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OF
CALIFORNIA

HIGHER SCIENCE



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

JANUARY, 1904

FRANKLIN H. HEALD
 EDITOR AND PROPRIETOR
 215 STIMSON BLK. LOS ANGELES, CAL.

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HIGHER SCIENCE

OF THE MOTION OF MATTER

Issued Monthly
at 218, 219 and 220 Stimson Block

Entered at the Postoffice
at Los Angeles as Second-Class Matter

FRANKLIN H. HEALD, Editor and Proprietor

Vol. IV.

LOS ANGELES, CAL.

No. 1

THE DIFFERENCE IN METALS

The theory of a procession of planets, teaches us that at the sun all matter is the same, i. e., a perfect admixture of all the elements (16*) we know, and no doubt hundreds of others that we yet know nothing of. The expanding of this matter into gas by heat of the sun, does not separate it into its different elements, but it is simply pushed on up to the zone of nebulae clouds beyond Neptune, (23) where the most of it is crystalized into dust. Still it is not separated into its elements until it forms a great ball of dust which is to make a new world. This must then gradually heat (48) itself to a molten mass by a friction of grinding its mass of loose dust, as we see from Neptune to Jupiter. When the planet has finally melted and cooled enough to form a crust, then commences the process of separation of its matter into its so-called elements. The mountains are rising out of the water making dry land and mountains are leaving the waters in deep seas. The mountains wear away and settle into the deeper parts of the seas forming level stratas of sand, clay etc., which are afterward raised up into dry land and mountains, by the further contraction of the planet as it cools and becomes smaller. The process of separating into elements goes on until the planet bursts and gradually falls into the sun again, (160) when it is again melted and mixed as originally expanded from the sun. Now in the mean time, was there really any difference in the metals except in their relative density? What difference for in-

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

stance do we find between the two metals silver and gold? According to the procession theory they are only of different density. If we could make a machine strong enough to force a ton of silver into the space occupied by a ton of gold, it would then be gold. Why not? And what else could it be?

We can melt carbon to a liquid and if we can at that time surround it with a metal that will cool and contract without bursting, it will make such an enormous pressure that our carbon comes out a diamond. On the contrary if we have no pressure it is simply coke, carbon or some light form of expanded carbon, the expanded matter of the diamond.

I wish also to call your attention to the fact that altho scientists will tell you all gold weighs the same, it is not a fact. Some gold is heavier than other gold. You may make a fair estimate of this by its color, because all gold is not of the same color. If there are a certain number of atoms in a cubic inch of silver, then there as many more atoms in a cubic inch of gold, as a cubic inch of gold weigh more than a cubic inch of silver. Altho I am taking the chance of being laughed at, I believe the time will come when metals will be changed at pleasure by machines or devices for increasing pressure. I do not imagine that gold has ever been made by men from metal of less density, but I do believe that certain men have solved the mystery in their minds and are now endeavoring to make devices for securing the necessary pressure. Nature has a number of methods of producing the immense pressure required to compress matter into the small space or density of gold. A close examination of the immensely rich Yellow Aster gold mines at Randsburg, Cal., shows that there has been an enormous pressure from below, which has punched the original granite up thru miles and miles of stratification, while at the same time the pressure was held against it from every point of the compass as well as from below. One of the first problems I ever solved, in discovering the procession of

planets was, the formation and places of deposit of gold nuggets. The process is so ridiculously simple and so different from any theory ever advanced that there is no danger of anyone stumbling upon the solution before the editor of HIGHER SCIENCE has located what little he will need. The greatest danger to mining industries (which would be a great blessing to humanity,) is that different metals will be manufactured at pleasure as required, by pressure, as outlined above, without the great slaughter of human life and waste of time, required in hunting for the hidden crevices, where mountains have met and pressed matter into the small compass of gold and other metals, in their endeavor to force each other out of the way.

VEGETATION ON THE MOON

Prof. W. H. Pickering, of Harvard University, is credited, by the Yellow Journals, with having just completed "one of the most startling scientific books of the century," in which he takes the first steps to prove there is intelligent life in the moon. He sets up the claim that that there is both air and water, and says:

. . . . "The canals on the moon, as well as the canals on Mars, are processes of vegetation. They appear green in the spring, gray in the summer and yellow in the autumn. They are in no way due to the presence of large bodies of water.

The water necessary to the life of all growing vegetation is found on the moon in the deposits of water vapor and snow, which are plainly seen in all photographs ever taken of the lunar body."

In the first place it is impossible for any kind of life or vegetation to exist on the surface of the moon, even if air and water were ever so abundant, for the simple reason that the days and nights are each 336 hours long. We know that vegetation cannot exist on the earth when the nights are more than fifteen hours long, on account of the low temperature. Let us suppose then that this night were continued for 321 hours longer. I have estimated [HIGHER SCIENCE, Vol. I. No. 2, p. 7.], that the temperature would possibly be low

enough (between three and four hundred degrees below zero), to liquify air. This would not leave many green vegetables on the edge of the new moon, on a bright spring morning. But suppose there were all kinds of vegetables in great abundance in the morning of a lunar day that was to continue for 336 consecutive hours. How long would they last? They would all be withered and dead in 24 hours; in 48 hours take fire and burn, and in 336 hours the surface of the moon itself, would be fused into melted glass, giving the white appearance of the snow which he "plainly sees in all photographs ever taken of the lunar body". There would not even be a seed left to germinate during the next long night of 400° below zero.

The most absurd mistake he makes, however, is to suppose that the seasons exist on the moon the same as and at the same time as on the earth. The cause of the seasons on the earth, is the fact of the earth's trip around the sun. As the poles of the earth always point in the same direction, they are alternately presented to the sun every six months, which make the hours of light and darkness or the seasons. Now the moon has approached the earth to a point where one of its magnetic poles is attracted and held toward the earth, making one revolution in each orbit, or presenting every part to the sun in its orbit of 28 days. If it had any seasons they would each be 7 days long and only suitable for the cultivation of mushrooms and toadstools provided they could withstand the variation of something like a thousand degrees of temperature from 400° below to 600° above zero.

SCIENCE CANNOT (?) EXPLAIN

When the number and violence of magnetic storms are recorded and compared, it is found that they correspond to the spots on the sun, and go through the same period of eleven years. The conclusion seems almost inevitable; magnetic storms are due to some emanation sent out by the sun, which arises by the same cause that produces the spots. This emanation does not go on incessantly, but only in an occasional way, as storms follow each

other on the earth. What is it? Every attempt to detect it has been in vain. Prof. Hale, at the Yerkes observatory, has had in operation from time to time, for several years, his ingenious spectroheliograph, which photographs the sun by a single ray of the spectrum. This instrument shows that violent actions are going on in the sun, which ordinary observation would never lead us to suspect. But it has failed to show with certainty any peculiar emanation at the time of a magnetic storm or anything connected with such a storm.

A mystery which seems yet more impenetrable is associated with the so-called new stars which blaze forth from time to time. These offer to our sight the most astounding phenomena ever presented to the physical philosopher. One hundred years ago such objects offered no mystery. There was no reason to suppose that the Creator of the Universe had ceased His functions: and, continuing them, it was natural that He should be making continual additions to the universe of stars. But the idea that these objects are really new creations, made out of nothing, is contrary to all our modern ideas and not in accord with the observed facts. Granting the possibility of a really new star—if such an object were created, it would be destined to take its place among the other stars as a permanent member of the universe. Instead of this, such objects invariably fade away, after a few months, and are changed into something very like an ordinary nebula.

A question of transcendent interest is that of the cause of these outbursts. It cannot be said that science has, up to the present time, been able to offer any suggestion not open to question.—*Harper's Magazine.*

Both of the above mysteries (?), which the writer believes science is unable to even suggest an explanation for, I have explained by the theory or fact of a procession of planets, time and again, both in the 100 page book and in the three vols. of this magazine. December, 1901, p. 11; August, 1902, p. 10; January, 1903, p. 3 to 5, et al magazines, explain the cause of sun spots and the force received and measured at the earth at the same instant when light reaches us from the great explosions which make them. True there is no other explanation, but there can be no objection to this one, because it is so simple that it carries the perfect evidence of truth and anyone reading it who is intelligent and unprejudiced at once admits its truth.

The second proposition relative to the "new" or burning stars need hardly interest us until we settle

the workings of our own system but the magazine has explained it a number of times, the best being under the title "Burning Stars" [September No., 1902, p. 4], as well as a number of shorter articles on the subject. The precessional theory does not stop with planets but shows that suns are approaching each other in binary system [November No., 1902, p. 4; February No., 1903, p. 31, et al]; and that when they finally narrow their orbits down so as to graze each others surfaces as they go around each other with the speed of lightning, they must then, when torn to pieces and expanded largely into gas by the great heat they cause by grinding together, spread by centrifugal force and expansion of heat, over billions of miles of space and form either one, or more likely two, sun centers and thus each start again a new solar system. The action of the nebulae following the blazing of *Nova Percius* shows two brighter portions leaving each other almost with the speed of light evidently by the centrifugal force which their fall of thousands of billions of years generated. By measuring their speed at different times and noting the difference or the rate of slowing up, any competent mathematician should be able to tell, how far their centrifugal force will separate them [see July No., 1902, p. 153, "Orbits of Comets"].

Exod. XXII., 24.—And my wrath shall wax hot, and I will kill you with the sword; and your wives shall be widows, and your children fatherless.—*God*.

NATURE

JOHN A. JOYCE

Nature and her honest laws
 Gives to us the primal cause,
 That Religion cannot know
 With its superstitious woe.
 Art and Science lead the way
 To a healthier, brighter day
 When the thot of man shall be
 All he needs to make him free!

WASHINGTON, D. C.

FABLES FOR LITTLE FREE-THINKERS

Once upon a time, the Turtle sent word, that he would on a certain day, perform the miracle of walking on the waters. As he had already gained some reputation by beating the Hare in a foot-race, many of the creatures had faith to believe; so much indeed that a large gathering was present. The owl was there to look wise and give his opinion after it was over. The frog was there to croak his disapproval and the fishes and lobsters came for miles up and down the river. When the hour arrived the turtle stepped proudly out of the hazel brush on the shore and walked across on the heads of thousands of suckers which formed a bridge; occasionally stepping one foot on the back of a lobster.

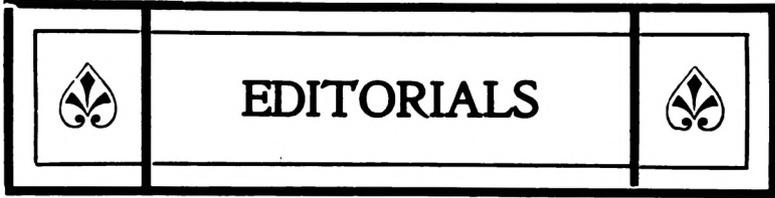
Moral—In order to perform a miracle, it is only necessary to have a large audience of suckers and lobsters.

Thirty-Three

Responsible men at Santa Fe N. M. sign a letter to the Los Angeles Times denouncing Rev. Norman Skinner of this city, as a most foul buncoer and villain and a liar and charity fed thief of the lowest order. Judging by the handle to his name, there can be but little doubt that these thirty-three honorable citizens of Santa Fe, know whereof they speak. Let the pious Los Angeles women now gather at his holy feet to shed bouquets and salt water. (Tears.)

This Magazine

Is procuring evidence to show that the Chinese and Japanese missions of this city and other cities on the coast, are no higher in the scale of morality than places of assignation, where the religiously inclined, being deadened to moral decency, by their associations with the ministry and priestcraft, go to select their male chambermaids and cooks. Now please do not get excited and do anything you would regret later, because when we get thru with our work and have gathered the facts on this subject, there will be nothing left for you, but to admit the truth.



Is the reason why churches are losing prestige and success and rapidly going out of existence, because they are open on Sunday?

Wm. Platts of Whittier, has two valuable scientific articles upon the formation of oil and coal in the *Whittier News*, which we hope to publish in this magazine as soon as we can possibly spare room.

Sampson was one of the prohibitionists mentioned in holy-writ and god allowed the Philistines to punch his eyes out and force him to grind corn on the merry-go-round, like a donkey, to amuse the crowd.

The *Pink Iconoclast*, of Colorado Springs, republishes our petition to Congress, asking for a law to protect women against the crimes of Priests and Parsons, and truthfully says if put in force it would delegate preaching and church matters to women where it belongs.

It is astonishing how soon the new crop of almonds become wormy in this climate. A few days ago we bought a pound labeled "new crop" and found worms in them 4 years old with whiskers 1-32 of a cubit in length. The label surely could not have referred to the worms.

We are glad to be able to announce that this magazine (as a 16 pager) is now self-sustaining, and you will hear no more complaint. We will also put every dollar added to its income into bettering the paper. We have not one-fourth enough room for the editor's expanding ideas.

Whiskey Hath Slain

Its thousands, but religion has slain its thousands of millions.

Great Objection

Has been made by certain (female) lovers of Jesus to our explanation of the Star of Bethlehem. Now if any Christian can explain the origin of this star, on scientific principles, any better than the procession theory does, we would be glad to see and publish the explanation and if it is not caused by heat or some degree of heat or lack of heat (expanding or contracting of matter) we will hand over our \$1000 and they can keep another priest in idleness a whole year.

A book called "*The Soundings of Hell*" by Rev. Sidney C. Kendall of this city, deals with the Chinatown question on the grounds "that prostitutes are made by patrons of the stage," when the truth is that ninety-nine times out of a hundred, they are made by priests and ministers and are, as the *California Voice* says "the daughters of Christian parents." These unsuspecting children are taught to have implicit confidence in the religious knaves who have no more honor than to live upon the charity of women and children and are therefore an easy prey to their passions.

"Return to Nature," is the name of a book by A. Just, published by B. Lust, translator from the German, at 154 E. 59th St., New York. It is, as the title indicates, a plea for a return to the habits of animals and christianity. He takes great stock in the habits of "our blessed Saviour." He argues that Jesus and his followers ate very little during the day, which is probably true, when we remember that they did no work to produce any income, and no doubt were compelled to await the coming of darkness in order to help themselves to what others had labored to provide for the morrow. He thinks we should sleep on the ground and in many other ways imitate animals and people who sleep in the

daytime and rustle something to eat, while those who earn an honest living are asleep. The whole book seems to oppose the evolution of man and recommend a return to animal life and especially to the improvidence, indolence, filthy habits and thievery of the supposed founder and early followers of christianity. People who have evolved into twentieth century civilization are not apt to be very much infatuated with the book, other than as a curiosity.

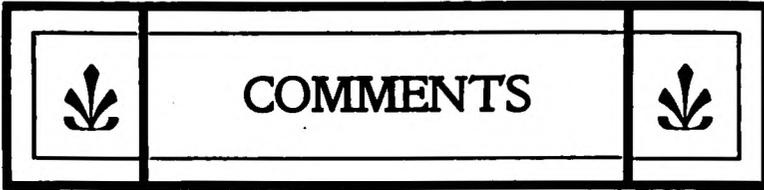
Henry A. Sullivan, the famous ex-monk author of "*Convent Cruelties*," and wife are visiting Los Angeles with a view of making this their home and headquarters for Mr. Sullivan's lecture tours. His new edition of *Convent Cruelties*, is much larger having about eighty pages. Price 25c. Address 427 So. Main St.

A little book called "*Gathering the Lord's Jewels*" has reached our table. It is made up of a lot of foolishness about people who are suitable material for Heavenly jewels. Amongst these are such old villains, drunkards, libertines and hypocrites as, Abraham, Sarah, David, Solomon, Virgin (?) Mary, Beecher, Comstock etc., which includes all the thieves, negro rape-fiends and other criminals who have taken advantage of vicarious atonement during the last 1900 years or so. Let us thank our lucky stars that his string of jewels will deliver the lower level, of a large quantity of filth.

H. H. Drake, of Amarillo, Tex., says, amongst other good things:

. . . . "Please put me down for one \$2.50 copy of your new *Procession of Planets*, and notify me when ready so I can send the money in advance. If your theory is correct it appears to do away with the need of a bible god in the making of the human race. Am I correct? . . . I am intensely interested in your theory, altho a novice in such matters." . . .

Our friend is correct; the new theory has no place or use for the chance and changing notions of a jealous and angry murdering god. There can be no god because he could not create himself.



It is not the young man who parts his hair in the middle that has a well balanced head.—*Downey Despatch.*

It is said that God will not leave himself without a witness. The personality of Deity is periodically renewed, in order that the two witnesses (the Father and the Son) may testify.—*Flaming Sword.*

Rats !!

Fred H. Smith of Fairbanks, Tex., says;
 "The much longed for HIGHER SCIENCE came today. When you publish your new edition of the *Procession of Planets*, I desire two of the \$2.50 copies."

Lust cannot be eliminated by legislation.—*Ram's Horn.*

If we can get our law thru Congress for the protection of women against the crimes of priests and parsons, it will eliminate a large per centum. Send ten cents for a blank petition. We are filling orders every day and they are being signed all over the U. S.

Miss L. M. Gibson of St. Elmo, Tenn., deploring the possible loss of HIGHER SCIENCE says;

. "I am so sorry. What is the reason the Freethot people are so careless? Must be because we are not afraid of eternal punishment. Please send samples to the following and oblige".

Jesus not only taught his immediate followers that prayer is essential, but he taught them how to pray. Throughout all ages man has prayed, and to the extent that he has prayed aright he has received a blessing.—*Christian Science Sentinel.*

Mistake. Only the ignorant pray in earnest and they are usually disappointed. It is the people who personally attend to business who succeed in receiving blessings.

If a merchant makes fifty cents on a turkey raffle and a church makes five dollars on a doll raffle, which one is the hypocritical, disgraceful gambler?—*Examiner* (Paris Tex.)

H. H. Drake of Amarillo, Tex., says:

. . . . Have received no HIGHER SCIENCE since September, and beg of you to send it if out. I do not want to lose a single one of your lessons."

Thos. Duell, of Idana, Kan., says:

. . . . "HIGHER SCIENCE is all right and is doing lots of good. I want you to send it regularly and I will pay for it soon. Have you the large book of Procession of Planets finished and what is the price. I must try and get it. Wishing you success.

. . . . When half the population of any English or American community has not the slightest connection with or interest in the Church, certainly its work can be looked upon as only just begun.—*Boston Congregationalist*.

And yet, a couple of hundred years ago, the Boston man who failed to show up at church at stated hours, or irreligiously kissed his wife or babe on Sunday, was piously burned at the stake or "pressed" to death, his carcass pitched over the precipice at Salem, and his soul (?) dropped into the lake of brimstone to burn forever. Let us hope that the finish instead of the beginning is near.

Editor HIGHER SCIENCE:

A little experiment which I myself have tried and which I suppose is well known to many persons consists in suspending a small piece of cotton cord or twine from the under side of the top of a glass show case. Now when the glass near the cord is slightly rubbed on the outside with the hand the cord will begin to move and by and by swing toward the glass and cling to it often wriggling about as if it were alive. I have noted however that this phenomenon is only manifested in what may be considered the winter months, say from October to March. It won't work in warm weather, but it will in cold weather, even in a moderately heated room. Kindly explain the cause of this action of the suspended cord.

J. CAL WATKIN

Kanawha Falls, West Virginia.

Will some electrician please explain the phenomena?

There are two elements in existence and they are known as spirit and matter. The spirit world, or the world that is spiritual in construction, and the world of matter that is material in construction. Spirit is as invisible to the material world as the material is to the spirit world.—*Christian Wisdom*.

This is exclusively christian wisdom and the fellow who wrote it has about as much intelligence as god had when he made the world out of nothing and thot it was flat.

W. H. Whinrey, Caplinger Mills, Mo., writes a most interesting letter which deserves to be published in full in gold letters; but alas, we can give but a few of its ideas in our limited space. He laments that the magazine has miscarried since June, and says of the theory:

“I received the *Proeession of Planets*, which I like very much, having already read it twice. It is most interesting and instructive. . . . I know of nothing pertaining to nature that does not coincide with your theory. . . . I see the old of every thing pass away and the new take its place, seemingly in one endless procession. Why should not planets live and die in the same way?”

Mr. Adam W. Carpenter, of Lincoln county, Kentucky, is the Prohibition candidate for Congress. He said to me that Lexington had stood highest in the list of crimes of any city in the United States, but that now Lexington stood third on the list and Los Angeles, Cal., stood first. It seems strange that a city named “The Angels” should be the worst place in the United States. You see that I am improving Lexington and I want that Infidel club at Los Angeles to bring up the reputation of that town. Where are you, Brother Secretary Walter Collins?—*Blue Grass Blade*.

Prohibition is the religious method of doing things and since our clubs have gotten into good working order, the City of the Angels has committed more crime against religion, by telling the truth, than any city in the United States. It also leads every city in intelligence; the calls for scientific books at the public library being the highest, 11.4 per cent. while the city of Salem, Mass. (headquarters of christian methods) is the lowest, being 3.4 per cent.

Mrs. A. De Peatt, of Ashland, Ore., writes :

“I have received several copies of **HIGHER SCIENCE** and I think it is fine. I find some things in it that I wish every thinking person in the world could enjoy reading. . . . I hope to hear that you will not discontinue, and hope to send some subscribers and a dollar sometimes to help the cause along. As you say, we should be able to support one paper on the coast to fight for the taxation of church property.”

Senator Burton, of Kansas, says : “Lynching has never suppressed crime, and never can, because the lynchers themselves are criminals. Nothing breeds criminals like lynching. It is not the crime of one man, or even a few conspirators ; it is the crime of a community. Its only lesson is to teach the young a disregard for law and a contempt for our courts.”

When the process law becomes so slow and rotten that criminals are not punished it becomes the duty of the people (who are the law) to take matters in their own hands, but they should include the crooked judges in their list of executions. From personal experience the editor of **HIGHER SCIENCE** knows that lynchings have entirely rid communities of horse-stealing and other crimes which had become intolerable.

The theory of a procession of planets is one of orderly growth and decay resulting from the continual expansion and contraction of the universal substance. The theory as set forth by Mr. Franklin H. Heald is, briefly, that the sun of our solar system continually sends forth expanded gaseous matter which, as it gets further from the sun, cools and condenses, and that somewhere in space, at least as far removed from the sun as the planet Neptune, the condensed matter forms into a planet, which, through the ages, progresses from stage to stage of growth until, like the earth, it becomes the habitation of man, and then on and on toward the sun until it becomes a dead world which finally falls back to its source, the sun, whose intense heat burns it up, or rather expands its substance to a gaseous matter which again goes forth to be reincinerated in some new planet. . . .

This little book, so far as it goes, does not conflict with a rational idealism as the basis of creation, and one can but wish that Mr. Heald had elaborated more particularly his conception of the individualizing force of nature. The book will appeal most powerfully to the materialist, and yet may be read with profit by all who are capable of appreciating the fundamental truth it proclaims.—*Phrenopathic Journal*.

Mrs. Carrie R. Chapman, of 110 C St., S. E., Washington, D. C., who is broad-minded and intelligent, pays us the following compliment :

“ Truth has a marvelous power of making itself felt in spite of what is said against it. There are two of us women here who are now ready for HIGHER SCIENCE and I inclose money-order. . . . One thing more, you have opened our eyes in regard to the President.”

Later, a lady friend writes of her :

“ Mrs. Chapman received the *Procession of Planets* and the October number (1902) of HIGHER SCIENCE. . . . Well, you should have seen her busy reading your book. She never stopped until it was finished, and I sat here beside her and heard her exclamations of enjoyment and appreciation. (Mrs. Chapman's husband was an astronomer.) She wants your new \$2.50 edition as soon as it is out.”

Henry Frank, mixes up HIGHER SCIENCE, in December *Mind*, as follows:

“ Modern scientists are beginning to teach us that the instinct is purely a chemical action, the result of repulsion and attraction (Should be expansion and contraction. Ed. H. S.), and that intelligence is only apparent to us, but is not an element in the life-activity of the lower forms, as for instance when a new born caterpillar climbs to the end of the branch where it may find a fresh bud on which to feed, instead of some dim intelligence leading it, the scientist tells us the caterpillar merely follows the light, while it is hungry, and as soon as it is fed, it climbs (?) back again. This means, says the scientist, that when light impinges the caterpillar it sets up certain chemical reactions of hunger. . . . This looks like intelligence. But the scientist tells us that it is merely chemical reaction”

This not only looks like, but is, intelligence or consciousness. It was however the lack of chemical action, because of his empty stomach which forced the pain of hunger or contraction of his Protoplasm. What he calls instinct is only a force of expanding and contracting, by the heating and cooling of chemical action of the food we eat. [See HIGHER SCIENCE March 1903, p. 66; January 1903, p. 7; June 1902, p. 10; and May 1903, p. 132].

Send ten cents to this office for a blank petition asking Congress to pass such laws for the protection of women as will compel all ministers of the gospels and priests of all the religions in the United States, to be or become eunuchs. Read "Crimes of Preachers."

J. W. Sawyer, Grand Junction, Colo., sends \$2.00 for the magazine and books, and says:

"Have received six copies of HIGHER SCIENCE and want to include them in the subscription. Can you furnish all back numbers? We are maintaining a reading-room for all Freethinkers and Socialists, and using it for the people's church, which gives bi-monthly dances in Turner's Hall. The pastor, J. Monroe Stewart, quotes Ingersol and Thos. Paine in his sermons. . . . The churchites like the capitalists are hastening their destruction, and it will not be long until their work is complete."

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G. W. Fox & Wm. M. Jack,
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