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HIGHER SCIENCE



of the
MOTION of MATTER
A MAGAZINE DEVOTED TO
SCIENCE, TRUTH, INVESTIGATION
& MATTERS OF GENERAL INTEREST

DECEMBER, 1902

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EDITOR AND PROPRIETOR
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HIGHER SCIENCE

OF THE MOTION OF MATTER



Vol. II.

LOS ANGELES, CAL.

No. 2

SIZE OF THE SUN.

THERE are perhaps few of us who realize the immense size of the sun (174*) or perhaps that have ever undertaken to contemplate it. Even in these modern times with ocean greyhounds and lightning express trains, there are comparatively few who during their lives, make the trip around our earth, a distance of 24,000 miles. Those who do can realize its great size. Now if we should travel around the earth ten times, we would only have traveled as far as from the earth to the moon. Let us, then, in our minds, set the sun with its center at the center of the earth.

And we find that the sun not only fills the moon's orbit around the earth, but that its surface is nearly twice as far away from us as the moon. Can we realize the immensity of such a body? And yet it is but a speck, compared with some of the other great suns, as the earth is a speck when compared with it. How much less are we able then to comprehend the size of a being, large enough to create a god, big enough to create such immense bodies in less than a day. No wonder the sun is able to keep the solar system filled with the gas of expanded matter from its great undying fires, when we remember that solid matter is always falling back into it from every direction and being disintegrated or exploded into gas of thousands of times its bulk. As a matter of fact the whole solar system is a part of and belongs to the sun the same as the atmosphere and rain and hail and snow are a part of the earth. The gas which the heat of the sun makes and which is swelled up in every direction from the sun, is only a part of the sun, which, when it turns back into fine dust, by extreme cold, falls back as the rain falls to the earth.

* Numbers in parentheses refer to notes in "The Procession of Planets."

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THE RESISTING MEDIUM.

Since it has been proven beyond doubt that some of the comets, notably Enkes and Faves, our own moon, the Rings of Saturn and the planet Mercury, are actually shortening their orbits, a great real has been said about "the resisting medium." The truth seems to have been gradually dawning upon real astronomers for two or three centuries, that heavenly bodies do not forever follow the same path and therefore they are busy looking for a "resisting medium," with which to check the advance of heavenly bodies, so that they will travel more slowly and be allowed to fall towards the center of their orbit. When Newton discovered the force of gravity, he discovered the resisting medium which shortens every orbit of every heavenly body, from an atom of crystalized dust, to the sun which would fill our solar system with its immense bulk. Gravity is a drawing or contracting power which holds or draws a body towards a center and it should not take much of a philosopher to understand what "medium" of resistance shortens an orbit, now that they know that orbits do shorten. With this immense power or gravity pulling against the earth and attempting to pull it to the sun, what equally great power pulls it, or keeps it away from the sun? They say the speed of a heavenly body keeps it away by overcoming the force of gravity. On the face of it, this is a fallacy. What great power then, keeps up the speed? There must be a constant power applied to overcome a constant pulling power towards the sun. Not only this, but the speed constantly increases and the nearer a planet is to the sun or the nearer a moon to its planet, the faster it travels. How then does it get and continually increase this speed or power? Simply by falling — the power is the force of gravity, which gives every heavenly body its speed and its ever increasing speed, as it nears its center. Astronomers have been in the habit of speaking of and thinking of the speed of a heavenly body as being imparted to it by the immense hand of a god, giving it a mighty push or throw and they let it go at that. Now if they will drop this idea of a first great push, and remember that it would not last if it had such a push — but that it must be a continual

push, and even stronger and stronger as it continually gains speed. Can we not understand that something has pushed Mercury a great deal harder than it pushed Mars, when we notice that Mercury travels 2,500,000 miles per day and Mars but 1,100,000? We cannot deny that the same power is applied to both. What then is that power, but the weight of falling (253). The difference is that it has operated longer on Mercury. When the gas is expanded at the sun, the weight of these great planets is lifted by heat (in expansion) and when it falls it is simply a giving back of the same power, by returning weight. See Law XXXIII, October issue of this magazine, p. 5. It is, in the end, a question of weights. Whatever power or energy (heat) it required to raise matter to the immense height of Neptune's orbit, will be regenerated when it returns to the sun (7).

PROOF OF EARTH'S ROTATION

Camille Flammarion, the eminent astronomer, in the presence of 5000 persons, including representatives of the Government and the most prominent scientists, renewed at the Pantheon in Paris, France, on Oct. 22, 1902, in the afternoon, the only visible proof ever given since Foucauld's original experiment in 1851.

From the Pantheon dome a weight of sixty-two pounds was suspended by a wire 234 feet in length. The pendulum was started by Flammarion and each double beat of sixteen seconds showed an apparent deviation of one-tenth inch in a direction contrary to the earth's real rotation. With successive beats the deviation became clearly perceptible and a cry of enthusiasm escaped the spectators. Flammarion said afterward:

"The experiment is the grandest lesson ever given in popular astronomy, and we know with our own eyes that we inhabit a moving planet."

Noah thought too much of wine to waste it christening the outside of a wooden ship. See Gen. ix, 20, 21. — *Truth Seeker*.

ORIGIN OF PETROLEUM, COAL, AND OTHER CARBONACEOUS PRODUCTS.

By WILLIAM PLOTTS.

In beginning this article I want to qualify as to the term origin. As geologically, no step or condition in the transformation of carbon from one form to another can strictly be called an origin, and in attempting to account for the wonderful natural phenomena around us we must look at each object or form as merely a link in the endless processes of nature, and not regard any thing as having a definite origin or of being a finished product, and we must bear in mind that nature does not halt when the stored up carbonaceous products are denuded of their covering, but disintegrates them by erosion like all other strata that are in a state of emergence from the heated depths below, until no visible trace of them remains. If this were not so, the price of fuel oil would be even cheaper than it now is, and my critics would not be saying that my theory accounted for more of such products than were apparent.

We have all read a number of theories to account for the presence of deposits of petroleum and coal, nearly all of which are very absurd, inasmuch as they require fabulous conditions which in themselves are more difficult to account for than the first. The truth is our brains have been so crammed with the fabulous in childhood that our reasoning powers are defective, and it is difficult to theorize correctly.

One of the most popular of these theories is that immense quantities of fish or other animals drifted or were storm-driven into inlets. Sandbars formed in such manner as to retain them. The water evaporated causing the oil from their putrid bodies to seep into the sand, which afterward became covered (with strata) thru which we drill in our quest for petroleum.

In an early number of this magazine, the editor in reply to the query as to what made coal said, mud. And he was right, and mud is the parent of petroleum and all other carbonaceous products, and in pointing out the transformation from mud to petroleum, etc., I am not going to call to my aid

any fabulous conditions or monsters or miracles, for their formation is still going on and the process can be demonstrated in all its essentials by artificial methods, conducted on the lines of the conditions that are known to exist in the crust of the earth.

Most people who observe tilted and contorted strata seem to think that it was disturbed by sudden upheavals, but we have no warrant for such a belief. This earth movement is going on all the time and is more active now than formerly, on account of the increasing firmness of the earth's crust. As the crust becomes thicker and harder the surface is corrugated on a greater scale by the compression.

This buckling of the earth's crust has caused a considerable change in climate since the first growth of vegetation, so that only some few parts of the earth are now suitable for the first stages of the formation of petroleum and coal on any considerable scale.

This change has been caused by the buckling crust deepening the ocean in places, thereby contracting their area and forming mountains, consequently causing the rainfall to become less and intermittent in many localities. Less rain means less growth, and intermittent rainfall means the destruction of much carbonaceous matter by fires, since those pesky all-destroying creatures called men became cunning enough to create fire.

The basis of my theory is the fact that all the detritus that is washed into oceans and is constantly building layers of mud, sand, etc, which form into shales, sandstones and other harder strata, contains more or less unconsumed carbon, and it is known that regions hundreds of miles in extent gradually rise while other equally large areas are depressed, sometimes many miles vertically during long ages of subsidence. But altho detritus from the upheaved portions is being continually washed into the depressions, readjustments often change, subsiding into emerging areas. Now it is an established scientific fact that a few miles down in the crust the heat is sufficient to vaporize the carbonaceous matter and drive it upward, allowing the attenuated product of thousands of cubic miles to concentrate and condense into comparatively small bodies.

The valley of the Amazon in South America has conditions suitable for the formation of carbonaceous products in their first stages. A damp, warm climate favoring a prolific vegetation, and a minimum of forest fires. The seaboard is in a state of subsidence, and the ocean is deep, favoring rapid deposition. The sediment that is swept out by the immense river contains a large per cent. of carbonaceous matter in the form of leaves, bits of wood and even whole trees, but by far the larger part is finely incorporated in the gray mud that is deposited on the ocean bottom in layers with each recurring maximum stage of the current.

If the subsidence of the ocean floor continues until say, six miles or more of this carbon-containing mud is laid down and then emerges or remains stationary until the sandy beach recedes or encroaches over the deposits or a portion of them, leaving large beds or strata of sand (beach sand is always porous because the surf washes the finer particles constantly into deep water), then if the subsidence again occurs, until a few miles of additional deposits cover the sand, the conditions will be ideal for the formation and retention of petroleum and probably also other carbon products.

The carbonaceous matter ceases to decay as soon as it is deposited on the ocean floor and the deposits under the pressure of the constantly added material, becomes mainly shale rock, of which a large part of the earth's crust is composed, and if it did not become covered sufficiently deep to cause the heat to drive the carbon out in the form of gas, it would remain unchanged until it was in its turn eroded away.

Downward in the earth's crust the heat increases at the rate of about one degree to every fifty feet, or about 100 degrees per mile. About two and a half miles would be sufficient to drive the sea water out of the sand, upward in the form of steam, to condense in higher strata. Six miles below the surface the carbonic matter would all turn to gases that would percolate upward as long as the subsidence continued. Within about three miles of the surface the gases would condense into petroleum, coal or bitumen, having local characteristics imparted to them more by the heat, environments and time occupied in the process, than by any variations in composition of the mud from which it was formed.

Let us now suppose the subsidence of this region to have reached its maximum, and emergence to begin. The ocean recedes and what has been a waste of water for ages becomes land. And if the rate of emergence exceeds the weathering, or erosion of the elements, it may become elevated thousands of feet above the ocean. Later this erosion will have thinned down the covering in some localities to within a few hundreds of feet, perhaps exposed some indications of them to view, when the most dominant animals, if there be any on the earth having sufficient intelligence, may extract them for their benefit as we are doing today with the coal and petroleum that are being denuded of their covering.

Coal is found in the same series of rocks of the same ages as those in which petroleum is found, and the observing person who is acquainted with the conditions in which both occur must be impressed with the similarity. Petroleum is usually found in porous sand rock, which acted as a reservoir to receive and retain it, and would be the best means of preserving it the longest. It is highly probable, however, that the property of accretion by affinity, that carbon has in common with all minerals, and which is strongest when the mineral is nearest its pure state, had much potency in securing its concentration.

In the formation of coal strata, however, this property of matter gives us one of its best examples, for coal is not found in any reservoir except such as it forced for itself by accretion of its particles in the soft shales in which it is found. The arbitrary limitations of temperature also may have much to do with the evenness in which coal is found in place. I will not attempt to explain why carbonic gases sometimes condense into coal and at other times into petroleum, or into intermediate products, as that is the special province of chemistry, with which I have but a superficial acquaintance, and this article is already too long. A significant fact, however, is that when petroleum and coal both occur in the same locality, the coal is invariably above the petroleum, usually 1500 to 2000 feet.

The petroleum of California, tho occurring in younger strata than the great oil fields of Pennsylvania, was condensed from gases that came from a greater depth, where

the heat was greater, as is evidenced by the greater proportion of basic substance which it contains, and probably most of the variations in the products we are considering occur from this cause.

PAY WHILE WELL.

There is a movement on foot in this city to organize a large stock company with sufficient capital to start an institution where people will be cured and kept in good health at so much per month, or year. When they are sick they will not pay, but when they are well they will pay their regular dues, have their pulse felt and take whatever warning may be necessary from the examining board to secure health for the next month. This is one of the greatest steps forward which could possibly be taken. The good people of advance thot in Los Angeles, should not leave a stone unturned to bring this about. The practice of medicine has always been an enormous fraud. It is practiced on the wrong basis, like religion and a great many other things. The very fact that if a patient gets well the doctor's pay stops, compels the doctor to either be a fraud or a pauper. He must keep the patient sick or he does not get his money. China is far ahead of this country in respect to the practice of medicine. The people are so poor there that it does not pay a doctor to rob them and they simply pay a small regular fee to be kept well. It is true enough that it only requires about one doctor to where there are now ten, but it shows also what a useless swarm of parasites they are now, keeping us sick to get our money. Think of the innumerable hoard of preachers and priests in the world, living off of the charity of poor women and children. They are also as useless as nine-tenths of the M. D.'s. Let all of them go to work and earn an honest living the same as the poor sick women and tender little children do, whom they rob by prayers and pills. The time is coming when it will be a disgrace to live by charity and especially upon the hard-earned pennies of women and children, as priests and preachers live, and the time is also coming when it will be a disgrace to be sick or intoxicated. Men are ashamed to be sick now. They realize that it is a

disgrace and the result of laziness, gluttony or filthy habits. This is almost always the cause of sickness, except when an M. D. gets a chance to work in his pill or dose, and so keeps you going. It will be a grand thing for humanity when doctors are paid to keep you well, instead of sick. HIGHER SCIENCE will gladly help fight the bitter battles which would have to be fought against the State medical trust for an institution as proposed, and will agree to find hundreds of patrons as stockholders amongst freethinkers and scientists. Do not let the interest lag for a moment until this grand object is accomplished. Why pay 5000 M. D.'s to keep us sick when 100 could keep us well.

A NEW DISCIPLE.

Clarence C. Gates criticises Judge Tenney's Theory of the Solar System, in Oct. *Freethought Magazine*, of which the following are extracts, showing that he is ready to accept the Procession Theory. Light, heat, thought, sound, etc., are simply motions of the gas of expanded matter which fill the spaces of the universe, but electricity is a part of expanded matter. It is a fluid which can be collected, stored and used later.

* * * * *

"It is now a well-established fact that there is a thin, or rare substance, filling all space, unoccupied by denser and heavier matter. This rare substance is called ether. * * *

"Light and electricity are motions of ether, and of nothing else. Heat moves or passes through the ether, too, as you can easily prove, by standing near a hot fire or stove. This is a scientific fact, of which physics fully treats. Heat can pass from the sun to the earth, as heat. It has a very slight resistance in the ether, for which reason it is so cold in the space beyond the air.

"Now, if the sun was a globe, not molten, and like the earth, as Mr. Tenney believes, then the earth must be heated by electric currents from the sun, as Mr. Tenney says. These currents would be caused by the rapid motion of the sun through the ether. Friction, magnets, and chemical action

will produce electricity. Friction with the ether, caused by the sun passing through the ether, would produce electricity. A loss of motion would result; a diminution of the sun's speed through space. If the sun and earth were considered as magnets; the magnet, earth, revolving around the magnet, sun, there would still be a loss of motion. What is true of the sun would be true of the earth. Finally the earth and sun must clash; it would be inevitable. Under such conditions it would be illogical to say the earth has always existed in the same shape or globe, as it exists now.

"I understand, from quotations Mr. Tenney has made, that he wishes to demonstrate that the supposed electric currents turn into heat, upon passing through the air. If that were so, the further they pass through the air the more heat they would produce. The present zones would be reversed—the frigid zones becoming the torrid and the torrid becoming the temperate or frigid zones. Or, why should not these electric currents make a temperate climate all over the earth? The quotations that Mr. Tenney makes, to support his theory, are on pages 30 and 31, 'The Earth Not Created.' It seems to me that Dr. Rogers is as mistaken as Mr. Tenney.

"This is a serious mistake that Mr. Tenney has made. He is required to assume that there is friction, or a loss of motion to the sun and earth, to develop the electric currents. For perpetual motion is an impossibility, as much with the sun and earth as it is here upon the earth. Although there is a very, very slight resistance to the earth from the ether, still, some day, this resistance must throw the earth into the sun.

"Although I do not believe as Laplace believed, I cannot accept Mr. Tenney's theory that the earth has always existed as the globe, upon which we live. We have no reason to doubt that motion is eternal, and is the inevitable and necessary result of the universal diffusion of matter, possessing force."

He finds God the quickest, whose yearning and concentration are the greatest. — *Sri Ramakrishonu, in Vedantin.*

A remarkable proof of the truth of the above, is to be found amongst the negros.

PROCESSION.

This new theory of the motion of matter, showing that expansion by heat, or the lifting of matter up from a center of heat by expansion, and its cooling, contracting and falling again to its center, is the only cause of motion, is receiving recognition from the most advanced thinkers all over the world. Its recognition is coming years sooner than new discoveries of its magnitude usually occur. This is not to be wondered at, however, when we examine the extreme simplicity of the theory, and yet it took many years to establish the Laws of Evolution. The Coperanic theory, which is so simple and beautiful, was actually driven back and finally lost for centuries. All this, however, was brought about by the curse of christianity. Even Evolution was held back also by that cursed blight to civilization and advancement. In this quick acceptance of the new theory which finally solves all of nature's mysteries, we have the living proof that christianity is almost, if not entirely destroyed, and thus the world is rid of perhaps the worst evil, with which humanity and human progress was ever cursed. The following is part of a most interesting scientific article in the November number of *Pacific Vedantin Magazine* by Dr. Logan, showing that he rightly considers the procession theory as already established.

“ * * * There are on the head of a pin not less than eight sextillion of atoms or eight thousand millions of millions of millions (8,000,000,000,000,000,000,000,000,000) and these are separated from each other by distances greater than their dimensions. * * *

“ In a drop of water or in the head of a pin there are incomparably more atoms than there are stars in all the sky known to astronomers, armed with their most powerful telescopes.

“ These infinitesimal atoms are centers of force and are that of which all matter is composed. Physicists have found out that pure white light is composed of all these substances. In fact a theory now goes (evolves or is accepted) that light is the ultimate of all matter. All is precipitated light emanating from innumerable suns. The atom of light nearest the sun pushes the next one farther out; expansion of heat being the

motive power, thus light is carried away out into space where it becomes cold and dark and crystallizes into ordinary matter; then a return current sets in by means of the attraction of gravitation. On the homeward trip to the sun these rays of light objectify in all conceivable shapes and forms, from a nebula to the world, from the minutest microbe to the human form beautiful. These objectified atoms of light seek their home in the sun, there to be purified by fire of the accumulated dust of the ages and to rest for a season then to be again sent out on their eternal round of heat, light, matter, life, birth, growth, death and decay to life again. So winds the eternal panorama.

Our own sun with its chicks eight in number is probably the smallest one of the vast universe. Each sun is the center of a planetary system. The planets are mostly invisible, but the suns that inhabit space are counted up to the 17th magnitude; they number more than 100,000,000, each one with a planetary system, some numbering probably into the hundreds.* * *

We trace the light wave to the sun, also the energy that moves it. Beyond the sun there are immovable suns, all assisting to hold each other in place, into being. Their relation to each other is what holds them in place and keeps them in motion; the same is the relation of the organs of the human body.

The lifetime of any creature should be five times its maturity; this is nature's average, and should give man 100 years of life (5 score). This is the earth standard. The sun has its measure for the earth and all the planets. Astronomy tells us that the earth will eventually fall into the sun and all planets will follow in their turn. Four hundred million years is calculated to be the maturity of a solar planet. Astronomers also tell us that the sun will die, and other suns and all such.

Dead suns are said to rush together with terrific collisions, causing intense heat and evolution of nebular matter, dispersing it over immense space. This is the birth of a new cosmos such as we have witnessed in the recent past, when all the scientific world attended at the accouchement in the constellation of Nuavo Perseus. This sublime panorama is eternally

revolving, born, to die again like a puny mortal thing. All things from conception, birth, growth, decay and death to life again are an eternal panorama of involution and evolution within the body of nature.

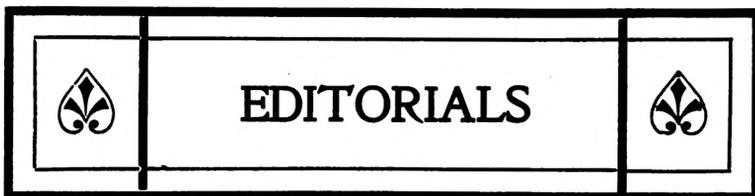
Within every human being there is a constant change, likewise within the race, and all nature including the cosmos. So regular and constant are these movements that a harmonious progression is observed." * * *

The above able article is of itself ample evidence that nature does its own work by heat and cold, and needs no god outside of itself, and can have none. If there is a god there must be a still greater god to make him, and a still greater to make that one, and so without end. Being natural, nature goes on with her work of expanding and contracting, attends to her own business and never gets angry, or jealous, and never repents what she has done.

Clairvoyants and Astrologers have for the past few months experienced much unjust trouble with authorities. In some states this prosecution has been resented in the courts, and in almost every instance the occult individuals have come out on top. I see no reason why the occult fraternity should not fight for their rights, as well as any creed. If Astrologers and Clairvoyants cannot practice and develop their art without being molested, then better shut up churches, political meetings, doctor shops, etc.—*Prophetic Messenger*.

Religion, medical practice and political thievery are each in a great Trust by themselves, and are again combined in a pool. What each separately can not rob the citizen of, the combined squeeze will get. However, they can only rob the ignorant after all.

"War and Worship." A poem. By Henry Bedlow. Published by the Truth Seeker Company, New York. Pp. 190, duodecimo. Price \$1.25. From a consideration of War the author passes to an analysis of Worship, in which the sources of religion are sought out. This is incisive work, like a surgical operation, and discloses the corruption that exists beneath ecclesiastical wrappings. The foundations of Christianity he treats as mythical or priest-invented.



Vol. II. Endeth.

After consulting our friends, it has been decided to be the best policy to end Vol. II with the end of the year and commence the new Vol. III with January. The advantage of having the number coincide with the month of the year is apparent. Do not forget our HIGHER SCIENCE advertisers. Send us more names of people who are too honest and clean to love Jesus.

Do Not Fail to

Celebrate the greatest day of the year, Dec. 25th; the day when the sun starts on his return north, to bring spring time, new life, song birds, glad tidings of great joy, seed time and harvest. What could be more beautiful than this custom of worshipping the sun, which evidently had its origin with the early men, tens of thousands of years ago, ages and ages before Moses made the ignorant, jealous and angry God Jehovah, who made the four-cornered flat earth.

Do Not Forget

Watson Heston's cartoon, which will appear in January issue. It is made especially for HIGHER SCIENCE, and the first he has made for several years. Mention this to at least twenty of your friends and advise them to subscribe now. If you have a profession or business, remember a small advertisement will not only be good for the magazine, but also pay for itself a dozen times.

Jamieson's Science of

Spelling is a vast improvement over the old style of phonetic spelling and can be acquired in seven lessons by mail. Prof. Jamieson is the distinguished Freethot lecturer

and debator. Write to him for particulars, 1716 Western avenue, Cincinnati, Ohio.

A Long and Painful

Article appears in one of the leading magazines, giving a list of reasons why the earth would take a flop the other way and revolve its poles at the equator, in case the Sahara Desert were allowed to fill with sea water. The writer and editor could have saved lots of valuable space and time, if they had happened to think that it was once filled with sea water, as its geological formations show, and that the earth turned right on around as usual.

Religious Cashiers

Were at one time very popular. The longer and louder a bank cashier could pray, the larger the bank's deposit; but all that has changed and now a religious cashier can only get a job in a second-class bank. In fact, he is considered a great danger to a bank and the people are afraid to put their money where there is any religion. Millions upon millions more have been stolen from banks by Sunday School Young Men's Christian C. C. Assn., goody-goody fellows than by any other class.

It Makes No Dif-

ference how much good reason you use to show a christian the cruelty, immorality and falseness of his religion. It is a waste of valuable time and energy unless the party is intelligent, in which case he would not be a christian; neither does it make any difference whether you feed a dog angel cake or carrion, his breath will smell just as bad or worse and will fill just as large a space with the germs of filth, disease and death.

Elizabeth Towne's

Experiences in Self-Healing, is her latest book, of seventy pages, price 50c., Holyoke, Mass. It is a very interesting book and as the name implies, shows how the mind can and should control the body or the power of mind over matter.

If Elizabeth Towne was a man for ten minutes, so that she could once grasp the idea that there is no power or motion except the expanding and contracting of matter by heat and cold, which is the only cause of ceaseless motion, she would find no place or use for a god, except to murder innocent babes, to bring famine, scourge and saviors upon the human race, number hairs on a dog's back and count dead sparrows.

Clarence C. Gates

Has a short article, "Mistakes Concerning the Earth," in October number of *Freethought* magazine, which comes the nearest being rational, simple truth, than anything we have yet seen outside of the procession theory and this magazine, in relation to the motion of matter. He seems to be possessed of that good, old, hard, horse sense which brushes aside all the hatched-up, borrowed mystery, so popular with ignorance. This young man appears to think the truth is good enough, and that seems to be what he is looking for.

The Theory of a

Procession of Planets does away with all possibilities of there being a god, "soul," spooks of any kind, or anything alive which is of such thin material that it can not eat. It takes heat to create life, and it takes food and a body in which to disintegrate it to make heat. As soon as people become intelligent enough to understand that all spook talk is for money, and that there is no motion except the natural motion of the expanding and contracting of matter, then they can drop all the mysterious "soul" talk and get down to the honest, simple truth of nature, and by thus getting rid of dishonesty and mystery, soon make the human race better.

There Are

Many Freethinkers, Liberals and Scientists who believe more good can be done in damaging religion by a mild, wishy-washy course of persuasion. HIGHER SCIENCE could never bring itself low enough to waste time persuading a person with no more brains than to believe in the low, filthy religion

of the bible or a person dishonest enough to pretend to believe. The former are mental cripples and the latter are moral cripples. What business have we to do with either. Point the finger of scorn at their ignorance and dishonesty and shun them. Nothing will do them so much good. We cannot even converse with such people without being injured, and they only deserve our contempt. It is not the wishy-washy people who are afraid to tell the truth, who make this world better.

Let Us Reason

Together, is a hundred-page book by Jacob B. Dunn, of Perrysburg, Ohio, which goes right down into the filth and faith of religion in order to show the rottenness of God, David, Solomon, Christ, christianity and its priesthood advocates and dupes in general. He is not afraid to tell the truth, by showing them to be liars, frauds and villains, living upon charity, forced, begged and frightened from weak-minded women and young, easily frightened children, and the low, ignorant and black colored races.

Elizabeth Cady Stanton,

The grand, intelligent, liberal writer of the past century, has returned to nature and as an organized center of action, her great mind has ceased to exist. Her teachings and the beautiful example of her long, honorable and useful life, will never cease to exist, while humanity exists. How sad to think she could not have lived until that fast approaching time when constant desire, endeavor and honest living will evolve within us the power to renew the human body, perhaps indefinitely. HIGHER SCIENCE extends sympathy to those near and dear who mourn for her, altho we all loved her and mourn her loss.

Right Generation

Is a 100 page book by Dr. M. E. Conger, 945 Trumbull ave., Chicago, which advocates a better condition of birth. He believes people should be 40 to 50 years old before they marry. Whether he is right or wrong in this unnatural belief, he certainly hits the nail squarely on the head when he

says, "Untold millions of lives and money have been sacrificed under the myth and mystery of religious schemes. The medical profession comes next, and this field is as inexhaustible as religion."

Jesus Christ

Taught and practiced the most immoral, dishonest and dangerous religion ever taught to mankind. He was the father of witchcraft, hell-fire and infant damnation. He taught his followers to "provide not for the morrow," which forces robbery and theft. He taught the dangerous doctrine which encourages crime: that a person may commit any crime or crimes during life and be forgiven on the deathbed or scaffold and go straight to glory. He had no father, home, wife or child, and was shunned by the intelligent class and finally hung for the good of his country.

If some hollow creed you doubt,
 Though the whole world hoot and shout,
 Doubt it.

If some nobler creed you see,
 Though the whole world say, "Let it be,"
 See it.

— *Vanguard*,

The charges brought against Mrs. Tingley and the Point Loma Homestead, by that Cruelty to Children Society in New York, have crumbled away by proofs to the contrary to such an extent that there are really none intact now. How they in far-off New York, who had never been west of the Hudson, could make such assertions, and yet be so good, is a mystery. — *Escondido Times*.

That the New York society is no doubt composed of a lot of inhuman christian brutes like Anthony Comstock, who believe that god brained 8,000,000 of the first born babies of Egypt in one night. All such people should be tied to iron stakes with baling wire and burned to death with green wood, and HIGHER SCIENCE hopes the times will come when they will be hunted and shot like coyotes. Give them some of their own medicine.



The *Seventh Trumpet*, which is still blowing for god and Hell, speaking of what we may expect, p. d. q., now says: "The Devil and his Angels become shut up in the Abyss till after the Millenium; then he becomes released to prove, that his imprisonment not yet humbled nor broke him; then he and every other unbroken, unrepentant, become cast into the Lake of spiritual Fire, burning with spiritual Brimstone. There they become humbled and broken to a true repenting Obedience." What a miserable "come-down" from genuine, old-fashioned hell-fire-and-brimstone. Rats! Who's afraid of spiritual fire or spiritual brimstone? It is made of the same material that a spirit is made of, which is nothing but talk.

We have only recently discovered that so-called electricity is not a fluid or substance separate or distinct from the one universal or everywhere etheric substance, but an *effect* or *jar* produced by vibration. — *Freedom*.

The new theory is so simple, that it is too bad to let such a good woman as Helen Williams mix it up like this. Read again *Laws*, xiii to xvii inclusive, as published in October *HIGHER SCIENCE*, and remember that it is the jar of expanding matter which makes the vibrations that travel thru the gas of expanded matter; but that electricity is a fluid manifestation of heat and a part of expanded matter; while light is but a motion running thru it or the jarring of the atoms which compose expanded matter.

The "Age of Reason," by Thomas Paine, is the greatest Freethought missionary book ever published. And as a means of spreading the gospel of mental liberty, the Liberal Club of this city will in the near future present to every priest, preacher, public school teacher and editor of Los Angeles, a

copy of that grand book that has broadened the mind of every man, woman and child who has had the good fortune to read it. To carry out this noble project will require nearly 1000 copies, which will cost about \$115. One gentleman has donated 500 copies at 10 cents each, and others have donated 200 more, leaving a balance of 300 copies, or \$30 and \$15 for distribution, a total of \$45. If the Freethinker would take as much interest in these matters as Christians do, that amount would be raised in a few minutes; but as they do not we would urge the friends of Liberalism to voluntarily donate this deficiency and let the good work go on. Contributions may be sent to Walter Collins, 639 E. 21st st. The books have been ordered and will be here about Jan. 1. It would be very appropriate to have them distributed before Paine's birthday on Jan. 29, 1903.

Higher Science. — The October number gives in thirty-four paragraphs a concise exposition of the editor's conception of cosmogony, or what he terms "Laws of Procession Theory." The formation of the tails of comets is also discussed, as well as other subjects from the standpoint of the Procession theory. Ten cents per copy. Los Angeles, Cal. — *Flaming Sword.*

The *Flaming Sword* is the champion of Cellular Cosmogony; i.e., that we live inside of a hollow shell, and that the outside is pure gold.

Here is a copy of "The Procession of the Planets," with the compliments of the inventor and author, whose ideas I like — some of 'em. He publishes *Higher Science* and sometimes he grows pessimistic and sarcastic about the Bible and preachers, etc. This I don't like. But when Franklin Heald sticks to his text he is a whole Bible with concordance, etc., thrown in. The price of the above book, paper bound, is \$1, and the address is 215 Stimson Block, Los Angeles. — *The Nautilus.*

Of course it would make no difference to our friend Elizabeth Towne, but it would make the biggest difference in the world to *HIGHER SCIENCE*, if all these gods, Devils, preachers and blessed saviors were females. In that

case it would be neither pessimistic or sarcastic, but the way it is now, and the way this old he-god gets angry and jealous and curses women, and the way they all, and especially the preachers, act towards our too willing Christian lady friends, is enough to break the great heart of Solomon. (Read "Crimes of Preachers," 25c.)

It seems that even those who expect to go straight to heaven when they pass away, will strain every nerve and leave no stone unturned to add a few days, weeks or months to their physical life. How strange!—*Philosophical Jol.*

It is strange in one way. Altho they hold to the faith of their ancestors, all thru their lives they know that after all, it is a lie. Every man feels the truth in his heart: that death is the end of him; and that man or even woman, never yet lived who had enough faith in religion to willingly give up life, unless they first became insane.

The Bible is the most corrupt, the vilest, the nastiest, the worst vice-breeding collection of literature that was ever placed in the hands of childhood.—*J. B. Wilson, Pres. N. L. P.*

God will always give us wisdom and strength to do and achieve with tremendous success when we do that which is nearest at hand to do.—*Star of the West.*

That is, he always takes the credit and part of the cash thru his ever-present and watchful agents, who live by charity and fraud. The strangest part of it all is, that even a woman, negro or boy under six years would expect to receive wisdom from a fool, who did not know the world was round after he had worked six days to make it.

A writer in *Saturday Post*, defending christian "science," or setting up the claim that the Jew witch-doctor Jesus was a scientist, says: "Who is to judge of the genuineness and merits of Christian Science? Shall we be influenced by those who have personal interests to subserve, dogmas, professions and creeds to foster; who have no knowledge of Christian Science other than that gained in the effort to find something

to say against it? One who could not sing or produce a harmonious sound on any musical instrument would not be deemed competent to criticise a great musical performance or composition." He might just as well say that a person has no right to criticise another for having the itch unless he has it himself. The editor of HIGHER SCIENCE is not an expert in producing harmonious sounds, and is not particularly charmed by any combination of the same, but he can see and understand that a snake is more affected by it than any degree of higher life. At the same time he has a better right to criticise the musician than the snake has. The snake is charmed or hypnotized, and simply stands up on his tail robbed at the time, of his reason if he ever had any. It takes music to "work" any religion, because it "hath charms to soothe the savage breast;" that is to hypnotize it and take away reason for the time. So a person who has never been cured by any special faith cure, or the power of mind over matter, has as good or even better right to judge of its merits, than one who has been hypnotized out of his senses by it. We look with loathing and disgust at the christian's own history of the doings and teachings of this half god who taught the most wicked, awful, low, filthy and brutal religion ever taught to human beings — the religion which burned with green wood every person attempting to introduce knowledge and humanity into the world. Scientist, indeed — god himself did not know the earth was round, and this fellow Jesus Christ did not know who was his own father, and believed in witches. Can we expect knowledge or science from a villain who taught witchcraft, hell-fire and infant damnation, and the doctrine of conduct towards virgin daughters elucidated in I Corin. vii ch. 36 v., New Version.

All matter is always in motion. It is either expanding by heat and swelling up from its center of convergency, or it is cooling, contracting and falling back to the center it came from. The falling back creates heat; the heat thus created expands it again, and the expanding sends it up and gives it a chance to cool, contract and fall again.

Ida Craddock, who has written some of the purest books ever written upon sex relations, has been murdered by that old inhuman monster, Anthony Comstock, the Cotton Mather.

witch-hunter, of the 20th century. Hounded by unjust imprisonment and threats, she finally took her own life rather than submit to further persecution. Proper steps should be taken at once to rid the earth of this moral blight, Comstock, who disgraces humanity by assuming the shape of man.

There is reason to believe that comets in general, for some unknown cause, decrease in splendor in each successive revolution.—*Chambers' Astronomy, Vol. I, p. 399.*

The Procession theory explains the reason very simply.

Atheism asserts that unbelief is a duty where evidence is insufficient, and that faith in dogmas relating to the unknown is foolish credulity. While Christianity defies the unknown, Atheism studies it, and offers to truth but one homage, the homage of investigation. — *Annie Besant.*

“Therefore shalt thou (Jeremiah) say unto them (the Rachabets, who were teetotalers), thus saith the Lord of hosts, the God of Israel: Drink ye and be drunken and spew and fall and rise no more, because of the sword which I will send among you; and it shall be if they refuse to take the cup at thine hand to drink, then shalt thou say unto them, Thus saith the Lord of hosts, ye shall certainly drink.” — *God.*

In speaking of the Lansing skeleton, *Prof. Warren Upham* says: “Man in the Somme Valley and other parts of France, and in Southern England, made good palæolithic implements fully 100,000 years ago, according to my estimate of the length of the ice age. When the earliest men came to America cannot probably be closely determined. It was during the glacial period, or possibly earlier. The Lansing skeleton affords probably our oldest proof of man's presence on this continent.”

The earliest live men no doubt came to America after it came up from under the sea where it was made, but there is no reason why man, other animals or vegetation may not drift to and be deposited with debris in any part of the world where there is water and afterwards be found in formations now far above sea level.

An interesting article in *Harpers* by Professor Snyder opens quite a new view of life possibilities to the layman. The professor holds that ferments are not caused by bacteria except in so far as the chemical products of these are present, and that these chemical products without the living bacteria will produce the same chemical actions as with them. Certain bacteria squeezed to death in a sand press resulted, he says, in a juice that placed in the proper medium produced the ferment just as the bacteria had done. He thinks that everything in the universe is active on this line of ferment. The interesting suggestion is, however, that these ferment processes can be reversed. Thus the ferment exhibiting itself in man's life and normally ending in old age and death, reversed at the proper time, would lead back to youth and babyhood. The fact is that fermentation is the beginning of life, and is nothing but the expanding of matter caused by heat. The heat is caused by friction, and the friction is caused by chemical reuniting or fluxing of separated elements of matter. There is and can be no motion except by the expanding and contracting of matter.

Did you ever notice how often the egotistic man wins, tho his intellectual capacity is inferior to the many around him who fail, and becoming his servants, use their brain and muscle for his benefit? — *Royal Road to Opulence*.

The Julian Miner of 28th published our November article, "Fissure Veins," in full.

The only way that the human being can be young again is to live again, and the only way to live again is to recreate oneself in children. — *Saturday Post*.

Los Angeles Leads! That lovely city of California may well boast of the "HIGHER SCIENCE," a monthly 10 cent magazine by Franklin H. Heald, and the latest successful Liberal Club on the Pacific Coast, and perhaps in the whole United States. That magazine always amuses us by some "poser" for the Nebular (ous) Hypothesis people. How Herman Wettsam, for instance, must dance around with the fifth moon of Jupiter (see p. 3) and call on his Pro-sychedy-

annis to save him! On page 17, October number, the magazine gives a fine account of the club, which Singleton W. Davis, one of the substantial Liberals there, confirms as follows: "We have in Los Angeles a fine Liberal Club that meets every Sunday in Brent's Hall — the best furnished in our city. We have able addresses and splendid music, all by home talent."— *Torch of Reason*.

Could the sacrifice of the life of Jesus Christ save one soul which an omniscient God knew would be lost?— *The Philosopher*.

If ye had faith the size of a mountain, ye might say unto this grain of mustard seed, be thou plucked up and be thou planted in the sea, and it should not obey you.

Writing to the editor of this magazine from his home at Carthage, Mo., Watson Heston, the Freethought artist and cartoonist, says: "'HIGHER SCIENCE' for the current month is at hand, and very much appreciated as usual. It is always full of meat clear thru, and I assure you I read it with keen interest. It is both restful and refreshing to pick up a clean, clear-toned and healthy publication like yours after glancing at the egotistical rot and nonsense in some of our so-called Liberal and Secular magazines and papers." * * *

"The Procession of Planets," when understood, disposes of all god's, supernaturalism and superstition. Thinking people, unless they have unmovable prejudice, must accept it; its truth is too plain and simple for denial. Let your light shine, for before it darkness must flee.— *C. Severence*.

It is dangerous to read New Thought papers. They are liable to open your eyes to the fact that you are a soul and being a soul, you should do your own thinking on every question.— *Let*.

A new Thot paper with a soul attachment, would be the same old rot, of which all religion is made. Do not forget that when a party is so thin that he can not eat and digest food, he is dead. It takes the expanding motion of heat to make the motion of life.

The following are extracts from a letter by Dr. Webster Groh of Hagerstown, Md.:

“ * * * I have read with great interest, a copy of your ‘Higher Science’ magazine. I do not understand all the details of your theory and the evidence by which it is supported, yet as far as I have examined, it seems perfectly natural that planets should continue their perpetual rounds of birth, growth and decay, heat radiation and cold; of gaseousness, liquification and solidification, just as they continue the rounds of their orbits; for we see them in all stages of progress — cold and heat. Knowing that no particle of matter was ever created or destroyed, but simply transformed into other shapes, we have reason to believe that the procession of outgoing expanding gas and the returning or falling of contracted or solid matter, is a reality.”

The true humility consists in putting the emphasis upon our inmost selves, and this leads to the highest pride. Jesus led an humble life, but his pride knew no bounds. — *Whim.*

There is a great difference between pride and vanity, and that of Jesus was vanity. He had nothing to be proud of.

We want a Masonic Cemetery and we want it badly. There is a good scheme afloat which we hope to see pan out after the new officers are in place.—*Freemason.*

Sure enough! Try and make your fellow men, who are not in your particular little ring, feel bad and lonesome because they cannot be buried in your lot. You who are so full of the milk of human kindness that it is liable to sour. It is not the man who is dead who cares a copper where he is buried, but it is his poor, silly widow who writhes under the intended insult. Never mind, the law should and will force cremation of all dead bodies as soon as superstition weakens a few more volts.

One of our religious exchanges which represents spirits, gives the following from a spirit to a lady who was inquiring as to condition of the defunct who have passed “over yonder.” Amongst other valuable information the spirit said: “They will come here with souls seared and darkened with stains

eternity can scarce efface. Listen, madam, do you hear those mournful, pleading voices? Perhaps, you remember the famine in Ireland many years ago when thousands and thousands had to come here because they had no food to sustain life there. Among them were many children, and some of them were so wasted and dwarfed that they have never grown any in body or mind all these years. Oh! oh! it's pitiful to see them hold out their little wasted hands, and look up at one so imploringly, their plaintive voices always repeating the words: 'Give me three grains of corn, mother, oh, just three grains of corn.' Why, it's enough to make stones weep as well as angels." And yet people who believe all this rot, never stop to wonder why their "dear heavenly father" and "blessed savior," who are all powerful, do not stop numbering hairs on dogs' backs and recording the falling of sparrows, long enough to give these poor, little folks a few grains of corn, or a basket of angel food and flagon of heavenly cream.

Josephus and several Fathers located the Garden of Eden between the Ganges and the Nile. Prof. Unger communicated to the Imperial Academy of Sciences at Vienna, his analysis of an Egyptian brick from the Dashour pyramid, viz: The remains of eight different plants, fishes, insects, cats, rats and other vermin! This brick was over 5,000 years old, and manufactured from slime taken from a close proximity to the very spot where the Lord must have got his dirt to make Adam. Now, the solemn question presents itself for prayerful adjudication: Which ought a Christian desire for an ancestor — a dead cat or a live monkey? — *Examiner*, Paris, Tex.

Commonplace people are in constant training for an audience. The great man recognizes no audience but himself; he trains for his own approval. — *Helen Williams in Freedom*.

"Procession of Planets" is the latest and greatest demonstration of material indestructibility, beginningless, endless and boundless with coherent force; it will inevitably end the bitter conflict between rational and supernatural propositions to account for all that is. To assume that a birthless

and deathless personality, intelligent, self-clothed with unlimited creative and governing functions, christened "God," spoke the millions of suns and their planetary systems into existence without "raw material," is too absurd for the belief of savages. On the other hand, to assert as many do, that the force co-existent with matter, occupying all space, is a God, personality intelligent, is equally incredulous, paradoxical unthinkable and forever at variance with common sense; to postulate an intelligent personality necessitates individual organism which instantly imposes limitation of locality and scope of action.

The following letter is from our well-known Los Angeles painter, F. E. Sturgis:

MR. F. H. HEALD: After re-reading much of the December Higher Science, I heartily concur in Prof. Jamieson's appreciative remarks in November "H. S." that "Each month it is growing better and better," and with him "I earnestly hope you may conquer a success." Planetary procession, or motion of matter as you expound, it appears to me, the most simple, rational explanation of the growth and dissolution of atomic forms extant, and seems destined to displace Nebular theory as a solution of the existence and continuation of the molecular universe.

Civilization is largely due to philosophical research and a potent factor in human advancement from barbarism, is the science of astronomy. Each new discovery relative to Astral bodies sets an epoch in intellectual destiny, and correspondingly severs a link in the chain of supernatural sophistry which no power can ever weld. Flat, four-cornered, restive earth philosophy could not maintain against revolving rotundity. Creation a myth, struggled desperately for supremacy as a "first cause" hypothesis in opposition to eternity of stellar evolution, but has no place among twentieth century sciences.

Is not a proposition that force is inherent in all matter from molecules to universe, and is as science demonstrates, capable of dissipating, reorganizing and operating all matter through eternity just as comprehensive to the mind as the

theory of a God personality, whose origin, location, quantities and character are absolutely unknown and so admitted by the sworn defenders of the doctrine?

“The fool hath said in his heart ‘there is no God.’”—
Bible.

The Philosopher, out of the depth of his mind asks, “Who and where is God?”

Matter indestructible exists. Force all forceful pervades all matter. This is a statement of a truth self-evident which beyond observation requires no other proof to enable the mind to grasp and retain without volition. A self-evident or demonstrable fact is to intelligence the “knowable”—a science.

A theory that matter and force can exist apart, and that force is the basic principle upon which infinite omnipotence is or can be predicated, has not that I am aware of, been demonstrated; it is not a universally, self-evident fact, nor is it possible to conceive of conditions whereby matter and force can exist independently of each other. This theory not self-evident and undemonstrated, must be to intelligence the “unknowable” and therefore unscientific.

With apologies to Dr. Geo. W. Carey’s poem, “New Name.”

‘Vibrations of etheric substance, light flashing thru regions
of space,
A girdle of something enfolding and binding together of space.
Words without wires transmitted, Ariel-winged, reason-sand-
dled and shod,
Some call it Electricity, the ignorant call it god.’

It is the impulse, sensation, motion or jar traveling thru the gas of expanded matter (which fills all space). The theory of a procession of planets explains it all and shows clearly that a god in and contrary to nature is an absolute impossibility, and that there is nothing outside of nature.

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