the "Challenger" surveyors more than the extraordinary **FLATNESS** of that depressed portion of the earth's crust which forms the **FLOOR** of the Great Oceanic area. * * * If the bottom of mid-ocean were laid dry, an observer standing on any spot of it would find himself surrounded **BY A PLAIN**, only comparable to that of the North American prairies. * * * The form of the depressed area which lodges the water of the deep ocean is rather, indeed, to be likened to a **FLAT WAITER** or **TEA TRAY**, surrounded by an elevated and deeply sloping rim, than to that of the basin with which it is commonly compared."

This condition of the ocean bed as described by Prof. Carpenter is well shown by this illustration.

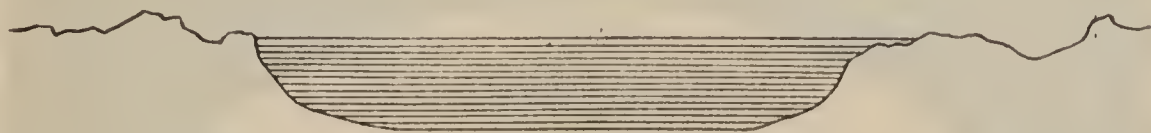


Fig. 4.

It is perfectly plain, from these quotations, that the face of the earth, both above and below the level of the ocean's surface, is a plane. This position is strengthened by the reports of aeronauts of how the earth **looks** to the man in a balloon. The London Journal, July 18, 1857, says:

"The chief peculiarity of the view from a balloon at a considerable elevation was the altitude of the horizon, which remained practically on a **level with the eye** at an elevation of two miles, causing the surface of the earth to appear **concave** instead of convex, and to recede during the rapid ascent, whilst the horizon and the balloon seemed to be stationary."

J. Glaisher, F. R. S., in his work, "Travels in the Air," says: "On looking over the top of the car, the horizon appeared to be on a **level with the eye**, and taking a grand view of the whole visible area beneath, I was struck with its great regularity; all was dwarfed to **one plane**; it seemed too flat, too even, apparently, artificial."

M. Camilla Flammarion testifies: "The earth appeared as one immense plane richly decorated with ever-varied colors; hills and valleys are all passed over without being able to distinguish any undulation in the immense plane."

Hear the Aeronaut, Elliott: "I don't know that I ever hinted heretofore that the aeronaut may well be the most skeptical man about the rotundity of the earth. Philosophy forces the truth upon us; but the view of the earth from the elevation of a balloon is that of an immense terrestrial basin, the deeper part of which is

directly under one's feet. As we ascend the earth beneath us seems to recede—actually sink away—while the horizon gradually and gracefully lifts a diversified slope stretching away farther to a line that, at the highest elevation, seems to close with the sky. Thus upon a clear day the aeronaut feels as if suspended at about an equal distance between the vast blue oceanic concave above, and an equally expanded terrestrial BASIN below.”

Figure 5, presented below, fully illustrates the testimony of these gentlemen, and shows plainly that the view of the earth from a balloon is the direct opposite of what should be seen on a globular surface.

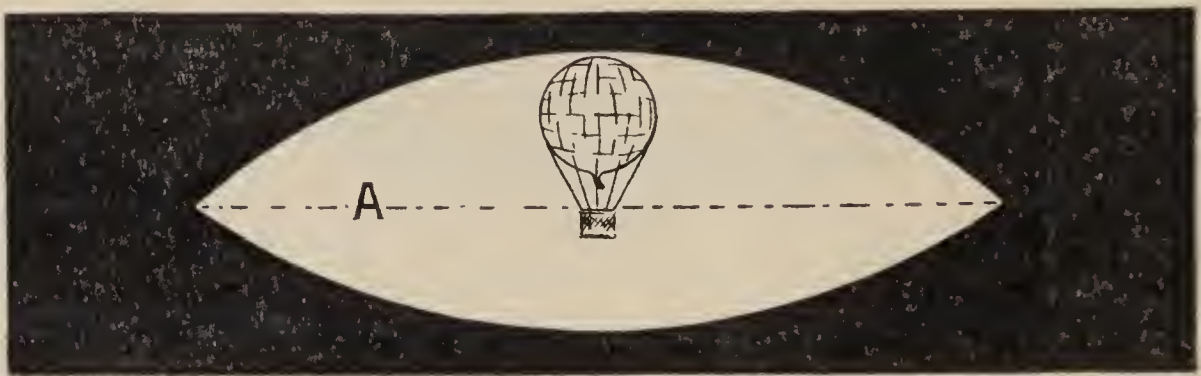


Fig. 5.

Level

I have used the term “level” frequently. Now what is level? What does it mean? For definition I refer you to “Nuttall’s Standard Dictionary,” Ed. 1892, page 409: “Horizontal, even, flat, on the same line of plane.” “Robinson’s New Navigation and Surveying,” says on page 25: “The spirit level, which is usually on the underside of the surveyor’s transit instrument, is used to determine a horizontal line. A horizontal line is at right angles to a vertical. It is a level line.”

We accept these definitions. We ask you to do a little work to illustrate the fact to yourself. Take paper, pencil, a rule and some circular object. Draw a perfect circle. Draw from its center a straight line to and a little above the circumference. This line is the vertical line, and on the earth would represent a line from the center of the globe to the circumference or surface. Now draw a line at right angles to your vertical or perpendicular line and you have a level line, a horizontal line. The level or horizontal line is always at right angles to the perpendicular. Now we are ready to consider the question of

Curvature

The curvature, dip or falling away from the level or horizontal on a globe of 25,000 miles has been computed by "Chambers' Mathematical Tables" as 7.935 inches to the mile multiplied by the square of the distance. In "Mensuration," by T. Baker, C. E., it is given as 7.962 inches, practically 8 inches. For easy computation we use 8 inches as our rule.

So now the "dead level" line from London to Moscow, a distance of 2,590 miles, proves the earth a plane. On a globe of 25,000 miles circumference the dip or curvature in 2,590 miles would be practically 847 miles. The Amazon River falls or dips only 12 feet in 700 miles. That is, if a horizontal line be struck at the given point on the river and continued without curvature the full length of 700 miles it will be then at that point only 12 feet above the surface of the water. The horizontal or level line is tangential to the curved surface of the earth. Therefore, if this level or horizontal line is struck at the surface of the water at one point and carried in a rectilinear course for 700 miles the distance between that line and the surface of the water is then only 12 feet; whereas, on a 25,000-mile globe it should be 326,666 feet, over 61 miles. The Nile flows 1,000 miles with only a foot fall. It should be 127 miles.



Fig. 6.

In Figure 6 the curved line "D" represents the surface of the earth, "A" the perpendicular or vertical line, and "B" the horizontal, level, tangential line, standing at right angles to the vertical "A"; the dotted line "C" represents the fall or dip of the surface in any given distance. So the dip from London to Moscow should be 847 miles instead of showing a dead level. In 1,500 miles from the Carpathians to the Urals the dip should be 284 miles. The dip in 270 square miles would be over 170 feet and **not** "not a single foot." The Amazon should fall 61 miles in a 700-mile run instead of 12 feet. The dip of the La Plata should be 264 times what is. The Nile flows 1,000 miles with only a foot fall. It should be 126 miles fall.

Long Distance Views

Ships and lighthouses have been seen at sea and from sea at distances ranging up to 200 miles. Utterly impossible on a globe, because we cannot and **do** not see either through or around a "hill of water."

The following is extracted from "Music and Morals," by H. R. Hawiess:

"The Antwerp spire is 403 feet high from the foot of the tower; Strasburg measures 468 feet from the level of the sea, but less than 403 feet from the level of the plain. By the clear morning light, from the steeple at Notre Dame at Antwerp, the panorama can hardly be surpassed; 126 steeples may be counted, far and near. Facing northward the Scheldt winds away until it loses itself in a white line, which is none other than the North Sea. By the aid of a telescope ships can be distinguished out on the horizon, and the captains declare they can see the lofty spires at **ONE HUNDRED AND FIFTY MILES** distant; Middelburg at 75 miles, Fleesing 65 miles, are also visible from the steeple; looking towards Holland, we can distinguish Breda and Walladue, each about 54 miles off."

The above spire must be over $2\frac{1}{2}$ miles below the line of sight to an observer 150 miles out at sea, making no allowance for elevations. That allowed for it will be less.

From Chambers' Journal, February, 1895, the following is copied:

"A good many years ago a pilot in the Mauritius reported that he had seen a vessel which turned out to be 200 miles off. This incident caused a good deal of discussion in nautical circles at the time, and, strange to say, a seemingly well authenticated case of the same kind occurred afterwards at Aden. A pilot there announced that he had seen from the heights the Bombay steamer then nearly due. He stated precisely the direction in which he saw her, and added that her head was not then turned toward the port. * * * Two days afterwards the missing steamer entered the port, and it was found on inquiries that at the time mentioned by the pilot she was exactly in the direction and position indicated by him, but **ABOUT TWO HUNDRED MILES AWAY.**" Now, allowing a full mile for the height of the observer above the water line, the vessel would have been **FOUR MILES BELOW THE LINE OF SIGHT.**

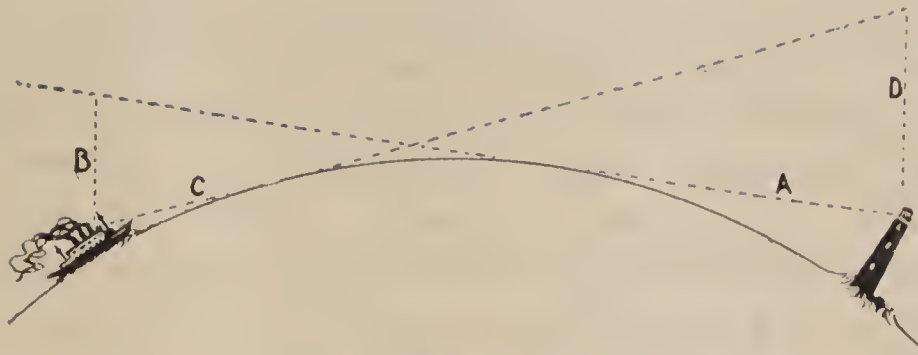


Fig. 7.

Observe carefully diagram, Figure 7. The pilot in the lighthouse looks in a straight line off out to sea, along the line "A." His line of sight ("A") strikes the surface of the water at a distance proportioned to his height above water, and passes straight on. That line is tangential to the surface of the water at the point it strikes the water, and continues so. It does not curve with the curved surface of the water. Therefore, the vessel at "K" would be four miles below the pilot's line of sight if the supposed curvature existed. But since the pilot could not see in a curved line, nor through a hill of water; and since he **did** see the vessel, we conclude this and the many other instances of the like character on record prove positively that no such curvature exists on the ocean and that it is level, horizontal, flat, a plane. Furthermore, the navigator, looking toward the lighthouse along the line "C" would, from a distance of 150 miles as reported, miss the light or a church spire by about three miles. It would be that much too low for his line of sight.

Practical Experiments

Experiments have been made which prove the surface of standing water level, horizontal, flat.

In the County of Cambridge, Eng., there runs a straight canal called the "Old Bedford." I copy the report of an experiment as made by the experimenter himself:

"A boat, with a flagstaff, the top of the flag five feet above the surface of the water, was directed to sail from a place called Welch's Dam (a well-known ferry passage), to another called Welney Bridge. These two points are six statute miles apart. The author, with a good telescope, went into the water; and with the eye about eight inches above the surface, observed the receding boat during the whole period required to sail to Welney Bridge. **The flag and the boat were distinctly visible throughout the whole**

distance. There could be no mistake as to the distance passed over: as the man in charge of the boat was directed to lift one of his oars to the top of the arch the moment he reached the bridge. The experiment commenced about 3 o'clock in the afternoon of a summer's day, and the sun was shining brightly and nearly behind or against the boat during the whole of its passage. Every necessary condition had been fulfilled, and the result was to the last degree definite and satisfactory. The conclusion was unavoidable that the **surface of the water for a length of six miles did not to any appreciable extent decline or curve downwards from the line of sight.** But if the earth is a globe, the surface of the six miles length of water would have been six feet higher in the center than at the two extremities, as shown in diagram (Fig. 8); but as the

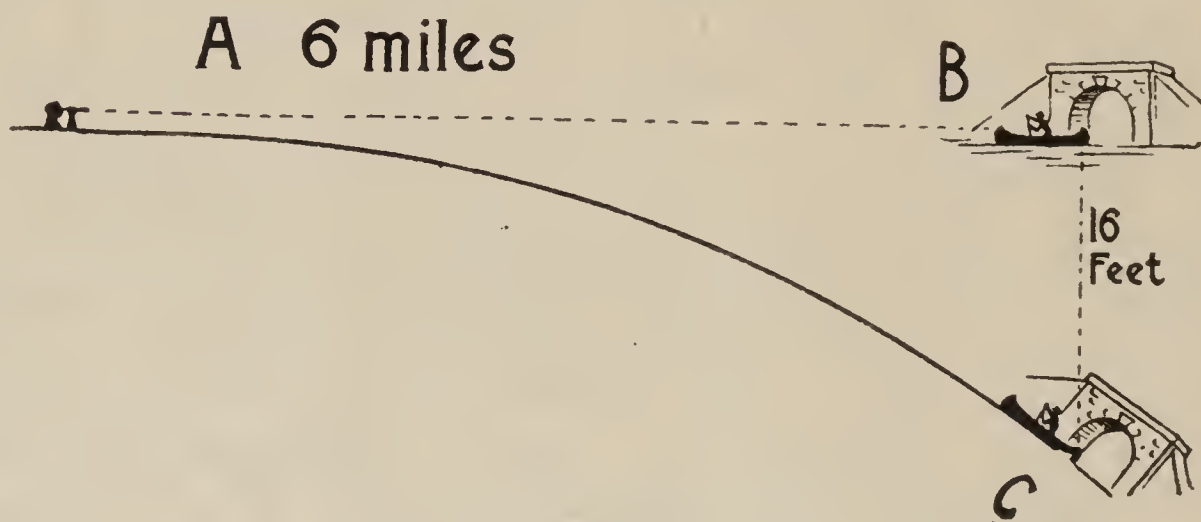


Fig. 8.

telescope was only eight inches above the water, the highest point of the surface would have been at one mile from the place of observation; and below this point the surface of the water at the end of the remaining five miles would have been sixteen feet."

The upper, dotted line in Figure 8 shows the actual fact; the lower, solid line shows the condition which should exist on a globe.

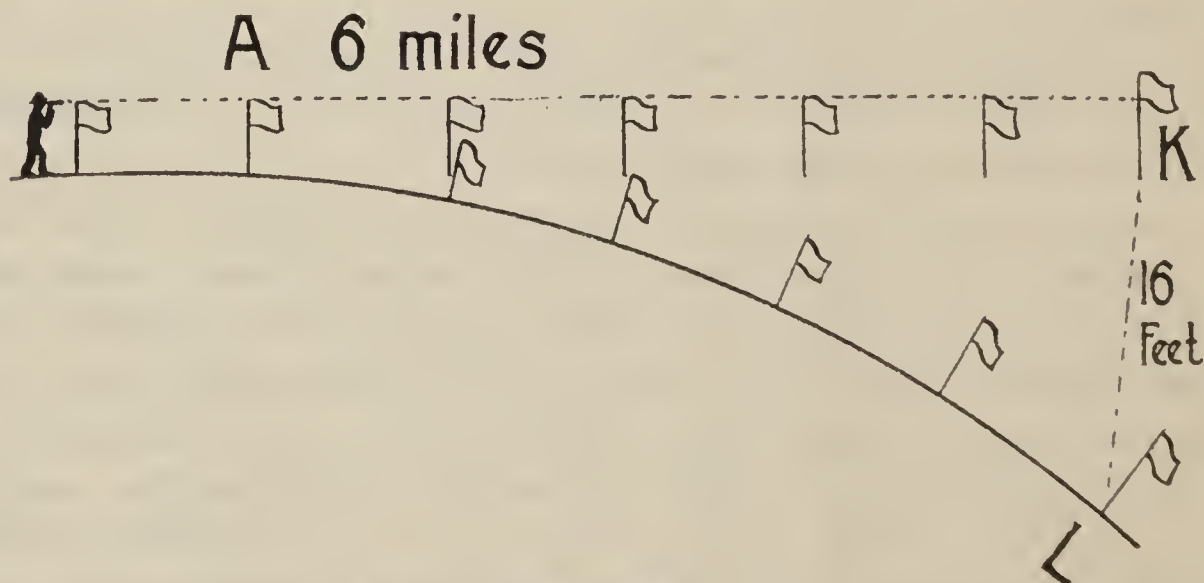


Fig. 9.

A line of flags were placed along the same canal at distances of one mile apart, each flag top five feet high above the surface of the water, the last being eight feet high. The telescope was sighted along the tops of the lower flags. The last and higher flag was plainly and wholly visible above the tops of the others, which showed one straight, level line. But the curvature on a 25,000-mile globe would place the last flag 16 feet below the observers' line of sight, as shown in Figure 9.

Heliograph

Harper's Weekly of October 20, 1894, gives particulars of an experiment made by the Signal Corps of the U. S. Army, with the Glassford flashlight or heliograph. And under the heading of "SPEAKING BY SUNLIGHT," the London Daily Mail, February 2, 1900, refers to the above mentioned experiment in this language:

"Most of the news which has come from Ladysmith lately has been transmitted from the beleagured town to General Buller on the Tugela by means of either the heliograph or flashlight. * * * The operator, by depressing the key, moves the mirror, and so permits the flash of the light to be reflected. A short depression reflects a short flash, and a long depression a longer flash. This enables the Morse alphabet to be used—the ordinary dot and dash system of the telegraphic instrument. The distance which these sunflashes will travel is hardly credible. The record was made by Captain W. A. Glassford, U. S. Army Signalling Corps, who in some experiments in Western America succeeded in opening up and maintaining communication by heliograph between Mount Ellen, Utah, and Mount Uncompahgre, Colorado—a **hundred and eighty-three miles apart**. He used an eight-inch mirror. No other method of signalling can go nearly as far as the heliograph. A two-foot flag signal cannot be seen further than three miles with the naked eye, or double that distance with a telescope."

The point here is the distance signalled: One hundred and eighty-three miles! Any work on Geodesy gives the curvature of the earth as 8 inches for the first mile and after that 8 inches multiplied by the square of the number of miles. Now, what is the dip or curvature in 183 miles? Multiply $183 \times 183 = 33,489 \times 8$ inches = 22,326 feet over four miles. Now, a straight line (a line of sight is always straight, never curved) running at right angles to the perpendicular at the transmitting station, Mt. Uncompahgre (A), would run as a tangent from the line of curvation, so that in 183 miles the curvation would place Mt. Ellen downwards from the

tangent line "A," "B" below the line of "vision" over four miles. "Yet the receiving station on Mt. Ellen was seen on a level with the eye from Mt. Uncompahgre, on a line coincident with the tangent line." Study carefully Figure 10 below, which was copied from Harper's Weekly. The experiment is on record in Washington City. This is another indisputable proof that the earth is not a globe but a plane, since no object could be seen on a globe at so great a distance.

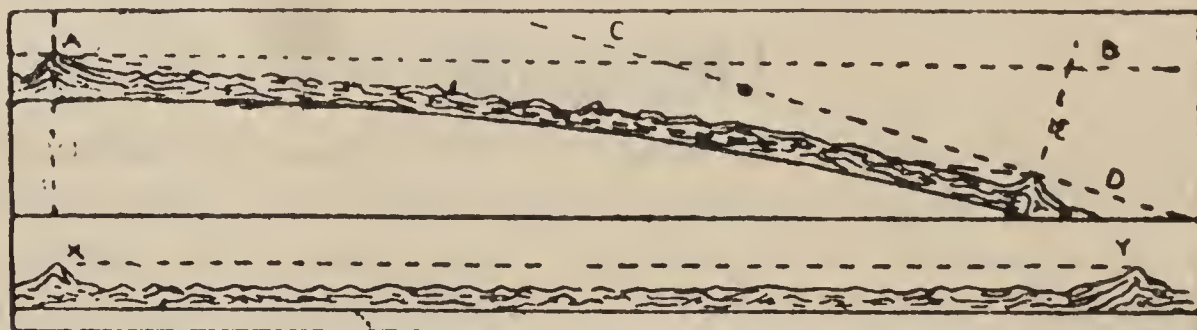


Fig. 10.

Ships' Disappearance

I have now given you the testimony of travelers, scientists and experiments whose operations and observations have covered N. A. & S. A., Europe, Asia, Africa, and even the ocean bed, all of which tends to dispute and disprove the globular theory and establish our contention that the earth is one vast plane. We have shown you, too, by the experiments conducted on the Bedford Canal, Eng., and by the great distances objects are visible at sea and from sea that the ocean, all standing water is level, horizontal, flat. Had we telescopes sufficiently powerful we could see from New York to London. We could see all vessels at high sea between those two ports at any time. There is no "hill of water" to obstruct the view. You ask then why the ships disappear at sea as they do? We are taught that they vanish from sight behind a hill of water. But when they disappear from view to the unaided eye, a powerful telescope will often restore the whole vessel to full view, masts, hull and all. If the vessel has really gone down behind a hill of water so it cannot be seen by the naked eye, it cannot be seen with the telescope, as neither the eye nor telescope can pierce such a hill of water, nor look in a curve over it. But vessels have been many times reseen with the aid of the telescope after having been lost from view to the naked eye.

But I fancy that the theory of refraction will be objected at this point. Yes, we know there is such a thing as refraction of light. But let me quote you on that point from Encyclopedia

Britannica, article "Leveling": "Refraction acting in such an extremely variable and uncertain manner, that if any constant or fixed allowance is made for it in formula or tables it will often lead to a greater error than it was intended to obviate."

But refraction does not occur except when light passes through media of varying densities. In the case of the observer and the ship at sea both are in a medium of unvarying density, the air above the surface of the ocean. There could be no refraction in that case. Look at Figure 11.

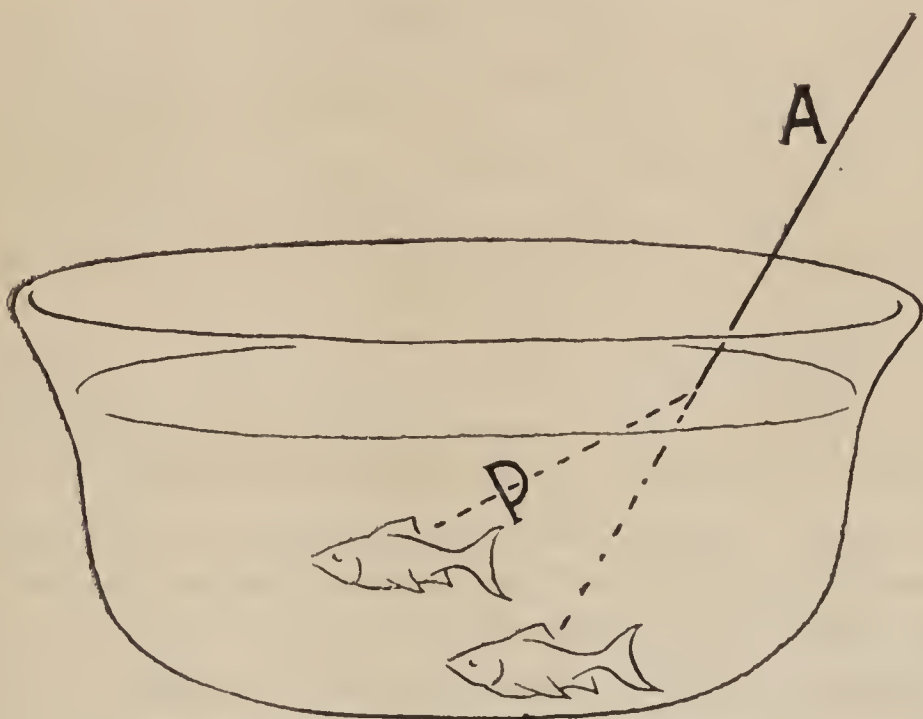


Fig. 11.

Here the line "A" represents the observer's line of sight as he looks down at the fish in the water. But where the ray of light strikes the water, a denser medium than the air, it is refracted or bent out of its normal course, and the image of the fish is elevated and projected forward, so that he appears to be at "P," whereas he really is on the bottom of the vessel. But if the fish were out in the air, or the observer down in the water, there would be no refraction in the case, and the fish would be seen where he really is. Divers are never deceived in the location of objects under water. So as the ship and the observer are both in a medium of uniform density, the air, there is no cause for refraction. If the ship were under water the light passing from it to the observer out in the air would be refracted. But it is not. Neither is the observer under water. Drop a penny into a glass tumbler, pour a little water in and you have the lesson of Figure 11 clearly before you.

You will require an explanation, then, of how ships **do** disappear at sea if its surface is flat, a plane.

Perspective

As an introduction to my answer to this question I here copy an item from the Twice-a-Week Spokesman-Review, of Spokane, Washington, United States of America, October 7, 1910:

“MARS FLIES LIKE BIRD OVER FAIR.

“Aviator Establishes Record for Long Glide Without Power at Spokane.

“J. C. Mars, in his Curtiss biplane, broke one world's record and thrilled a large crowd at the Spokane Interstate Fair on Wednesday. The record was made when he cut off his engine at an altitude of 3,500 feet above sea level, or 1,600 feet above the ground, and glided to the ground, depending solely on his steering abilities to alight in safety.

“THE AIRSHIP AND MAN LOOKED NO LARGER THAN A BIRD as they sailed over the hills miles to the east of Spokane.”

Now here is the record, in a modern newspaper of wide circulation, of a large Curtiss airship diminishing to the dimensions of a bird at an altitude of 1,600 feet above ground and not less than two “miles” distant from the observers. The ship was in midair, bright sunlight, no “hill of water” nor anything else to obstruct the view; and yet she **appeared** reduced to the size of a bird (large or small). And if she had “sailed over the hills (a few) miles (further) to the east of Spokane” she would have disappeared entirely from view, though there was still no “hill of water” nor other obstruction to interfere. I did not witness the flight of this airship. This is the report made by the newspaper. But I **did** witness a balloon ascension from the grounds of the Alaska-Yukon-Pacific Exposition at Seattle, Washington, in the fall of 1909.

As the balloon ascended and receded it appeared to grow smaller and smaller, until in the distance it looked almost a mere speck in the sky. There was nothing between me and the balloon but air and empty space, yet it vanished almost from sight as I gazed.

In Figure 12 here, you have the appearance and disappearance of this balloon nicely illustrated. The circle “A” shows the balloon near the ground at starting. The eye naturally looks straight to the center of the object. So the rays of light, lines “a” and “d,” passing from the outer, larger, dimensions of the balloon through the lens of the eye forms on the retina the image of the entire object, and large because near to the eye. Observe how these rays of light meet and cross at the center of the eye. This is

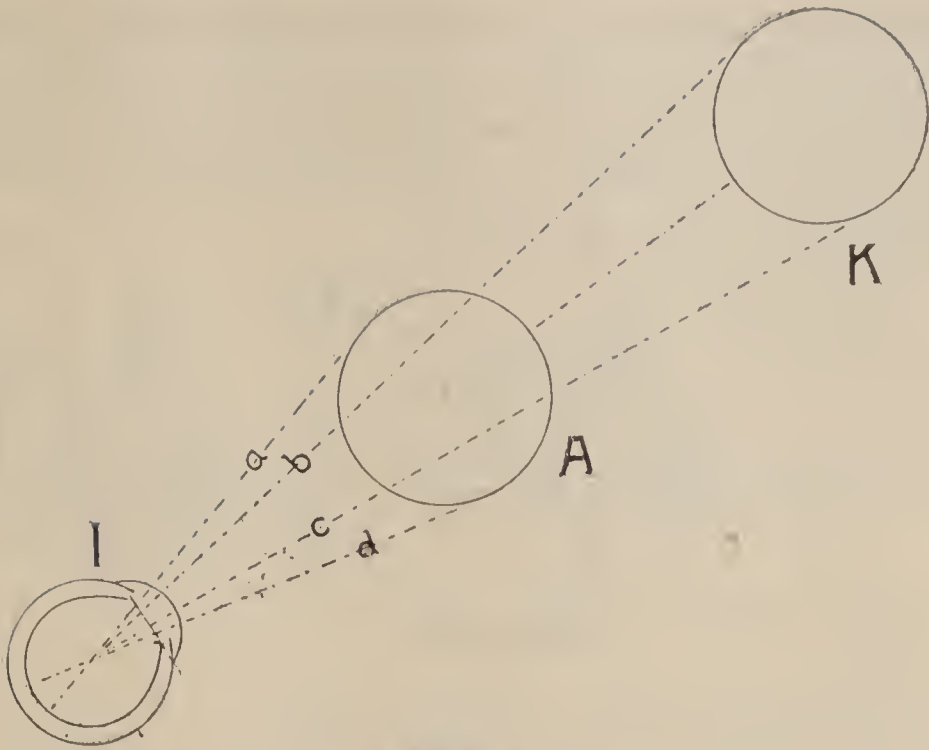


Fig. 12.

a well-known law of optics. The nearer the object the larger the image on the retina, and *vice versa*. Now when the balloon had receded to "K" the lines "b" and "c" passed to the retina at a sharper angle than did the lines "a" and "d" so that a smaller image is formed on the retina. When an object thus recedes until these lines or rays of light fall on the retina at an angle of one-sixtieth or one minute of one degree there is no image formed on the retina at all and what is known in perspective as the "vanishing point" is reached and all objects will disappear from sight there. When this simple law of perspective (which is well known by artists, architects and many others) is clearly understood, it will explain the vanishing of the bird, the balloon, the airship in mid-air, the rising, culminating and setting of the sun, moon and stars, the passing of a cloud and the disappearance of ships at sea. Illustrate for yourself.

Your eye is five feet from the ground, a pole stands twenty feet high. Fasten a cord to the top of the pole, another to the bottom, stand close to the pole and bring the two cords together at the eye. They will cross your line of sight at right angles as you look straight ahead of yourself. Now back away from the pole allowing the two cords to slip through the hand still held up to the eye. Do you see the pole is not shortening, nor getting lower or smaller but the angle made by the cords is constantly changing, becoming less and less, sharper and sharper? If you back away so far that the angle made by those cords (which represents your line of sight or rays of light) is one minute of one degree then the object vanishes from sight. If you view the object at its center,

then the lines marking its outward dimensions must be equidistant from its center and so form the vanishing angle at the same point. But if the object be viewed at one side of the center, these rays of light strike the eye at different angles, and parts of the object will remain visible longer than the rest.

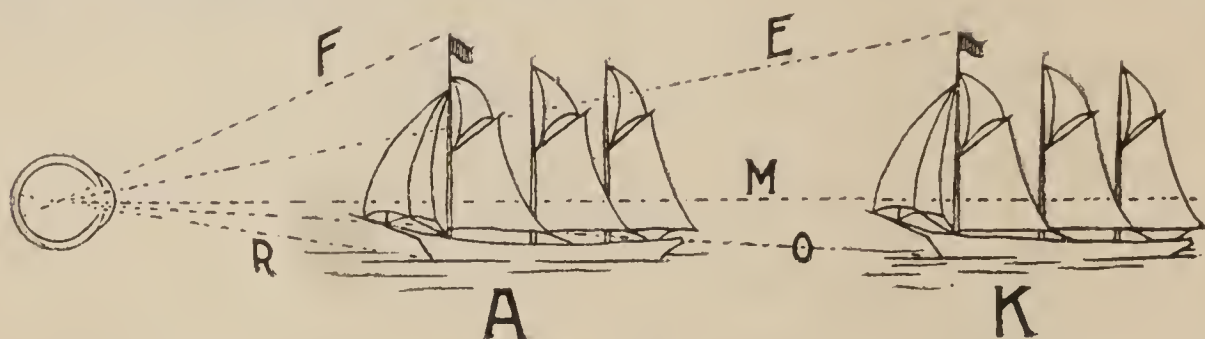


Fig. 13.

Figure 13 represents the vanishing ship. It vanishes **not** because it goes down behind a hill of water on a globe, but in obedience to this law of perspective. Study carefully.

The line "M" is the straight line from the eye to the ship. Let it strike the ship ten feet from the water's edge. Then the line "F" goes to the top of the flag, forty feet above "M," and "R" to the water's edge ten feet below "M." Now it must be plain to any mind, that as the ship recedes, the line "F" must lower into "E" and so form a sharper angle at the eye; "R" rises into "O." It is plain, too, that "O" being only ten feet below "M," must vanish into "M" before "E" which is 40 feet above "M" will vanish into "M." In other words, the hull of the vessel must disappear before the mast and flag, because the rays of light passing from the hull to the eye form the vanishing angle before those from the flag, since those from the hull are nearer to the line of sight. This explains why and how ships disappear at sea. But it does not explain why, when the ship has disappeared to the naked eye behind the hill of water, a good telescope will often bring the whole vessel, hull and all, into full view again. Let our scientists and opponents explain how this is possible on a round surface. It has frequently been so seen. Don't dispute it because you have never done so.

Practical Surveying

In practical surveying and the construction of railways and canals there is no allowance made for the curvature of the earth. Serious difficulties in operation would arise if curvature really existed and no allowance was made for it.

The English Parliament in its session of 1862 made the following standing order on this subject:

“The section shall be drawn to the same **horizontal** scale as the plan, and to a vertical scale of not less than one inch to every hundred feet, and shall show the surface of the ground marked in the plan, the intended level of the proposed work, the height of every embankment, and the depth of every cutting, and a **DATUM HORIZONTAL LINE, which shall be the same throughout the whole length of the work**; or any branch thereof respectively, and shall be referred to some fixed point * * * near either of the termini.” Vacher and Sons, Publishers, London.

A Mr. Hughes, chief officer of the steamer “City of London,” made the following statement:

“I have projected thousands of miles of level railway in South America, and never heard of any allowance for curvature being made. On one occasion I surveyed over one thousand miles of railway which was a perfect straight line all the way.”

The above quotation is from Karl A. Smith, of Leicester, Eng., Author, who adds: “It is well known that in the Argentine Republic and other parts of South America, there are railways thousands of miles long without curve or gradient.”

The traveler and navigator, C. F. Knight, in the “Cruise of the Falcon,” Vol. 2, pp. 1 and 2, says:

“From Tucuman to Cordova we were carried by the Government Railway. There are no curves on the way, the rails being carried in **ONE PERFECTLY STRAIGHT LINE ACROSS THE LEVEL PLAINS.**”

A letter from the Manchester Ship Canal Co., states as follows: “It is customary in railway and canal constructions for all levels to be referred to a datum which is nominally horizontal, and is so shown on all sections. **IT IS NOT THE PRACTICE IN LAYING OUT PUBLIC WORKS TO MAKE ALLOWANCE FOR THE CURVATURE OF THE EARTH.**” Engineer’s Office, Feb. 19, 1892.

Here practice disputes and wholly disproves theory.

Circumnavigation

Geographers tell us that the earth has been circumnavigated many times in an easterly, or westerly direction which proves it to be a globe.

To this proposition I quote you Prof. R. A. Gregory, Fellow Royal Astronomical Society, who says: “Circumnavigation in an easterly or westerly direction does **NOT** prove the earth to be globular. * * * It has been pointed out that circumnavigation would be possible on a flat surface, with the North magnetic pole at its center.” Elementary Physiography, p. 110.

Circumnavigation on a flat surface, keeping everywhere equidistant from the "North magnetic pole at its center," would bring the navigator back to his starting point, according to the theory, barring imperfect practice.

In "Navigation in Theory and Practice," p. 66, by Prof. Evers. L. L. D., we have it stated that: "Plain sailing is sailing a ship, or making the arithmetical calculations for so doing, on the assumption that THE EARTH IS PERFECTLY FLAT." And Mercator's Chart, which represents the earth and seas as one vast but square plane, is the chart most commonly used by navigators today.

Now I should like you to make an imaginary journey round the earth in an easterly or westerly direction; yes, two or three journeys, say travel in a westerly course and on the equator all the time. And to aid you to always keep this equatorial path, suppose we tie a rope to the north pole just long enough to reach from it to the equator, and you are to hold the end of this rope in your right hand. Of course, we can tie the rope to the pole. Is it not a very material thing? Have not two brave American explorers already nailed the Stars and Stripes to the pole? Of course they have! Well, now, you are ready, start! Away you go facing westward, your right hand extended outward toward the north pole. Round you go—there, back to your starting point safe and sound. Now, suppose we have the power and we **do** just snip off the "top of the earth," say down to the Arctic circle, leaving the pole (which is only the end of the earth's axis or axle, on which the earth spins, and which projects out a little) sticking up yet. Your rope will now become slack and settle down to the solid earth. Now pull in your slack, cut off the superfluous length and make another trip. There—done! Now cut off another slice of earth, say down to the Tropic of Cancer, take up your slack in the rope again and make another trip—that was well done! Now, please cut off the rest of our globe down to the equator, take up your slack in the rope and make one more, a last journey in this experimenting. What have you done? You have simply gone round a circle, with yourself picketed to the central stake or pole, just as the cow-boy pickets out his broncho. In each journey from the first to last your right hand pointed to the north, your left to the south, your face was to the west and your back to the east. If all the land area of our earth were spread abroad on this flat, circular surface, and you made your journeys by water you would certainly have circumnavigated the earth, never turning backward on your course, and arriving at your starting point again.

But we do not intend to argue that all the land surface is

spread abroad within this circle surrounding the north magnetic pole. We will discuss its position under another head.

Earth at Rest

We have stated that the earth is at rest. If we have "made good" on our gravity question, we certainly have won that point. But experiments have been made to discover the truth of this matter.

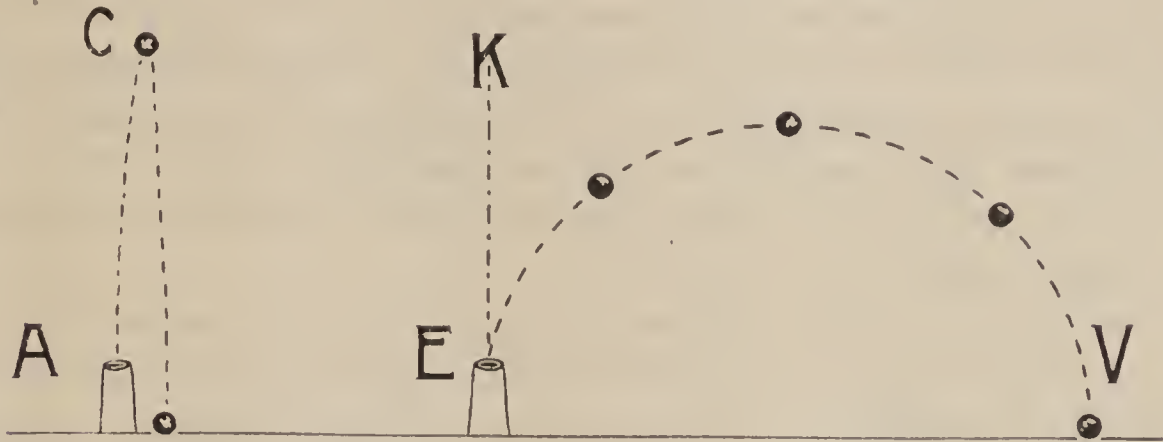


Fig. 14.

A very investigative gentlemen, who wrote under the name "Parallax," made and reports the experiment illustrated in Figure 14 above.

A strong cast-iron cannon was firmly fixed in the sand as shown in the cut, carefully plumbed in a true vertical position, and fired into the air. The ball passed from the cannon's mouth "A" on to "C" and fell back to within 8 inches of the cannon, being in the air only 30 seconds. The experiment has been repeated frequently, and in several instances the ball fell back on the cannon's mouth, and **never** farther away from it than two feet, while the average time the ball was in the air was 28 seconds. This information is found on p. 67, *Zetetic Astronomy*, by Parallax.

Now, if the earth is in motion from west to east at the rate of seventeen miles per minute, equatorial speed, and the experiment was made on the equator, while the ball was absent in the air, the cannon and earth's surface must have traveled forward at least 8 miles in that time, so the ball should have fallen that distance from the cannon instead of near to it or on its mouth. The result undoubtedly proves that the earth directly under the ball was absolutely stationary during the 30 seconds the ball was absent in the air. Instead of passing in the direction of "A" to "C" and back to a few inches from the cannon, the ball should have started from "E" toward "K," but as the cannon moved forward it would have passed over the curved line and have fallen at "V" eight miles

behind the cannon. In addition to this we have learned that astronomers are wholly unable to obtain any parallax in the fixed stars, although the earth's orbit is said to be 186,000,000 miles. Astronomers acknowledge this. See Webster on parallax.

If the atmosphere above the earth for a distance of 50 to 250 miles is in motion **with** and **in** the same direction as the earth, all objects floating in the air would move forward from west to east also. But clouds move leisurely about in **all** directions; several different strata of clouds or air are known to move in opposition to this motion and in various directions at one and the same time. Balloons move in **any** direction. We see, hear, feel no motion. See propositions fifth and seventh under Gravity.

Tycho Brahe, the distinguished Danish astronomer who died soon after Copernicus' time, said:

"The heavy mass of the earth, so little fit for motion in every respect, could not be displaced, in the manner they propose, and moved in three different ways like the celestial bodies, without a shock to the known principles of physics, even if they could set aside the express testimony of Scripture." See "Is the World a Globe?" p. 33, by Carl A Smith. And here I copy also the following from "The Earth a Globe," by David Nield: "The reason why we are not 'whirled off' the earth is because we form part and parcel of the globe, as we do of the railway train 'whirling' at the rate of sixty miles per hour. It is when the train suddenly stops that we are shaken severely, or likely to be 'whirled off,' not when in motion. It is so with the earth."

Did the earth "suddenly stop" when Joshua commanded the sun to stand still? Mr. Nield very cleverly discusses this question—not one bit.

And before introducing my next topic I wish to quote you this statement from the pen of Dr. Woodhouse, once Professor of Astronomy at Cambridge, from the same work cited above, p. 58:

"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 **evidences of their senses and Scripture, and facts in their favor**, which we have not, it is not without a show of reason that they maintain the superiority of their system. * * * However perfect our theory may appear in our own estimation, and however simply and satisfactorily the Newtonian hypothesis may seem to us to account for all the celestial phenomena, yet we are compelled to admit the astounding truth, that, if our premises be disputed, and our facts challenged, **the whole range of astronomy does not contain one proof of its own accuracy.**"

Well, we Zetetics dispute their premises and challenge their **facts**.

The Sun

Since we dispute that there is any axial motion of the earth to cause day and night it devolves upon us to explain that phenomena.

Prof. J. Norman Lockyer, in his *Astronomy*, says: "You have to **take it as proved** that the earth moves. Day and night are **the best proofs** that the earth does really spin. Without this spinning there could be no day and night, so that the regular succession of day and night is caused by this spinning. Hence the appearances connected with the rising and setting of the sun **may be due, either to our earth being AT REST** and the sun and stars traveling round it, **or the earth itself turning round**, while the sun and stars are at rest."

If, therefore, "it may be due to **either**," why do not our scientists try to find out which of the **either** it really **is** and not merely **assume** the spinning when there are so many proofs against it? Now, if you should return from town some day, and be sitting in your parlor at night reading your paper, you happen to look out at your east window and see a man with a lantern, presently see him through the west window, and by and by the east window again—west and east alternately now; and you should say to the good wife: "Why, this house is turning round and round; I **know** it is. Why there is that man standing there with the lantern, and I see him through the east window and then the west, east and west all the time. **I know** the house is spinning." Would not the wife say: "Why, Grant, I thought that was a **dry** town you visited today! Where did you get your booze? Don't you think the man **might** be carrying the lantern round and round the house? You better go out and see." Would not the wife's be the more sober and sane position to take?

Now, we affirm that the common law of perspective, previously explained, accounts for the disappearance of ships at sea, a bird, a balloon and an airship in mid-air, a passing cloud, the rising, culminating and setting, or disappearing of the sun, moon and stars, as they move over and above the earth. The sun is a small body about 30 miles in diameter and about 3,000 miles above the earth. So its light is limited. It cannot penetrate to millions of miles distance. As it recedes from us to the westward, the angle of its rays finally reach the vanishing angle, those from the lower part of the sun first, just as those from the hull of a ship, so that the lower part of the sun disappears first, the rest gradually until it is all gone. Diagram No. 15 will illustrate our ideas of the cause of day and night and the change of seasons.

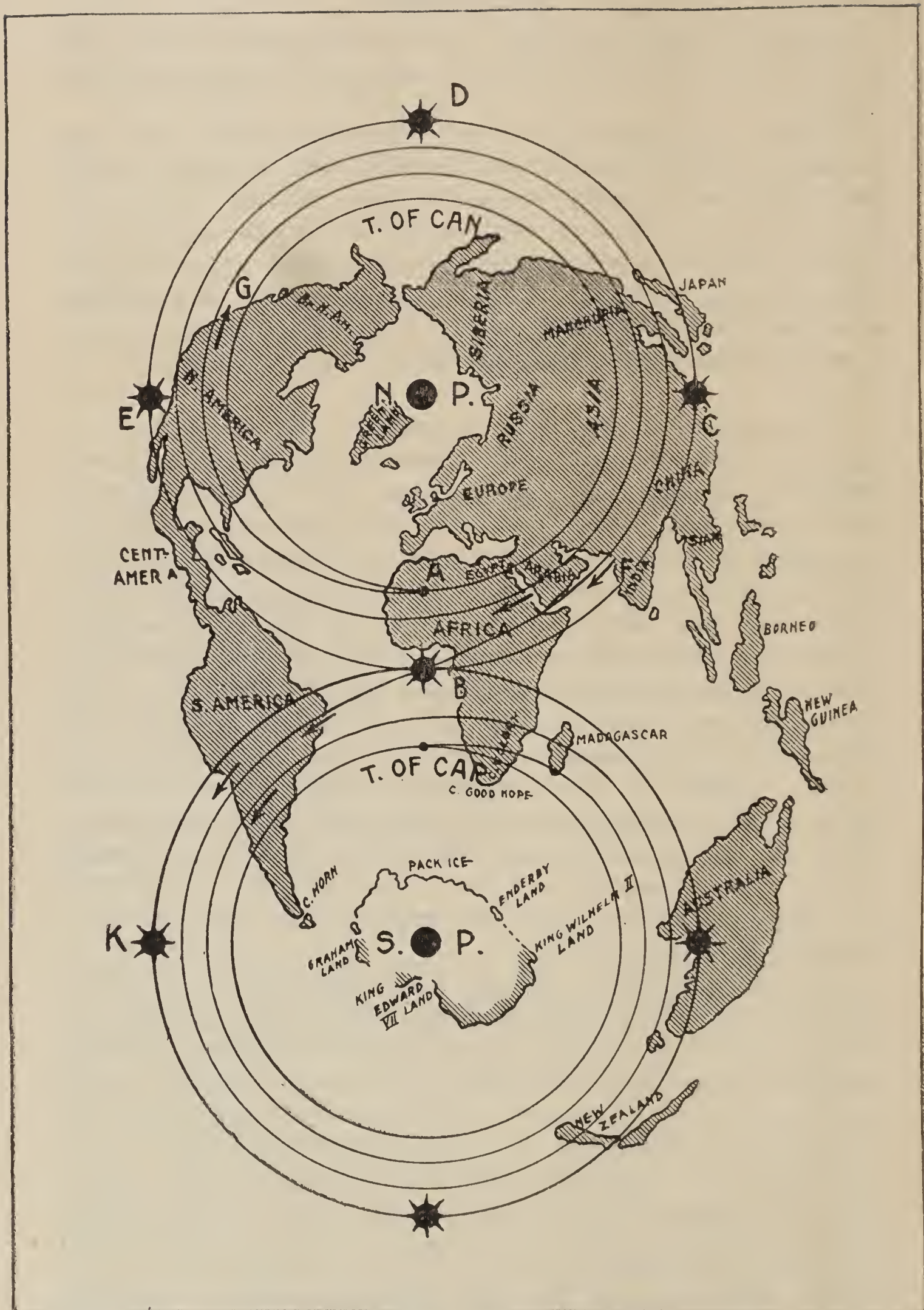


Fig. 15.

Now, we believe that the sun moves over this earth in two general circular halves, answering to the "hemispheres;" six months of the year he moves over the northern half or hemisphere, and the other half or hemisphere during the remaining six months. This accounts for the six months day and six months night at the "poles." also the change of seasons. When the sun is in its northern circuit we have our spring and summer, while the southern hemisphere has its fall and winter, and vice versa. Study Figure 15.

Suppose we take the sun about June 21st, when it has reached its greatest northern declination and is over or on the Tropic of Cancer, say at "A." He makes one complete and perfect circle on the tropic, and then begins to enlarge his circuit outwardly and southward toward the larger circle "B" which answers to the equator. Follow his course, as marked by the arrows, round the ever-increasing circuit, each day moving about 18 miles farther south until on September 21st he reaches the equator at "B." Here he again makes a complete circle for one day and instead of continuing around the north center or north pole, he crosses over into the southern circle toward "K" and on round the circle. Then begins a narrowing of the circuit toward the south center, and continues until the Tropic of Capricorn is reached when the **turn** back outward and northward is made and he moves northward until the equator is again reached when he passes into the north circuit. We also believe that while the sun is in the northern hemisphere an observer at the N. P. could see it for a full six months at a time, a day so long. The south pole would then have night.

But why does the sun rise and set to us who live a distance from the pole? Suppose we place a man at the center of two circles, the one 10 feet, the other 20 feet in diameter, as say "A" and "B," Figure 15. Now, with a 10-foot rod he could reach any point on the outer circle, say to "B," "C," "D" and "E" on the circle "F." Now move him out to "A" on the circle "G" and with his rod he might be able to reach to "C" and "E" and possibly beyond "B" on the circle "F," but he could not reach to "D" as he did from the center at N. P. His rod is too short. So with sunlight. Its rays, like the rod, are too short to reach from "B" to "D," but they may reach from "B" to "C" and "E" and across the circle through "A," N. P., on to the circle "G." To those living at "A" it is sunrise when the sun gets to "C;" noon when he is at "B," sunset when he reaches "E" and night until he gets back to "C." So the farther north the sun moves, or, in other words, the nearer he moves toward the N. P. the longer will be the day because he is getting where his rays will reach more nearly all over

the circle like the man with the rod. So of the southern hemisphere. Therefore, we believe that when the sun, as he moves majestically round his circuit, comes near enough for his limited light to reach us we have sunrise, daylight and daytime until he passes so far away from us again that his rays will no longer reach us when we have sunset, darkness, night. Connect this with the gravity question and you will readily concede the impossibility of the earth spinning to cause day and night, and yield to our claim that it is the sun which moves, and not the earth. For if there is no gravity in operation, then the earth is at rest, it does not spin nor rotate in an orbit. The earth and sea form one vast outstretched plane, while the sun and other heavenly bodies circle above it. The earth floats in or on the waters of the mighty deep, partly submerged, just as a log or an iceberg floats in water. Lakes and inland seas, such as the Mediterranean, are the hollows or depressions in the land portion filled with water; the vast oceans being greater hollows or depressions also filled with water, the earthen bed of the ocean connecting the continents in the same manner as the bed of the Mediterranean connects Europe and Africa.

“But the sun **rises** and **sets**,” you object.

This is only apparent, and in perfect harmony with the law of perspective and the action of other bodies in air. Here I insert Figure 16, which illustrates my point.

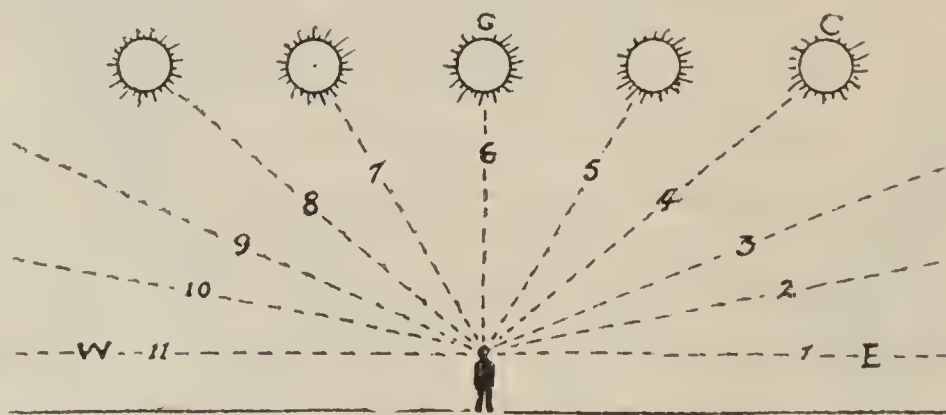


Fig. 16.

Let the heavy line below represent the earth's plane surface or our horizon. Place an observer at "A" in the center. The heavy line above represents the course of the sun as he moves from east to west in one common level above the earth. Now if he is equidistant from the earth all the time, the plane of his circuit is parallel to the earth's plane surface. And all parallel lines seem to meet when continued to a great distance from the observer. Stand in the center between the rails of a long line of straight railroad track. The rails seem to meet way ahead of you. The front end

of an outgoing train seems lower than the rear end; of an incoming train the front appears higher and the rear lower. It is so shown on pictures of moving trains. That part of a long building farthest from the camera when photographed is shown lower in the picture, though the building is the same height throughout. Watch your newspapers. You will see pictures in them which illustrates this point very clearly. A railroad time card will help you, too. This is because the rays of light strike the lense of the camera at different angles. So with the observer on looking at the sun. The farther away it is the lower it appears to be. "A" looks out over the dotted line 1 and sees the sun low on the horizon just rising at "E," although he is as high above the earth at "E" as he is when he reaches "O" or "G." Now, as the sun moves toward the observer he sees it along the line 2 and then 3 at "O," then line 4 and 5 till finally on line 6 he is in the zenith at "G." Here his rays strike the plane surface of the earth at right angles or 90 degrees. Moving on westward he is seen on the angles shown by lines 7, 8, 9, 10 apparently getting lower and lower until he is lost, vanishes, sets in the west at "W." Watch a bird or balloon and it appears the same. Clouds, which off a few miles appear to be resting right down on the earth, are just as high above the earth there as they are right above your head. So this is the way the sun rises and sets. The sun seems to come down to the level of the eye at rising or setting, though it really does not do so. So the surface of the earth **seems** to **come up** to the level of the eye of an aeronaut, although it really never does.

Darkness Impossible on a Globe

This is a condition commonly overlooked. The light from the sun radiates in **all** directions from itself. Examine Figure 17. Its rays are not concentrated along the lines "A" to "K" from "S"

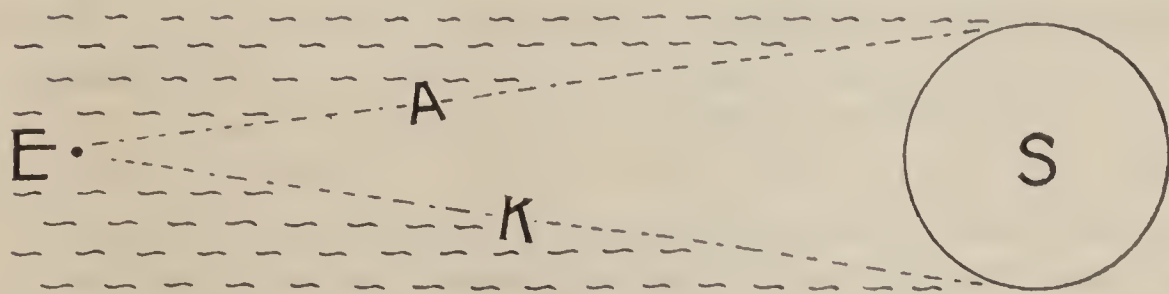


Fig. 17.

to "E," so that only one side of the earth would get the light; but the earth is such a speck compared to a sun 1,300,000 times

larger than itself that the light would sweep entirely round it so it would amount to no more to the sun than a pinhead in the rays of a three-inch electric bulb. Would not the light after it passes the earth react, rebound, entirely envelope the side opposite the sun? It would. The sun would be hidden from view to a person just as it is when you sit in the shade of your house and read the news. The light passes your house and comes back, or it circles round it. You never need to go out into the direct rays of the sun to be able to read your paper. Its all round you and would be so on the earth. Night would be no darker than the shade of our houses at noonday, if the earth and sun are the size assumed by our scientists.

Let us make some figures to get a comparison. The earth is said to be 8,000 miles in diameter and the sun 866,000 miles. Then the sun's diameter is 108 times that of the earth. Now let us represent our earth by a globe 1 inch in diameter, to be proportional the sun must be represented by a globe 108 inches in diameter, or 9 feet. I could hold the earth globe in my hand, but the sun globe is too large, I can't hold it. Let us reduce each one-half. Now I have a 1-2 inch and a 4 foot 6 inch globe. Still too large. Cut again: 1-4 inch earth, 2 foot 3 inch sun. Very awkward! Once more: 1-8 inch earth, 1 foot 1 1-2 inch sun. Now 1-16 inch earth, 6 3-4 inch sun, and 1-32 inch earth and 3 3-8 inch sun. There. I have them reduced to the comparative sizes of a pinhead and a teacup. I can now handle them in my hand or illustrate them on paper. Now let's get them together in the same ratio.

The sun is 93 million miles off, so "they say." Let us take the earth's diameter as a measuring rod. Divide 93,000,000 by 8,000 we have 11,625. So their distance apart is as 1 to 11.625. Then an inch earth globe must be compared to a 9 foot sun globe placed 11,625 inches apart. Let us make it even 12,000 inches, or 1,000 feet just for easy consideration. But my two globes that size are not only too large but too far apart to consider well together. It will take too big a building to exhibit or too big a book to illustrate them in. So let us cut it in two five times as we did the sizes and we have our 1-32 inch earth globe and our 3 3-8 inch sun globe to be placed 31 feet 3 inches apart. Place a pinhead 31 feet from a 3 3-8 inch ball of strong light and it can make no shadow at all. Place an 8,000 mile earth 93,000,000 miles from an 866,000 mile sun and it cannot make the slightest shadow on a 2,160 mile moon 240,000 miles off to eclipse its face. Please look again at Figure 17.

Sun's Distance

The great astronomer, R. A. Proctor, in his work on "The Sun," says: "The determination of the sun's distance is not only an important problem of general astronomy, but it may be regarded as the very **FOUNDATION** of all our researches." Well, now, what has its distance been **determined** to be? From "Theoretical Astronomy" has been gathered the following important information:

"Copernicus computed the distance of the sun from us to be 3,391,200 miles; Kepler reckoned it to be 12,376,800 miles; Ricciola 27,360,000; Newton said it did not matter whether we reckoned it 28 or 54 millions, for he said that **either** would do well. Benjamin Martin, in his Introduction to the Newtonian Philosophy * * *, says that its distance is between 81 and 82 million miles; * * * Thomas Dilworth says 93,726,900 miles; Mr. Hind has stated positively that it is 95,298,260; * * * Gillis and Gould say that it is more than 96,000,000, and Mayer more than 104,000,000."

The author of the "Story of the Heavens," p. 28, Sir Robert Ball, says: "The **actual** distance of the sun from the earth is **about** 92,700,000 miles." Its "**actual**" distance was also cleverly guessed to be all the way from "about" 88 to 109 millions of miles in 1869, at the time of the transit of Venus over the face of the sun, when observations were made from 73 stations in Europe, Asia and America. These results have been obtained by observing "the sun's horizontal parallax, that is, the angle under which the semi-diameter of the earth **IS SEEN FROM THE SUN.**" Draper's "History of the Conflict Between Religion and Science," pp. 173, 174. But goodness me! Who knows how the earth looks "as seen from the sun," or what its parallax would be from there. Here these astronomical leaders record a difference of 3,000,000 to 109,000,000 miles; just 105,000,000 miles variation; yet David Nield chastises Zetetics severely in his "Globe," p. 40, for not being any more accurate than to say the distance is two or three thousand miles off." Yet **they** say "the actual distance is about 3,000,000 to 109,000,000 miles." Astonishing accuracy!

Here is a simple method to measure the height of a steeple, a tall tree or a man. Our school children have this problem in their eighth grade work in school.

The student is required to find the height of this tree without climbing to measure it. He is told that at a distance of 122 feet from the root of that tree a line drawn straight to its top stands

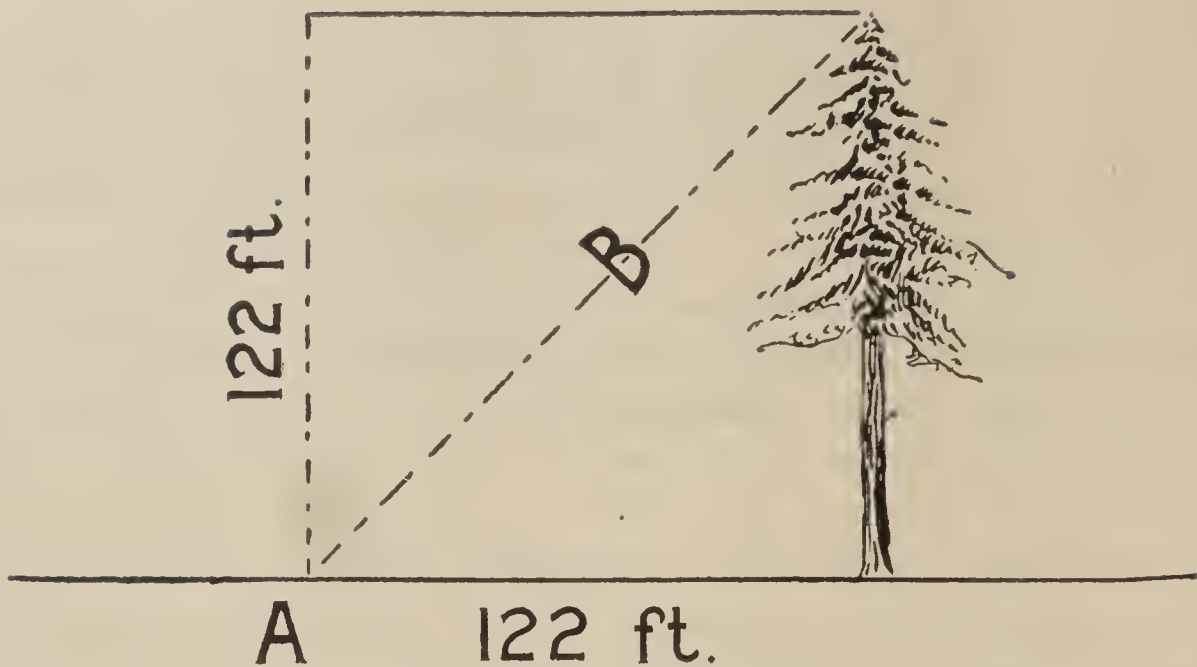


Fig. 18.

at a 45 degree angle, what is the height? It's a very simple problem. He has learned before in his study of figures that a 45 degree angle line is a diagonal to a perfect square, and joins its opposite corners. Therefore, if the line "B" is a 45 degree angle and joins the top of the tree to a point 122 feet from its root, it joins the two opposite corners of a square. All sides of a square are equal. The straight line from the root of the tree to point "A" 122 feet away is one side of the square, therefore if all sides are equal they are all 122 feet long. As the height of the tree forms one side of the square it is therefore 122 feet high.

Now use this simple method, which is infallible, to determine the sun's distance from the earth.

About the 21st of March and the 21st of September each year the sun is vertical, straight up, overhead at the equator. An observer on the equator must look straight up to see the center of the sun at that time. Now if, at that time, a point can be found either north or south of the equator where an observer sees the sun at an angle of 45 degrees from his station this rule of the half square will determine the distance. We are to use the parallax which shows us the sun from the earth, and not the one which shows us the earth from the sun. That parallax would be a little difficult to take. If I see an object from one point and you see it from another distant point, it **must be right where our two lines of sight meet and cross.** Now the sun is seen at an angle of 45 degrees from the perpendicular from a point 45 degrees north or south of the equator when it is vertical to the equator. Then the distance from the equator to the 45th degree north latitude is equal to the height of the sun above the earth. Geographers give us that distance as practically 70

miles to a degree. We accept this as sufficiently accurate for all practical purposes. So $70 \times 45 = 3,150$ miles the height of the sun and the distance from the equator to the 45th degree north latitude. You can take the observation yourself at your own home, and **know** for yourself that these conditions are true.

The sun travels northward or southward 18 miles per day. If you live north of the 45th parallel, divide the distance from it in miles to your home by 18. That will give you the number of days it will take the sun to travel that distance. If you live five days' travel north of the 45th parallel and the sun is moving northward, wait five days after the sun is on the equator to make your observation. If he is going southward in the fall, make your observation five days before he reaches the equator. A "half-pitch" house roof is a 45 degree angle and you can take your observation over that. Or set up a pole and when the shadow falls at noon exactly the length of the pole's height you have a 45 degree angle. Or take a carpenter's square, place the long arm of it on a **level** surface with the short arm standing vertically and toward the sun. The short arm of the square is 16 inches long; therefore, when the point of its shadow strikes the long arm of the square 16 inches from the end you have the 45 degree angle line pointing to the sun.

But it will be objected here that the earth is a globe, its surface curved, therefore this 45 degree angle of observation is a curved angle; that the perpendicular at the equator is not parallel to the perpendicular 45 degrees north of that point, because these two perpendiculars meet at the "center of the globe, the center of gravity."

Under my argument on gravity I showed you that there is no gravity. Please review it. Therefore, the earth is at rest. Her surface, land and water, is a plane. I gave you the physical evidences of planeness also. And I challenge any one to demonstrate that perpendicular lines are **not** parallel. It never has been done. All perpendicular lines **are** parallel. Therefore, our method of measurement is correct.

Sun's Diameter

Now, we think we have proven clearly that the sun is near to the earth, not more than 3,150 miles distant, instead of 93,000,000 miles as the astronomers postulate. Therefore, it follows without argument that it is a small body. But how small, how large? Astronomers tell us it measures one-half of one degree in diameter. Very well. One degree is 1-360th part of a circle. If the sun is

3,150 miles distant, as I have shown. then let that distance be the radius of a circle and the sun stand on the circumference of that circle. If 3,150 miles is the radius then twice that, or 6,300 miles, is the diameter, which multiplied by 3.1416 equals 19,792.08 miles the circumference of the circle. Now one degree of this equals 1-360th part, or 54.97 miles. Call it 55, and if the sun is 1-2 deg. he is 27 1-2 miles in diameter, not 866,000.

There is another method which has been used to determine the fact in this case. If you should enter a large tent or building you would know the very moment any part of the roof was directly over your head. If you passed through it you would know the moment you passed from under any part of the roof. As long as you were under the roof you would know that some part of it was vertical to your position. And in walking about under the roof you would learn that the size of the tent was equal to the area of all its vertical parts. The area of the space covered by the tent could only be equal to the area of all its vertical parts. Before you entered the tent from the south side you saw the roof from an angle less than the vertical, and north of you, and when you left it on the north side you saw the roof at an angle less than the vertical and south of you.

Dr. Robertson of England has written a book showing that, "The real size of the sun may be found in the area of vertical solar rays."

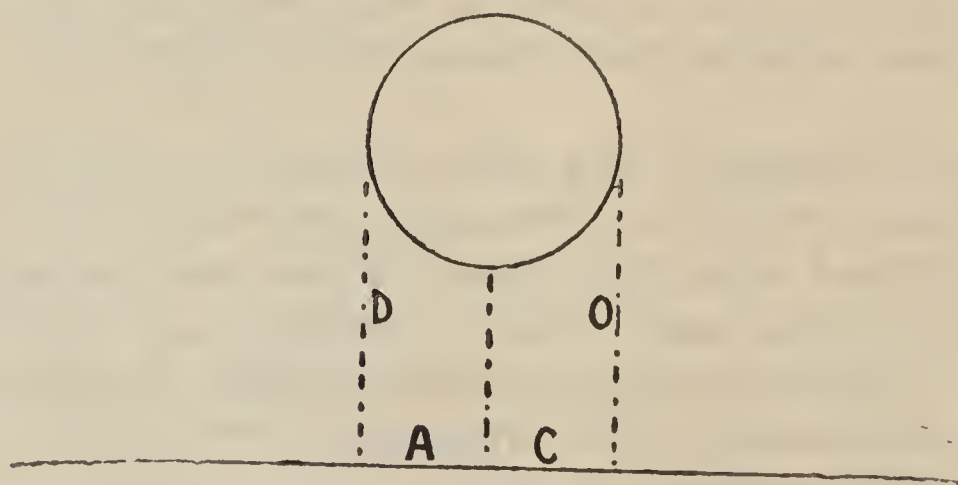


Fig. 19.

Here is a diagram which seems to illustrate his idea exactly and cannot be disputed. The base line "A" "C" represents the plane surface of the earth. The lines "O" and "D" are the outer vertical rays of the sun and the central line the central rays. No ray of light outside of "O" and "D" could be vertical to the earth; it must pass obliquely to it. No observer outside of "O" and "D" could see the sun directly overhead. Those south of the sun must see him face northward, backs south. Those north must view him

face southward, backs north. A newspaper correspondent on board a British warship going south to the Boer war wrote: "On that Sunday we passed to the south of the sun. At noon on that day the ship was in Latitude 14 deg. 30 min. north, the sun in Latitude 14 deg. 28 min. Henceforth we were to look at him with our backs to the south instead of north." Here at noon one day the ship is two minutes north of the sun, on the next day the ship has passed to the south of him. His diameter then cannot be 866,000 miles, but as Dr. Robertson clearly shows is not over 36 miles.

"The ancient geographers found themselves considerably embarrassed in their attempt to fix the northern tropic, for though they took every proper method, namely, to observe the most northerly place whose objects had no shadow on a certain day—yet they found that on the same day no shadow was cast for a space of no less than 300 stadia." The Roman stadium was 630.93 feet, 300 stadia would equal 189,279 feet, or 35.84 miles. This does not agree with my calculation on the circle plan, but the discrepancy may be due to inaccuracy of measurement in either or both cases.

"The Nautical Almanac" gives the apparent diameter of the sun measured on the sphere of the heavens March 22nd, or September 23rd, as 32 min. 2 sec., "and 32 min. of arc on the sphere of the heavens is equal to 32 geographical miles on the surface of the earth," practically 36 miles.

Read this proposition over again and you must admit that the diameter of the sun is plainly demonstrated by the area of its vertical rays. I say again, the discrepancies in the results obtained by these two methods may be due to inaccuracies of measurement; but the differences are not so great as those of the mathematical scientists who have placed the sun's distance from 4,000,000 to 109,000,000 miles.

The Moon

We have now to consider the moon. We believe that her size and distance from the earth are approximately the same as that of the sun; and that she moves in the same general course after the sun, her speed being a little less than that of the sun; consequently the sun overtakes and passes the moon once in about every 29 days. We believe our senses do not deceive us, and that her **apparent** size and motions are real. Science (?), not nature, has deceived us.

Here I make you a quotation from "Zetetic Cosmogony," p. 71, by "Rectangle," whom I believe to be Dr. Rowbotham, of England:

“Both the distance and size of most of the objects in the heavens may be measured with a high degree of accuracy. It only requires to be known that the object is vertical to a certain part of the world at a certain time, when the observer takes a position—which could be ascertained by previous experiment—where the angular distance of the object is 45 degrees. A base line measured from that position to the point at which the object was vertical at the moment of observation, will be the same length as the distance of the object from the earth’s surface.

“Size, except with cases of very small stars, may be as easily determined. Let the instrument with which the angular distance was taken be graduated to degrees, minutes and seconds, the minutes and seconds corresponding to miles and sixtieths of miles on the earth’s surface.

“Having carefully adjusted the instrument, bring the image of the lower limb of the object to be measured down to the horizon, and note the reading on the instrument. Now bring the upper limb in contact with the horizon, and the difference of the reading will be the diameter of the object. It would, of course, require a very finely adjusted instrument, and one graduated to say the one-hundredth part of a second to measure some of the smaller stars.

“Instead of the diameter of the moon being 2,160 miles, as we are informed by the men of science of today, it is, by the above process, found to be about 32 nautical miles in diameter.”

Further comment or argument on this point is useless. See Sun’s Distance.

Moon Light

We have been taught “from our youth up” that the “moon shines with a borrowed light,” that she reflects merely the rays of the sun.

A reflector simply throws off from its own surface whatever has been forced against it. A boy throws his ball against a smooth wall. It “bounces” away in an opposite direction on exactly the same angle at which it struck the wall. The wall is a reflector. If sweet cider is thrown onto the reflector sweet cider will be thrown off. If buttermilk is thrown on, buttermilk will be thrown off. If hot water is thrown on, cold water will not be thrown off. Now, since the rays of the sun contain heat, if reflected by the moon would still contain heat. But Noad’s “Lectures on Chemistry” declares that: “The light of the moon, though concentrated by the most powerful burning glass, is incapable of raising the temperature of the most delicate thermometer.” And “The Lancet” informs

us: "The moon's rays when concentrated, actually **reduce** the temperature upon a thermometer more than 8 degrees." Now, since sunlight is hot and moonlight is cold, we know that sunlight is not reflected from the sun or it would retain its heat.

Again I quote from "Zetetic Cosmogony," p. 72:

"If the moon be observed from last quarter to new, it will be found that for a portion of one day, immediately before new moon, the dark part of the moon is turned towards the sun; and at new moon the sun is still to the eastward of the moon, which is illuminated on its western surface.

"On the 10th of August, 1898, at Durban, Natal, the moon rose at 1:07 a. m., and by sunrise (6:35) was high in the heavens, showing about half on her eastern surface. On the 15th, moon rose 4:58 a. m. (sunrise 6:30), with a very small portion of eastern limb illuminated, but the whole circle was distinctly visible. On the 16th moon rose 5:32 a. m. (sunrise 6:29), with the dark part towards the sun. On the 17th, moon rose 6:04 a. m. (sunrise 6:28), 24 minutes before the sun. New moon same day 6:35 p. m., the moon's illuminated western limb being turned away from the sun, which was to the eastward. On the 18th, moon rose 6:36 a. m. (sunrise 6:27), and the sun was thus ahead of the moon and on the illuminated side, having passed her between the hours of sunset on the 17th, and sunrise on the 18th. The almanac shows that at every new moon, the sun is to the east of the moon, which is illuminated on her western surface, clearly proving that the moon is a self-luminous body, and not a reflector of sunlight."

From my own study and observation I am able to contribute the following, which I illustrate by diagrams 20 and 21, which is additional proof that the moon is an independent light.

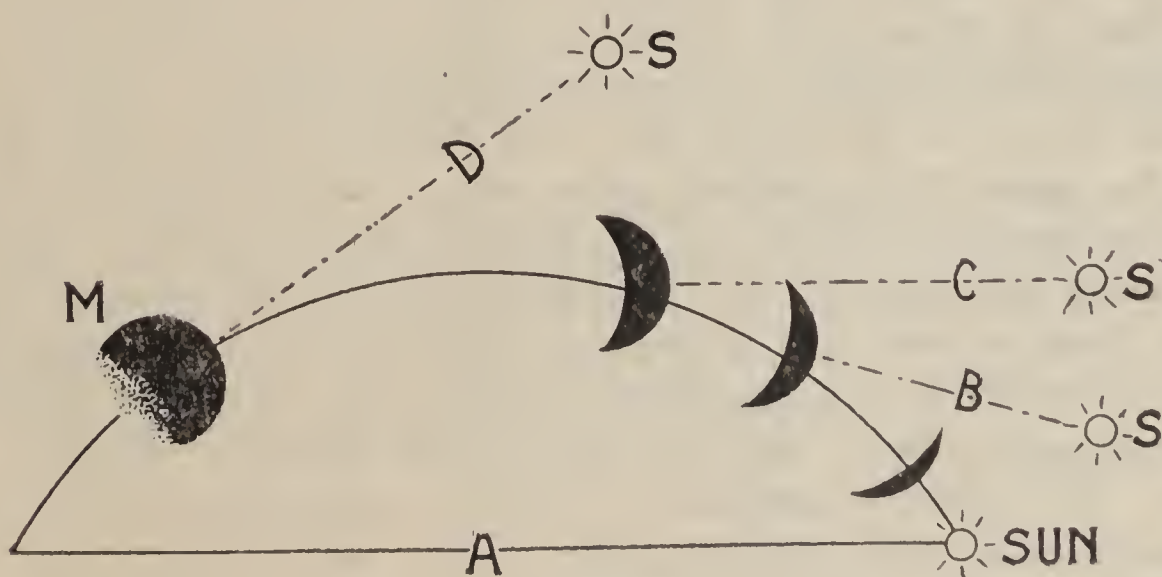


Fig. 20.

If you should hold a ball in any light, you may observe that one-half of its surface is illuminated. Some ray or rays of light will strike the ball exactly at the center from top to bottom and at right angles to the axis of the ball. Try this in lamplight. Move the ball anywhere you wish; the light falls the same. It falls just as far above the center as below it, and just as far below the center as above it. The illuminator always stands exactly on a level with the center of the illuminated body; never above nor below the center. If there is any change in the position of either body, there will be a corresponding change in the area of the illuminated surface. The light could not stand under the ball or globe and shine clear round to the upper center; it shines a fourth way round each way from its source.

Now go back to Figure 20. Let the line "A" be our horizon looking south. The sun and moon seem to pass in a half circle from east to west over our southern horizon. I wish you to study the sun and moon together, always making your observations just at sunset or sunrise.

Our first sight of the new moon shows her low down near the horizon in the west, and shows only a small strip of light on her lower, western side. This is the way the moon appears to a common observer who uses no instrument in his observations, and must not be taken to dispute the testimony of Parallax or the almanac. From its appearance then we would be led to believe that the sun was illuminating that little strip of the moon's surface. But a few nights later the moon is higher and farther to the east at sunset, with her upper limb tipped away from the sun, so that a line drawn at right angles to her axis would locate the sun at "S" along the line "B." Later still the moon has passed farther to the east and is tipped more away from the sun at sunset. If it were the sun illuminating the face of the moon he should be high in the heavens, his rays passing along the line "C" so as to strike the moon at a right angle to her axis. As the moon ages and recedes to the eastward she tips her upper limb more and more away from the sun, until she is seen as shown at "M." At 6 o'clock p. m. on January 19, 1910, the moon was seen at "M" almost due east of us, her axis tipped away from the sun, and standing at right angles to the dotted line "D" on which the sun should have been if it were his light illuminating the moon's face. But the sun was just down or setting in the west. The relative positions of the sun and moon as the moon passes through her different phases shows that the moon does not borrow her light from the sun.

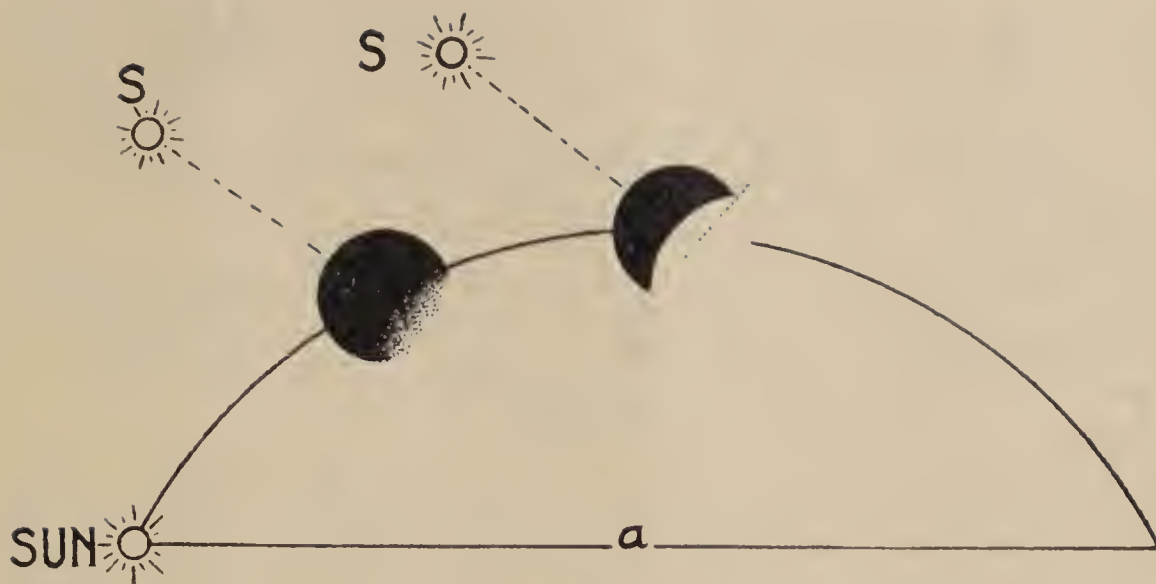


Fig. 21.

Figure 21 teaches and emphasizes the same truth. The observation here was made at sunrise instead of sunset, and shows the relative positions of the sun and moon just before and at sunrise on the morning of January 25 and 28, 1910. The axis of the moon was tilted too far away from the sun for his light to be the light of the moon. The moon has one dark and one light side which is turned alternately towards and from the earth as she circles above us.

Eclipses

We are taught by our astronomers that an eclipse of the moon is caused by the earth intervening between it and the sun so that the earth casts a shadow on the moon. This shadow is observed to be circular, they say, so that the earth which makes the shadow must be a globe or it would not cast a round shadow. From "Wonders of the Sun, Moon and Stars," p. 110, by R. Russell, this statement is taken:

"When the moon gets on the side of the earth precisely opposite the sun, the interpolation of the mass of the earth causes an eclipse of the moon."

Prof. Laing, in his "Key to Laing's Planetarium," states that an eclipse can only occur at the time of full moon. This is in harmony with Sir Robt. Ball's statement, and, indeed, with all other astronomers.

I will here draw your attention to diagram 22.

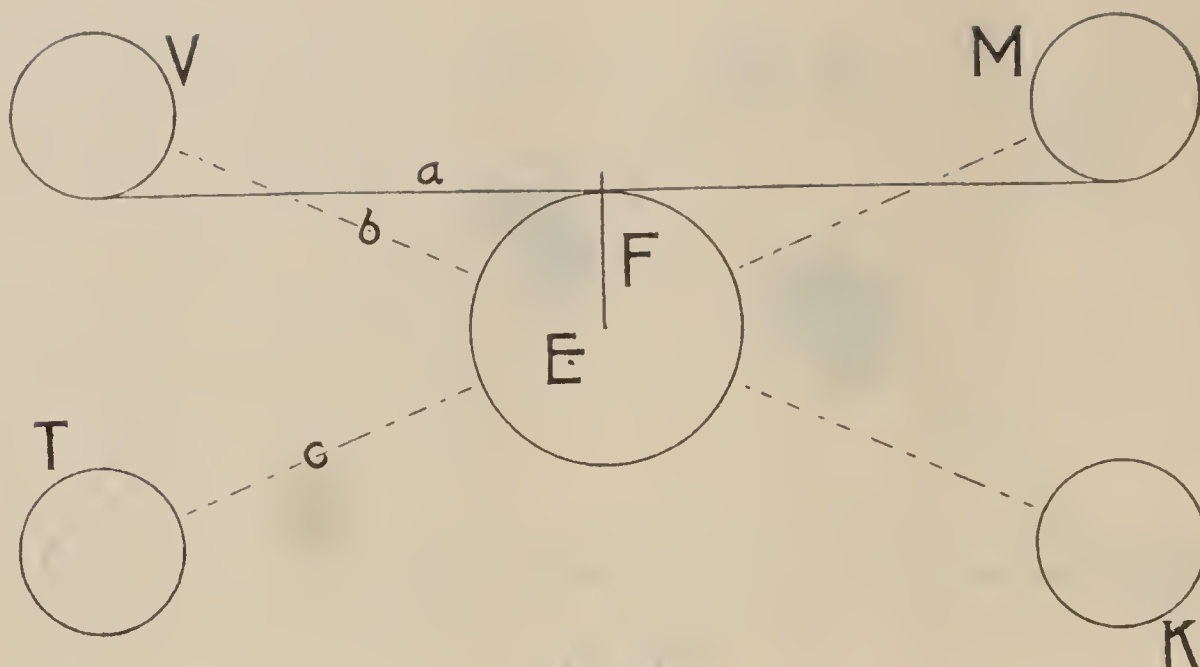


Fig. 22.

When the sun is at "M," to be eclipsed by the earth's shadow, the moon must be "precisely opposite to the sun" or at "T." If the sun is at "K" the moon must be at "V" to be "precisely opposite." The rays of light from the sun passing along the lines "B" and "C" would be absorbed by the earth "E" and so a shadow formed. However, we have this statement from "Recollections of Past Life," by Sir Henry Holland: "On the 20th of April, 1837, the moon rose eclipsed before the sun had set."

And E. Breach, in his "Fifty Scientific Facts," says: "Yet the last eclipse of the moon, on February 28th (1893) * * * both luminaries were above the horizon when the eclipse commenced."

Lady E. A. M. Blount, F. R. S., London, in a lecture delivered at Todmorden, referred to an eclipse she herself had witnessed that day, April 22, 1902, when both luminaries were visible above the horizon.

Let the line "A," Figure 22, represent the horizon. You see it is tangential to the earth's surface, and at right angles to "F" the vertical. The moon was eclipsed at "V" when the sun was at "M," both being above the horizon at the time. Therefore, it was not the earth's shadow which eclipsed the moon. Astronomers admit there are many dark bodies in the heavens, and we believe it is one of them intervening between us and the moon which causes the eclipse, though we have no certain knowledge to that effect.

Refraction will again be objected here.

To meet that objection I call your attention to Figure 23.

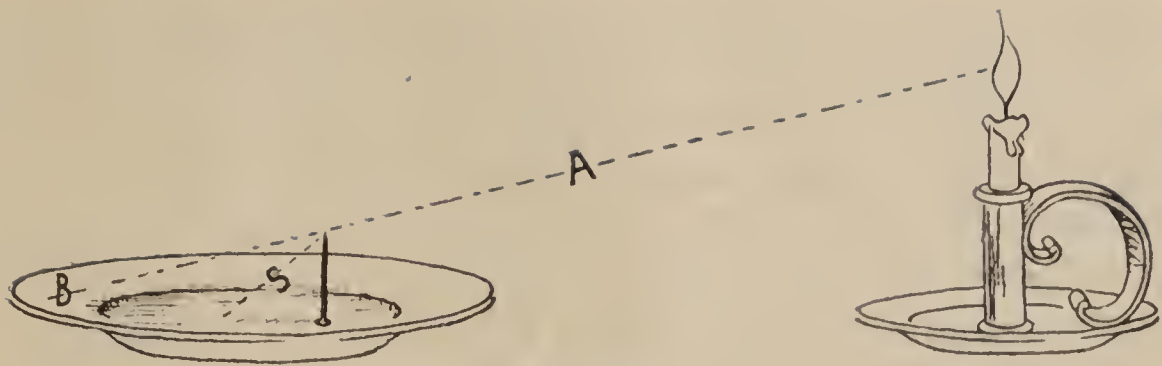


Fig. 23.

Take you a common pie tin, stand a nail on its head for a gnomon or style, place a candle at a distance so that the shadow of the nail just reaches to the opposite side of the basin. Remember, there is no refraction of light unless the light passes from one density into a different density. This proposition was thoroughly discussed under Figure 11. There it was shown that the **image** of an object is elevated and projected forwards in case of refraction. Now pour some water into your pie-pan and you will observe that the shadow of your nail will be **shortened** and lowered. Instead of the light still passing along the line "A" to "B" it breaks at the top of the nail and passes down "S" to the bottom of the dish, shortening and depressing the shadow. Try it out.

Now, when the sun is at "M" above the horizon, Figure 22, his rays do not pass along the line "C" to the earth and then turn up along the line "B" and allow the moon to be thus obscured. But his rays would pass direct to the moon at "V," and in case of refraction, if the earth cast any shadow at all it would be shortened and depressed below the horizon down towards "T." Therefore, the moon being eclipsed when both it and the sun are visible above the horizon proves that it is not the shadow of an intervening earth which obscures the moon. So this supposed proof that the earth is a globe fails just as signally as have all other proffered proofs. It is said that more than 50 such eclipses are on record.

Figure 24 well illustrates the appearance of an eclipse.

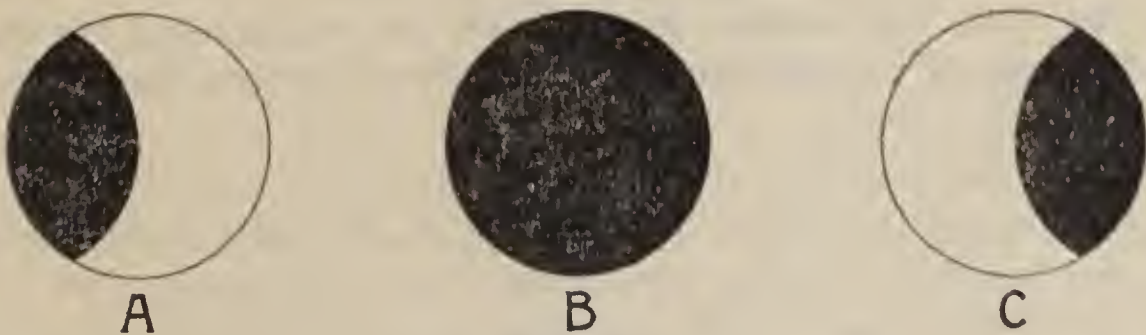


Fig. 24.

Now we wish to ask how long an eclipse of the moon could last if the earth passes between it and the sun to cause it? For answer I quote you a statement from "Fifty Scientific Facts," by E. Breach: "It is supposed that an eclipse of the moon is caused by the earth intervening between the sun and moon. The earth is reckoned to travel 1,100 miles per minute; how long would it be passing the moon, traveling herself at 180 miles per minute? Not four minutes. Yet the last eclipse of the moon, on February 28 (1893?), lasted four and one-half hours; so it could not be the earth intervening, as both luminaries were above the horizon when the eclipse commenced, and the spots of the moon could be seen distinctly through the shadow; the moon was also seen among the stars."

The diameter of the moon is said to be 2,160 miles. The earth is said to move in its orbit round the sun at the rate of 1,100 miles per minute. Now if the moon stood still, the earth would move the 8,000 miles of its diameter across the moon in less than four minutes. But the moon's motion is in the opposite direction from the earth, we are told, therefore, her speed being 180 miles per minute the time is less still. But the four and one-half hours the eclipse has been known to last and the general appearance of an eclipse, is strong evidence that it is not the moon and earth passing each other, but some dark body, moving from east to west in the same general direction that the moon does, but a little faster, overtaking and passing the moon, and thus causing the different aspects of an eclipse.

It is a fact that eclipses are foretold. The date is fixed and announced beforehand so we may be prepared for observation.

Such statements as the following will continue to befog the unlearned:

"Astronomers, by mere calculation, are able to forecast the position of any luminary at any time for many years to come. By the same means, they can foretell to a second, the commencement, duration, precise aspect, and the ending of all the eclipses that will occur for a lifetime hence, and more, without limitation. **Such being the case, the theories upon which the calculations are based must be true, or the correctness of such calculations would be impossible.**"—A. Giberne.

But the movement of the sun, moon and stars has nothing to do with the shape of the earth. And against that statement of Giberne's I put one found in "Pagan Astronomy," by A. McInnis:

"More than 2,000 years ago the Chaldeans presented to Alexander the Great at Babylon, tables of eclipses for 1,993 years; and the ancient Greeks made use of the cycle of 18 years, 11 days, the

interval between two consecutive eclipses of the same dimensions. The last total eclipse of the sun occurred on January 22, 1879, and the preceding one on June 11, 1861. Now * * * going back, for example, from January 11, 1861, through a period of **thirty-six** eclipses, or 651 years, we find that a total eclipse occurred on January 11, 1210; and, continuing backwards, by such cycles, we arrive precisely at the date of creation as given by Moses in Genesis."

I must here record, too, an admission made by Sir Robert Ball in his "Story of the Heavens," p. 56:

"If we observe all the eclipses in a period of eighteen years, or nineteen years, then we can predict, with at least an approximation to the truth, all the future eclipses for many years. **It is only necessary to recollect that in 6,585 1-3 days after one eclipse a nearly similar eclipse follows.** For instance, a beautiful eclipse of the moon occurred on the 5th of December, 1881. If we count back 6,585 days from that date, or, that is, 18 years and 11 days, we come to November 24th, 1863, and a similar eclipse of the moon took place then. * * *. **It was this rule which enabled the ancient astronomers to predict the occurrence of eclipses, at a time when the motions of the moon were not understood nearly so well as we now know them.**"

So we can, "by mere calculation," "predict" the occurrence of the birthdays of all the members of our families, provided we have a good record in our old family Bibles. We can **predict** the occurrence of an anniversary of any event of national or international importance if we have a good historical record of that event. "This rule" enabled the ancient astronomers to **predict** eclipses at a time when all people believed the earth a stationary plane, the sun, moon and stars small bodies near the earth and moving above it. That is the **rule** that is followed today. So that eclipses are **not** foretold by computing the movements of the sun, moon and stars, but by reference to a carefully kept record of eclipses.

The Stars

Star sizes and star distances may be found by the same method that determines those of the sun and moon. The North Pole Star never changes his position in the heavens. He may be observed any night in the year. He is practically vertical to the North Pole. When a point is taken on the earth so that this Pole Star's angular distance (or any other star) is 45 degrees, then the distance from the observer measured on the earth's surface to that point directly under the star will be the same as the vertical distance up to the

star, as a 45 degree angle marks a diagonal to a perfect square. (Fig. 18.) This method of measurement, which is absolutely infallible in measuring the height of trees, steeples, etc., when used to measure the height of the Pole Star, locates it about 3,150 miles above the earth, and **not** as Prof. Laing states it to be 186 trillion miles. The motions of the stars is very easily observed. I am indebted to Professor Orlando Ferguson for the following experiment, which is described in his work, "The Latest Discoveries in Astronomy," p. 15:

Place vertical poles in such a position as to "line up" with some star in the east, another line with a star in the south, one in the west, and one to the north of you. After a lapse of time, say two hours, go and observe. You will find that the star in the east has moved southward, the one in the south has moved to the westward, the star in the west has moved northward, and the one in the north has moved toward the east. I tried this experiment in my garden and found it to work out as described by Prof. Ferguson.

Of this experiment he says: "Anybody can try this for himself almost anywhere on earth and in less than three hours can be convinced (unless he is like the old lady, who said: 'Convince me that that is true and I will accept it. But I shall see to it that you don't convince me'), that all the stars are traveling around the center of both the earth and the heavens, which will absolutely prove to anyone that the earth is stationary as the Bible says it is, and that the sun, moon and stars travel around the center of the earth. Try this, and if it is not true don't believe my theory, but if you find it to be true admit it and shame the devil who has been deceiving the world long enough."

Now, if the stars in the heavens were still and the earth spinning, the star in the east would rise right up and pass directly over our heads; the star in the west would sink down straight to and below the horizon, while the one in the north and the one in the south would each recede to the westward. They do not behave so, but each moves toward the right as you face it. Of course, they rise and set as do the sun and moon, but they move in a circuit nevertheless.

To the above I append this testimony by Paul B. Du Chaillieu, quoted from his "Land of the Midnight Sun":

"At the pole the observer seems to be in the center of a grand spiral movement of the sun, which, further south, takes place north of him. It (the sun) seems to travel around in a circle." Again he says: "Its motion is very slow, and for quite a while it apparently follows the line of the horizon."

This testimony is valuable as showing that the sun as well as the stars travel around a north central point.

It seems to me that the facts adduced in the foregoing pages and the arguments based upon them can do naught but convince any candid-minded reader. Unless you "see to it that you are not convinced" this must be the sure result, therefore I have now only to record the Bible evidence and my conclusion.

So far in this discussion I have introduced philosophical, geographical and scientific evidence in support of our premises. This evidence has been abundantly sufficient to prove our contentions, namely: That the Builder and Maker of this universe is an intelligent Person who worked out definite planes previously formed; that universal gravitation is a universal fake; and, therefore, that the earth is at rest, a vast outstretched flat, horizontal, level plane; that the sun, moon and stars are all small bodies near to and in motion over and above the earth, to give it light and heat.

It now remains to inquire whether my labor is in vain, whether the Bible really teaches these doctrines which I have undertaken to support. If it does not so teach, then so far as the Bible is concerned, this effort is useless. But if our deductions are correct, it goes without saying that modern theoretical science is woefully wrong. To be corrected, therefore, will be a great benefit to man.

The Bible

If the Bible does not say what it means on the subject of Cosmogony, and mean what it says, then I submit that we have no means of knowing what it **does** mean. We contend that the Bible writers meant what they said and as they said it, and said what they meant. We believe, too, that they were not "ignorant semisavages" who **thought** things are as they said they are. The God who made the universe knew and knows the origin, order and arrangement of the material things of this universe; and He, by the agency of His Holy Spirit, dictated to the various writers just what they should say. Let us examine what they said.

In Genesis 1:1 it is stated that "God created the heavens and the earth." The sequence discloses that God was engaged in this work of creation during six twenty-four hour days. This is against the theory that the earth was self-evolved during a period of millions of years. See Evolution again.

The Psalmist says: "The earth is the Lord's and the fullness thereof, the world and them that dwell therein. For he hath founded it (the earth) upon the seas and established it upon the floods." Ps. 24:1-2.

Again: "O give thanks unto the Lord; to him that stretched out the earth above the waters." Ps. 136:6.

"Thus saith God, he that spread forth the earth." Isa. 42:5.

"Thus saith the Lord that spreadeth abroad the earth." Isa. 44:24.

"Thou shalt not make unto thee any graven image or any likeness of any thing that is in HEAVEN ABOVE. EARTH BENEATH. WATER UNDER THE EARTH." Ex. 20:4.

"The earth standing out of the water and in the water." 1 Peter 3:5.

These texts evidently mean to teach that the earth is an out-stretched plane floating on and in the waters of the mighty deep, just as an iceberg or log of wood floats, partly submerged. See argument on Curvature.

Again, Ps. 136:7 says: "Give thanks to him that made great lights." How many? "And God made two great lights." Gen. 1:15. What for? "The **greater** light to rule the day, and the **lesser** light to rule the night." "The **sun** to rule by day, the **moon** to rule by night." Ps. 136:8, 9. "To give light upon the earth." Gen. 1:17.

Two great lights. Not one great light and one great reflector.

That the Bible teaches that the sun, moon and stars are lights **independent** of each other is further evidenced by Isa. 13:10: "For the stars of heaven and the constellations thereof shall not give **their** light; the sun shall be darkened in his going forth, and the moon shall not cause **her** light to shine." Ezekiel 37:7, 8 calls the sun, moon and stars "bright lights."

"The sun and moon shall be darkened and the stars shall withdraw **their** shining." Joel 3:15.

Where did God place them?

"And God set them in the firmament." Gen. 1:17. "And God called the firmament heaven." Vs. 7. "The heavens declare the glory of God. In them hath he set a tabernacle for the sun." Ps. 19:1, 4. "The sun stood still in the midst of **heaven**." Josh. 10:13. "The stars shall fall **from heaven**." Matt. 24:29. "And the stars of **heaven** fell unto the earth." Rev. 6:13. Little stars then and all in the firmament where the sun and moon are, only about 3,000 miles above the earth.

Now do they move or are they stationary?

"In them hath He set a tabernacle for the sun; which is as a bridegroom coming out of his chamber. His **going forth** is from the end of the heaven and **his** circuit (not the earth's circuit) unto the ends of it." Ps. 19:1-6. "The sun riseth and the sun goeth

down and **hasteth** to his place where he arose." Eccl. 1:5. "Be as the sun when he goeth forth in his might." Judges 5:31. "And the sun stood still and the moon stayed. So the sun stood still and hastened not to **go down** about a whole day." Josh. 10:12-14. "So the sun **returned** ten degrees by which degrees it was gone down." Isa. 38:8.

These texts plainly tell us that the sun and moon move and we see them and the stars move. So we know they do.

But does the Bible teach that the earth is at rest? It does. "The world also is established, that it can not be moved." Ps. 93:1. "Who laid the foundations of the earth, that it should not be removed forever." Ps. 104:5. "Ye enduring foundations of the earth." Mal. 6:2. "He hath founded it upon the seas." Ps. 24:2.

Conclusion

He who bases his rejection of the Bible with its offer of eternal salvation on modern science has chosen a very poor foundation. He has exchanged a solid substance for a myth; wealth for poverty. Believing that infidels are reasonable beings whose judgments must be convinced, I have appealed to their reason altogether in this little work. I also believe them honest and sincere and not willing to jeopardize their eternal interests rashly, but feel that they are in darkness and uncertainty; therefore, I make this effort in their behalf. They surely want all the benefits due to man, and would not willingly and knowingly despise them. For one to despise his own best good would be the grossest of folly. Salvation is free for the taking; and if **you** take it, my portion shall not be diminished.

But what good could infidelity do me, should I adopt **it**? Do infidels think they are conferring some benefit on me by offering it? Are they substituting something **better** for my belief and religion? Is my religion a **bad** thing, something detrimental to me, harmful in this life, injurious to my prospects for a better hereafter? What does infidelity offer me in exchange for my faith? Nothing! Nothing!

No; infidelity takes away everything and offers me nothing. It is of no possible benefit to me here. It does not add a single thing to my comfort and happiness in this life. It does not relieve me of one unpleasant or detrimental condition or experience in the world. The infidel possesses no more than I may possess. I am not restricted in the least in a single thing that is good and desirable more than he. God says: "No good thing will be withhold from them that walk uprightly." Now if whiskey and tobacco are good things he

will not withhold them from me. I can pickle and besot myself with them as freely as the skeptic. If drunkenness and prostitution are good things, then Christian men and women may enjoy them to the full limit of their physical capacities. If it is good for you to lie, steal, murder and blaspheme your God we may do those same good things. We may eat as much, sleep as long and laugh as heartily as the skeptic. We may own as good farms, live in as good houses, drive as good horses, ride in as good carriages, wear as good clothes as the freethinker, limited only by the restriction which he puts upon himself; that we "provide those things honest in the sight of all men." And when this short life is over, my Christianity offers me and undertakes to provide me an eternal life of bliss and happiness with God himself hereafter. Infidelity offers me not one single thing **more** here and not a single thing hereafter.

On the contrary, it robs me of my peace, joy, contentment and happiness here and my prospects for a brighter, better hereafter. It makes the future a dark, dark picture indeed! It rears up dark despair to stare me constantly in the face. No; take away everything else, but leave me my religion.

If you admit the element of uncertainty, I shall still stand on the side of the Kansas fool, who said he "preferred to stay on the safe side of even a **dead** horse." Or, like President Garfield who, when he lay stricken down by the foul assassin's bullet, was told by his physicians that he had only one chance in a thousand for recovery, replied: "I'll take that one chance." There is only one chance in this wide, wide world offered me to lay hold of eternal life and I'll take that one chance. Grant that Christianity is a deception, that the destiny of man is as infidelity teaches. Still we have the joy of hope and anticipation to cheer and comfort us here, which skeptics have not, and we fare just as well hereafter. Our faith does us no damage and his does him no good. But should we and the Bible prove to be right and **he** wrong, then what? Which takes the greater risk?

And what is the infidel's standard of right or of living? There must be some standard which all may recognize and to which all must yield or there will follow only confusion and anarchism. God's standard is one, it was made arbitrarily by himself because he is God, because he is superior, because he is supreme, because he is the maker of all, because there is none higher than himself. But if infidelity is correct and evolution is true, then the highest being, the highest intelligence is man; he is superior to all; he is supreme: he is under obligation to none higher than himself; he may make his own standard of right and wrong. None, then, will be

under obligation to his fellow; each will make and maintain his own standard and so far as he has power to do so, might will make right; whatever a man does will **be** right if he has the ability to accomplish it. And the ability or power to do will be the only test of right. It will be right if I can do it. Why not? There is none to formulate a standard of right for me, because I am inferior to none. There is none to sit in judgment upon me for I have no superior. My own sweet will is all I need ever to consult in any matter whatever. If I choose to kill and eat my fellow man I may do so if I have the cunning, skill, ability or power to do so. It would be right for I am the arbiter of all right. The cutthroat, the debauche and the prostitute may all have a jolly good time as there is none to say them nay. If there is to be any superior at all which all others recognize, then there will be but one superior and all others inferior. There would be one superior to all and one inferior to all, just as you see in a herd of cattle. There is always one boss bully over all and one under all. One which can and does boss all the rest but is bossed by none, and one which is bossed by all the rest but bosses none. But to have peace and harmony all **must** yield to some one supreme ruler and arbiter over all, who shall determine all our relations, duties and attitude toward our fellows.

There is that Supreme Ruler who created and made us all and who **has** fixed our relations and obligations to each other, even Jehovah God, the just and proper arbiter of all, whose every act is right because he is God and could not do wrong.

But this doctrine of infidelity makes every man his own god and would engulf the world in confusion, anarchy and blood. All the woe, misery, degradation and wretchedness man has ever known has been caused by man falling away from the Bible standard. God's standard of right and righteousness; and all the joy, elevation and prosperity ever experienced by man has always been the direct result of following and conforming to that sublime and perfect standard. The goodness of man has not been worked into the Bible; but the goodness of the Bible has been instilled into man—some men.

No, my skeptical friend, back to the God of the Bible, to the Bible standard of right, and to the salvation of the Bible. **Accept** it all and it will bring you no harm, but rather blessing and benefit. It tells you what right is and offers reward for doing it. It never asks you to do anything wrong to yourself or your fellow man. It shows you wrong and asks you to shun it. It points out danger and begs you to avoid it. It offers you life, **Life, ETERNAL LIFE**, and implores you to accept it. If it is not worth taking, don't have

it. If you do not want it, reject it. If you can do better, by all means do so.

If you were going to establish and rule a colony or kingdom in any good country, you would formulate some plan of government; you would impose terms and conditions under which subjects might enter your kingdom. You would do some sorting, some culling in selecting your subjects. You would require **all** to comply with your terms and conditions. You would not seek to compel any to enter your kingdom, but would arbitrarily reject **all** who would not comply, and even banish any **from** your domain who refused, or destroy them out of it. You would be perfectly just in this course, and foolish if you did not follow it. Otherwise the incorrigible would spoil a good community if allowed to enter or remain.

This is exactly what Jesus Christ is doing for the world. He has undertaken to establish the Kingdom of Heaven. He has formulated his terms and conditions on which we may enter, and has promulgated them in his Gospel. The plan is all made and fully published. He is now seeking his subjects. He wants volunteers. He will compel none to enter. He is sorting, culling, accepting, rejecting. He is working on the basis of free choice. He created us with the power of choice, has fully instructed us and left us free to exercise that choice. He has put us on trial and test in this life. He has given us this short life without our knowledge or consent, without consulting us or giving us a choice in the matter. But now he does consult us and give us a choice as to whether we want life continued or whether we prefer extinction—to be reduced to ashes again. That will be annihilation sufficiently total for any who believe in that doctrine.

Most of us want life. We would lengthen our days if we could. God wants us to have life, and to have it more abundantly. He says: "Behold I have set life and death before you: choose ye." He gives us this life as a trial and test of our wishes regarding life as well as a trial and test of our loyalty to our Sovereign Maker. He wants those who will prove true to the test and are **willing** to go into his kingdom. He will accept those who **will** be loyal and obedient to him **in this** life when they **might** be disloyal. He wants those who **will** do right when they **can** do wrong. He compels none, but says "whosoever will may." If his offer is not good, spurn it. If you can do better, do it. If eternal life is not worth having, by all means refuse it; but please don't hinder those who seek it. In the language of another, "If you don't wish to go to heaven, go elsewhere; but please go quietly." Christ will not try to make you enter his kingdom, but he certainly **will** reject you out of it if

you are disloyal and disobedient. He would be a rank fool if he did not do so. Judge ye.

This world is to be his kingdom. This world is to be cleaned up and made the eternal home of the saved. All the wicked will be consumed by fire and destroyed out of it, just as you burn up the trash and filth which accumulates around your premises. You do not undertake to subject the trash around your place to eternal torment by fire. You burn it up to get rid of it, to get it out of the way. So says the Bible that God will do with the wicked. They shall be reduced to ashes by means of fire. "In smoke shall they consume away." Then the cleansed and renewed earth shall be the home of the saints, the Kingdom of Christ.

"But does not the Bible say that the wicked shall go away into eternal torment?" No, it does not. **That** is what some preachers say. The Bible says they "shall go away into everlasting punishment." Quite a difference. It says "The wages of sin is **death**," not eternal life in torment. Rom. 6:23. It says, "I will punish with death." Let me illustrate.

Suppose a man commits some crime. He is arrested, tried, convicted and sentenced to the penitentiary. There he is put to work six days in the week, taken to church on Sunday, is fed three meals a day, given books and papers to read in his cell. Now he is imprisoned to punish him. His work is not punishment, going to church is not, his food and rest and reading are not punishment to him, much less to say torment. His punishment then, consists in his imprisonment, his exclusion from society, the deprivation of his liberty, not work, food, reading, etc. Now if his imprisonment lasts a year, his punishment lasts a year; if his imprisonment lasts ten years his punishment lasts ten years; if his imprisonment continues during life, his punishment continues during life.

In the case of the wicked, God says he will punish them with death. Death is the punishment, and Jesus says it is everlasting punishment; therefore, it is everlasting death, death from which there is no awakening—eternal, everlasting death—not eternal life in ceaseless, conscious torment; for "the dead know not anything." So says our Bible.

Therefore, God is not that cruel monster of iniquity this doctrine of eternal torment makes him out to be. Instead of gratifying a fiendish revenge by subjecting the work of his own hands, whose life is but a breath, to the cruel torture of an endless eternity, God proposes to terminate the unhappy existence of the incorrigibly wicked. "They shall become ashes;" an unconscious unorganized state. Mal. 4:1-3.

'Tis not a wise or loving plan
 That God for e'er should torment man,
 Whose term of life is but a span,
 E'en let him sin whate'er he can;
 But fitting 'tis that he should be
 Reduced, throughout eternity,
 To dust and ashes, 'neath the feet
 Of those whose choice is Life complete.
 E'en bliss on high could only be
 One ceaseless round of woe to me,
 If, in the regions dark below,
 Our friends can only torment know,
 In endless, conscious, torture be
 Throughout the aions, eternally,
 While you and I, our lives more wrong,
 Bide endless days 'mid ransomed throng.

"But the righteous shall go away into life eternal." I choose the latter. Can you do better? Think it over now while you are in good health, sound mind, clear judgment; calmly, coolly, deliberately, leisurely, just as you would any business proposition, consider and do the best you can for yourself. You are free to do just as you please; but God will "be just when he judges and justified when he condemns" you on your own judgment. You can defy him to his face. You can beat him out. You can defeat his purpose and his wishes concerning you. You can decide the whole question yourself. Therefore, make no complaint when you get your choice. Consider this: "What shall it profit a man though he should gain the whole world and lose his own soul? or what shall a man give in exchange **for** his soul?" If you can inform me, please do so. If your plan is better than the Bible plan, please disclose it. If you want riches, you can surely make a fortune selling your secret, and I'll be a prompt buyer. The best way to criticise the Bible plan is to bring forward a better one. Can you do it?



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