







## THREE LECTURES

— ON —

### "The Reality of the Unseen,"

— BY —

**DR. FREDERICK FINCH STRONG**  
(LECTURER ON ELECTRICITY, TUFTS MEDICAL SCHOOL)

Friday Evenings, January 11th, 18th, and 25th, 1907  
EIGHT O'CLOCK

## ANNOUNCEMENT.

Physics of Electricity,  
Electrical Physiology,  
Galvanic Electricity,  
Faradic Electricity,  
Sinusoidal Electricity,  
Static Electricity,  
High Frequency Currents,  
Mechanical Vibration,  
Solar Therapy.

X-Ray Therapy,  
X-Ray Technique,  
Skiagraphy,  
Radium Therapy,  
Finsen Light Therapy,  
Ultra Violet Light Therapy,  
Incandescent Light Therapy,  
Thermo-Therapy,  
Induction Coils.

**A**T the beginning of the present year the Boston Post-Graduate School of Electro-Mechanico-Therapeutics and the Boston Post-Graduate School of Physical Therapeutics united under the name of the **BOSTON POST-GRADUATE SCHOOL OF ELECTRO-THERAPEUTICS**.

This School, as now organized, offers to graduates in medicine thorough and comprehensive didactic and clinical instruction in the various departments of Electro-Therapeutics under the careful direction of competent instructors.

The course will cover a period of one month, and will include the above mentioned departments, and such allied subjects as seem appropriate and helpful to those pursuing it.

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tific proof of the possibility of Materialization, Telepathy and Clairvoyance. The permanence of the Ego and the relative unreality of the Objective.

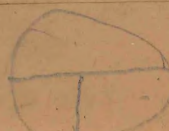
The lectures will be illustrated by brilliant experiments, some of which have never before been demonstrated outside the laboratory.

The course will be given twice during the ensuing year. Time and place to be announced later. For further information apply to

MRS. L. JENNIE MILLER,  
Lodge Room, 320 Huntington Chambers.

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for the inspection  
and the illustra-  
methods.

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Besides the Class-Room and Laboratory Work of the School, a large amount of practical instruction will be given in the several clinics with which members of the Faculty are connected, and in which students will come in close contact with the patients, and often assist in administering treatment to them.

The materialization of this School fulfils a long felt need for such an institution in Boston, and the management asserts with confidence that those wishing to familiarize themselves with this important and growing department of Medical Science, will find the course offered to be abundantly satisfactory to themselves and adequate to their needs.

### OFFICERS AND FACULTY.

FREDERICK F. STRONG, B. S., M. D., PRESIDENT, Hotel Ilkley, 176 Huntington Avenue. Lecturer on Electro-Therapeutics in Tufts College Medical School. *Lecturer* on the Principles, Technique and Therapeutics of High Frequency Currents and General Electro-Therapeutics, including Photo-Therapy, and the New Electron Theory and its relation to Radium and Radium Therapy.

FRANK B. GRANGER, A. B., M. D., VICE-PRESIDENT, 591 Beacon St., Visiting Physician in Charge of the Electrical Department, and Assistant Visiting Physician to the Nerve Department of the Boston Dispensary. *Lecturer* on the Principles, Technique and Therapeutics of Static Electricity, Radiography and Thermo-Therapy. *Instructor* in Clinical Electro-Therapeutics.

LOCATION OF THE SCHOOL AND MATERIAL EQUIPMENT.—The School is located at 532 Columbus Ave., and is easily accessible from all parts of the city. It occupies the two lower floors of a large brick house, and is well equipped with all electrical apparatus necessary for teaching purposes, all of which is of the most improved type. The forenoons will, for the most part, be given to clinical, and the afternoons to didactic instruction.

### GENERAL INFORMATION.

The Course of General Instruction will cover a term of four weeks, beginning on the first week day of each month.

The fee for the full term is \$60.

The fee for two weeks instruction is \$40.; for one week, \$25.

Terms for Special Courses given on application.

Arrangements must in all cases be made in advance by those wishing to take the course.

Students completing satisfactorily the full four weeks course will be given a certificate of attendance signed by the Faculty of the School.

The aim of the School will be to maintain the highest standard, and give to its students a thorough training in theoretical and clinical Electro-Therapeutics. None but graduates of recognized Medical Schools will be received as students.

Besides the instructions given in the departments already outlined, there will be from time to time lectures and demonstrations on allied subjects of interest and importance.



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Boston as an educational centre is too well known to require more than passing comment. Suffice it to say that its clinical facilities, schools, hospitals, dispensaries, libraries, churches, theatres, and places of general recreation and amusement are of the best. Its hotel, lodging and boarding accommodations are unsurpassed, and as moderate in expense as can be found in any large city. Those wishing it will be given every assistance in obtaining a satisfactory place of abode during their sojourn in the city.

Arrangements can be made for pursuing other lines of Post-Graduate work by those so desiring.

For further particulars address the Secretary,

FRANK A. DAVIS, M. D.,  
HOTEL BUCKMINSTER,  
Commonwealth Ave., and Beacon St., BOSTON, MASS.

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Telephone, 41530 Back Bay.







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EIGHT O'CLOCK

FABLTEN HALL, Huntington Chambers

30 Huntington Avenue, Boston, Mass.

ADMISSION, 25 CENTS



## SPECIAL

Arrangements have been made for a series of Lectures on

### "The Reality of the Unseen,"

By DR. FREDERICK FINCH STRONG,

(Lecturer on Electricity, Tufts Medical School.)

The Course will consist of three lectures given one week apart.

LECTURE I. The Nature and Limitations of Sense Perception. The nature of matter, and experimental demonstration of substance beyond human perception. The human aura made visible by scientific means.

LECTURE II. The Vibratory Nature of all Phenomena. Harmony and discord. Pitch and wave length. Invisible forces made visible by experiment.

LECTURE III. The Common Origin of Matter and Force. Universal Mind. Life in the Rock and in the Ether. Scientific proof of the possibility of Materialization, Telepathy and Clairvoyance. The permanence of the Ego and the relative unreality of the Objective.

The lectures will be illustrated by brilliant experiments, some of which have never before been demonstrated outside the laboratory.

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For further information apply to

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Lodge Room, 320 Huntington Chambers.

Strong proceeded to explain the function and the part they play in disease.

In a manner very interesting he described how they apprehend attack and eliminate foreign matter in the system, especially in the diseased matter in the disease forms of the anaemia. The address was concluded with a revolutionary account of the life in the ascending gradation of the animal life.

After the address a short discussion was opened during which Prof. Gage added a few supplementary remarks and expressed himself as highly gratified that this admirable address was given by a student, not a professor.

Mr. Strong had a number of his slides for the inspection and the illustration of the methods.

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tion. Musical vibrations or sound waves occupy eleven octaves and range from 16 to 32,000 vibrations per second. The Electrical oscillations are made to vibrate to the "A" of the twenty-first octave,—the "C" of which is about one million per second. Seven distinctive and delicate perfumes—true floral perfumes,—not coal tar substitutes,—are arranged in flasks connected with a nebulizer and compressed air tank. We have no "perfume scale" but by experiment we usually find for each patient a particular floral fragrance which is soothing and restful. Heavy scents are not to be used,—only a trace of fragrance,—a mere flower-breath,—is necessary. When this is determined and employed we have the patient's consciousness receiving simultaneously or "symphonically" soothing and restful vibrations effecting the centres of sight, sound, smell and vitality. The sense of luxurious relaxation and harmony is most grateful to a nerve-racked patient, and is a most delightful and restful experience even for a perfectly healthy individual.

While designed especially for the treatment of nervous and mental derangements, this method has proved of great value as a natural sedative in the relief of pain and congestion. In these latter conditions local electrical treatment may be used in addition to the general routine.

A complete equipment for this method of healing is being installed in the new University of Music at 221 Newberry St., Boston. Dr. Strong will have personal charge of the work and will receive patients for treatment daily except Sundays. All treatments by special appointment. The prominent musicians connected with the University will furnish music in special cases.

For terms, appointments, or arrangements for private demonstrations of the new Symphonic Healing, apply to

PROFESSOR ROBERT DOUGLAS,  
University of Music of America,  
221 Newberry St.,  
Boston, Mass.

## "Symphonic Healing"

A new method for the treatment of disease by the simultaneous use of musical, colored light, delicate perfumes, and electrical high-frequency currents, all the vibrations being harmonically related and attuned to the receptivity of the individual patient.

Health and Harmony are terms so frequently associated as to be often employed synonymously; without harmony perfect physical and mental health is impossible.

"The Human organism may be compared to a symphony orchestra,—the different organs representing the various instruments, while the individual players may be likened to the nerves and ganglia governing each function, controlled and supervised by the conscious intelligence through the central nervous system (analogous to the Conductor, or Musical director). Suppression or alteration of any one function disturbs the equilibrium of the whole body, just as a single instrument playing out of tune will destroy the harmony of an entire orchestra." (Quoted from "Modern Electro-therapeutics," by Dr. F. F. Strong.)

The healing of discordant mental and physical conditions by the use of color, music, perfume, etc., was used as a method of therapeutics in Ancient Greece and was mentioned by Pythagoras and Hippocrates. It was used not only to restore but to promote and maintain physical and mental health. The recognition and use of this harmonic relationship between the human organism and its environment had undoubted influence in producing the perfection of body, clarity and poise of mind and flexibility of the emotions for which the ancient Greeks were noted.

The present age, with its crash and jar,—stress and strain,—headache and nerve tension,—is the direct antithesis of the "Golden Age" of Greece. That this era of iron and brass should have produced a type of disease unknown to previous periods is only natural when we consider the discord in our



environment and its effect on individuals. We are often called a "Race of Neurasthenics"; nervous exhaustion, insomnia, melancholia, etc., are manifestations of a too common condition resulting from our abnormal methods of life: (often called "Americanitis").

Music, flowers, cheerful surroundings, etc., have long been recognized as valuable factors in restoring nervous invalids to health, but the use of harmonically related vibrations of different types tuned and adapted to the various nerve centres of the patient is an entirely modern idea. It has recently been formulated into a scientific system, the remarkable results of which would seem to justify the correctness of the theory upon which it is based. Briefly stated this hypothesis is as follows:—For every individual there is a keynote or rate of vibration to which the various nerve centres normally respond; and which corresponds mathematically to a certain note in the diatonic or septenary scale. Occultists of all schools and even modern psychologists recognize this individual keynote, and it is a well known fact that themes played in a certain key will affect a given individual more intensely than if placed in any other part of the scale. Many celebrated composers have had favorite keys in which their best compositions were usually placed. Healing music must be produced from instruments like the organ which give sustained tones producing a sense of relaxation and repose, whereas the percussive effects as from the piano, mandolin, drum, etc., are exciting, and like all stimulants are followed by a weakening reaction.

In addition to the musical vibrations we have (1st) those which affect the sympathetic nerves controlling digestion and circulation; these are electrical vibrations and produce no conscious sensation; (2nd) light waves which produce harmonious effects through their respective colors; and (3rd) the complex vibrations of an (at present) unknown nature, which act upon the nerves of the sense of smell.

Dr. Frederick Finch Strong, lecturer on Electricity at Tufts Medical School, has been experimenting along these lines for the past fifteen years, and has perfected a system in which nervous and mental diseases are successfully treated by what is known as "Symphonic sensation." Every nerve centre of the patient is made to respond to the particular

keynote or rate of vibration which is found to produce the most perfect sense of rest and relaxation. The technique employed is as follows,—

The patient reclines upon a couch in the centre of a room the walls of which are draped in black; the ceiling is white and is illuminated indirectly by banks of lamps, every seventh lamp being of the same color; the colors employed are as follows, each color corresponding mathematically to a note in the diatonic scale:—Red, (C); Pink, (D); Orange, (E); Yellow, (F); Green, (G); Blue, (A); Violet, (B). This arrangement differs slightly from the spectral colors as ordinarily given: pink being introduced between the red and orange, and indigo being omitted. The couch upon which the patient reclines is connected with a special electrical high-frequency apparatus invented by Dr. Strong, which gives the seven rates of vibration corresponding to the diatonic scale of the twenty-first octave. These are used to restore or promote harmonious action in the nerve centres which govern organic function (digestion, circulation, etc.). The patient is first relaxed by a few minutes of general electric treatment. The room is then flooded with soft light, one tint after another, until a color is obtained which produces a sense of rest and harmony upon the patient. This is taken as the "keynote"; it varies with different patients, but is always the same for a given individual. Soft music is then played in a lower octave of the same key. Soft adagio effects from muted strings, and themes in major keys being usually selected. If a Victrola be used the correct key may be obtained by adjusting the speed of the motor. Still better results may be obtained from the instruments themselves if suitably played. The choralcello, pipe-organ, harp, cello, violin and zither are the best instruments for the production of healing music.

The electrical apparatus is now adjusted to the "keynote" of the patient in the appropriate octave. For example, if the patient is most effectually relaxed and rested by soft blue light his "keynote" will be registered as "A": (blue, in the color scale,) (light vibrations are in the 49th octave,—from three hundred trillion to six hundred trillion per second.) Music is then played in the key of A Major,—the patient's musical taste being consulted in the selection of the composi-



tion. Musical vibrations or sound waves occupy eleven octaves and range from 16 to 32,000 vibrations per second. The Electrical oscillations are made to vibrate to the "A" of the twenty-first octave,—the "C" of which is about one million per second. Seven distinctive and delicate perfumes—true floral perfumes,—not coal tar substitutes,—are arranged in flasks connected with a nebulizer and compressed air tank. We have no "perfume scale" but by experiment we usually find for each patient a particular floral fragrance which is soothing and restful. Heavy scents are not to be used,—only a trace of fragrance,—a mere flower-breath,—is necessary. When this is determined and employed we have the patient's consciousness receiving simultaneously or "symphonically" soothing and restful vibrations effecting the centres of sight, sound, smell and vitality. The sense of luxurious relaxation and harmony is most grateful to a nerve-racked patient, and is a most delightful and restful experience even for a perfectly healthy individual.

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## Electricity and Life

By FREDERICK FINCH STRONG, M.D.

Lecturer on Electro-therapeutics, Tufts Medical School, Boston

SCIENTIFIC progress during the past three decades has, perhaps, surpassed that of all preceding ages; but we are still in the kindergarten class when we compare what is known with that which is still to be discovered. To *discover* means practically the same as to *uncover*, implying that the truth or fact was there all the time but was hidden, covered, occluded, or *occult*; and is it not a fact that many of the electrical discoveries of to-day would have been regarded as *supernatural* or *occult* by the scientists of a few generations ago? Of course there is nothing supernatural in the strict sense of the term, but many things remain *occult*, altho science is daily uncovering new and hitherto undreamed-of marvels.

There exist great *Cosmic Forces* of which we still know but little. Gravitation is one of these; we know something of its laws and the results of its action, but nothing whatever of its real nature. Electricity is another; of this we know somewhat more, and we now recognize it in a variety of forms, as light, heat, chemical action, magnetism, etc., but its *true nature* is still a deep mystery. *Life-force* or *vital energy* is another great Cosmic Principle; thru its action electrons are formed into atoms, atoms into molecules, molecules into crystals and chemical compounds, and these into the bodies of plants, animals and of

nized this force; it is quite unorthodox to even suggest that it exists—simply because we have not been able to measure and record it by our still comparatively crude laboratory instruments.

A few years ago, when almost every sci-

and frequency during some research work. He prophesied that when electrical oscillations were fully understood and applied by physicians that a *universal healing agent* would have been obtained—one which would so increase the vital energy and resistive reaction of the human body as to enable it to throw off all disease. The present writer, acting on this hint, constructed a high-frequency apparatus, tested it on a number of patients and reported his results to a local medical society in 1895. So far as can be learned this was the first clinical work ever done with the Tesla Current, altho d'Arsonval in Paris was then experimenting with his relatively low voltage currents, produced from 3,000 cycle alternators. Later, Apostoli, Denoyes, and others reported remarkable results from the currents induced in the bodies of patients placed inside of huge solenoids or wire coils thru which high frequency currents were passing. The effects obtained were: increase of strength, appetite and weight, induction of natural restful sleep, and increase in tissue combustion and elimination.

Early in 1895 the author devised the first *Vacuum electrodes* for applying Tesla currents to the patient. To-day thousands of physicians are using this device, often *mis*calling it the Violet-ray Treatment. This is of course a misnomer, the violet light in the tube having nothing whatever to do with the healing effect pro-



Demonstrating in a Startling Manner, the Appearance of the Human (the Author's) Body When Charged With a High Frequency Current. This Picture Shows Exactly How a Person Charged From a Powerful High Frequency Apparatus Would Appear to Our Unaided Eyes, Were They Attuned to Respond to Vibrations of One or Two Millions Per Second, Instead of From 380 to 760 Million—Millions Per Second (the Range of Normal Human Vision). This Display Greatly Resembles the Natural Aura Surrounding the Human Body, but which Average Persons Can See Only by Gazing Thru Special Chemical Screens.

entist was a materialist, we believed in nothing but matter and force; to-day science recognizes the necessity of a third basic principle, *Intelligence* or *Mind*; without this we can satisfactorily account for none of the facts of the world in which we find ourselves. Its manifestations in matter thru the *Cosmic Forces* give us at least a working hypothesis of life.

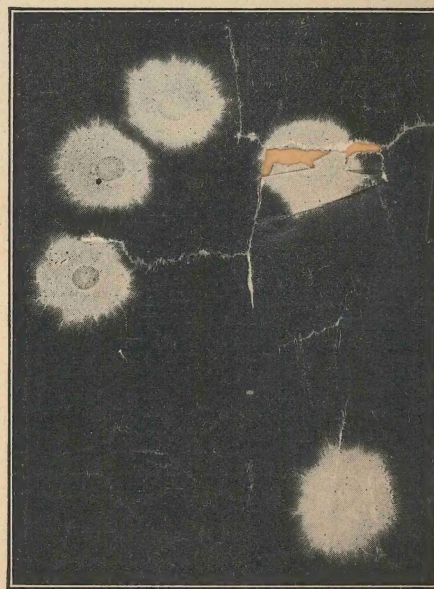
As electricity has been the great field for the investigations of the past century so will the nature and manifestation of the *Life-force* be the source of the discoveries of the future. Even to-day we may hazard a few statements regarding this hypothetical *Prana* or *Vital-force*. For example, it comes to us—like all other active forces—from the Sun. It is stored and transmitted by plants and by the oxygen of the air, and in the human body it appears to be distributed thru the great Sympathetic Nervous System to every organ and tissue of the body. The Sympathetic nerves radiate from the Solar Plexus—our *Sun-center*. If bacteria or poisons interfere with this circulation, as for example in *infantile paralysis*, the muscles from which the supply of life force is cut off, lose their power of reaction and wither away. It is in this connection that we may study the action of certain electric currents as applied to the treatment of disease. It would seem that certain types of alternating currents of high frequency and voltage greatly facilitate the distribution of this vital principle (Nerve-force, *Prana*, or whatever you choose to call it), and this explains the action of one of the most valuable of recent medical discoveries.

In 1893, Dr. Nikola Tesla described in a magazine article the remarkable effects upon himself and his assistants resulting from their exposure to the action of alternating currents of exceedingly high-voltage



Electrical Autograph of the Human Hand, Showing the Radiations from it When Charged with a Powerful High Frequency Current.

man. We have no name for this force, but thru its action the great Cosmic Scheme of Evolution goes on. In India they call it by a Sanscrit name—*prana*. Here in the Occident we have not yet officially recog-



A Striking Electrical Autograph of the Tips of the Four Fingers and Thumb of the Author's Left Hand. A High Frequency Current Charged the Hand while It Rested on a Photograph Plate, With the Results Shown.

duced by the transmitted electrical oscillations.

(Continued on page 831)



DEPARTMENT OF MEDICAL THERAPY or  
SYMPHONIC HEALING

—o—

Dr. Frederick Finch Strong, Lecturer on Electricity at Tufts Medical School, in charge of this department, has been developing this system for the past fifteen years. He is well known as a pioneer in electricity as applied to human healing, especially so in his successful work with what is known as "high frequency currents," and has perfected something for which the world has been waiting for centuries.

The present age with its crash and jar,—stress and strain,—headache and nerve tension, is urgently in need of new and rational methods of treatment. For those who are unfortunate enough to possess sensitive, high-strung temperaments, especially to the overworked musician and singer, this department will come as a veritable boon.

The high frequency currents introduced to the medical profession by Dr. Strong in 1896 are not true electrical currents, but are rapid vibrations electrically generated which seem to replace or augment the vital currents generated by the body.

This treatment, in its most modern form, and modified by other applications, is not a stimulant but acts as a general vitalizing agent, and no sense of shock whatever is felt as with ordinary electric currents. It relieves congestion, promotes healing and alleviates pain. Impaired vitality, due either to age or overwork, is absolutely benefited by this method, and the whole nervous system is tuned up. In throat troubles of an inflammatory, nervous, or reflex nature, and particularly where the bodily force or vigor has been weakened by vocal abuse or bad training, it is of incalculable value. In fact, it is the latest scientific word in this field of research.

Treatments may be had either by Dr. Strong personally, or by trained assistants under his direct supervision, according to the nature or seriousness of the case.

Appointments and terms upon application.

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May 11. 1919

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Dr. Frederick F. Strong

Subject:--Psychic Problems in the World War

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BANJO AND MANDOLIN CLUBS.



*Cornell 1893*

GLEE CLUB.











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Cornell 1892.



THE TOWN CLUB  
COMMUNITY HOUSE, HOLDEN.

Friday, March 23, 8 P.M.

Town Club members and guests will be treated to  
an interesting talk by

Dr. Frederick Finch Strong, Tufts College.

"THE SCIENCE OF THE NEW AGE"

In this era of revolution, the realm of human  
thought and activity, the material and spirit-  
ual, may well occupy our attention.

"Things are the mind can't comprehend;  
Things be man's knowledge can't construe,  
And only faith in some high end  
Can hold you to its purpose true."

Beautiful electrical experiments will be given  
in illustration of the text.

A full attendance is desirable. It will be  
your privilege to invite the ladies as guests.

Cordially yours,

The March Committee.







1915-17

DR. FREDERICK FINCH STRONG  
176 HUNTINGTON AVENUE  
BOSTON, MASS.

Doubtless in the course of your work you have frequently been called upon for help and spiritual council by earnest souls who are in danger of being driven out of the Church into agnosticism by the apparent conflict between the teachings of religion and the statements of Science. Arguments based on faith, analogy and recorded teachings do not weigh with these perplexed souls when opposed by the apparently contradictory evidences of the scientific laboratory.

The message I present in the form of a lecture, (a prospectus of which I enclose,) proves by experiment that the most recent discoveries of modern science are in accord with the basic facts of religion. By quotations from the most eminent modern scientists and by the brilliant experiments performed on the lecture platform, I show the idealistic and spiritual tendencies of the "Science of the New Age."

This lecture is presented with a serious purpose, but is nevertheless of a popular nature on account of the experiments shown. It is suitable for delivery under the auspices of Churches, Church Societies, the Y. M. C. A., Lyceums and Chautauquas.

My large Tesla Coil can be used in any hall equipped with the ordinary 110 volt alternating electric light current; no special wiring being required.

For details as to terms, dates, etc., write to me personally at the above address. The enclosed press notices will give you further information.

Very truly yours,



REV. GEORGE W. OWEN, PASTOR  
RESIDENCE, 40 OAK STREET  
TELEPHONE, 7 W

**First Congregational Church**  
HYDE PARK, MASSACHUSETTS

JOS. KING KNIGHT, CLERK  
1323 W. RIVER STREET  
TELEPHONE 439

February 3, 1917.

Dr. Frederick Finch Strong.  
176 Huntington Avenue,  
Boston, Mass.

My dear Dr. Strong:-

Many of our people were delighted with your lecture on The Science of the New Age, given in our church on January 21, 1917. I think the thing that impressed them most through the wonderful experiments and your explanation was the change in the theory of scientists from the material atom as a basis for the universe to the electron, which may be called spiritual. You have a great mission in this field, which you are well qualified by knowledge and experience to fulfil.

Sincerely yours,

*Geo W Owen*



IN CITY  
By Lillian  
Whiting.

To the Editor of The Republican:—

The horoscope of your charming city reveals among other "favorable aspects," as our friends, the astrologers, say, that on the evenings of March 29, 30 and 31, Springfield will be able to hear a most unusual lecturer, Dr. Frederick Finch Strong of Boston, lecturer on electricity at Tufts college, who will give this series of three lectures on "Force and matter in the unseen," "Life and intelligence in the unseen," and "The science of the new age." The initial one of this course, with a brilliant series of laboratory illustrations by means of the high frequency current, and an array of tubes and mechanisms, is designed to show to how far a degree laboratory research has already carried us to regions beyond the immediate recognition of the senses. For instance, Dr Strong presents illustrations, in wonderful electrical experiments, that demonstrate the actual existence of some 40 octaves vibrations that lie beyond the senses. In connection with these demonstrations the lecturer will employ his million-volt high-frequency coil, one of the largest that has ever been shown, which produces a discharge nearly four feet in height, in the form of a branching tree of electrical flame.

The second lecture is devoted to the further study of these finer forces, revealing that vibrations too subtle to be apprehended by the senses can still have their reality demonstrated by laboratory experiments. The ultra-violet rays will be shown.

The closing one, on "The science of the new age," deals with the super-normal powers of man. These, when called into being, are in correspondence with the next higher, or the super-normal stage of environment. The existence of etheric matter will be demonstrated by a series of wonderful experiments that fairly open to one a new world. In fact, the possibilities of this superphysical world, on which Edison, Tesla, Marconi and other of the great scientists draw, are presented by Dr Strong in a manner so clear and so intelligible that his lectures are held to be a signal extension of latter-day knowledge. For by spectacular experiments with the properties of the laboratory it is revealed that just beyond the realm of sight, hearing and touch; just beyond the visible, the audible, the tangible,—lies a marvelous realm that we have not even begun to explore. New and fascinating fields of thought, as well as speculation, are opened. The very conditions of man's life, in the future, are suggested with a force and a rational interpretation that offers its peculiar zest of interest.

Dr Strong is the son of Rev Dr T. C. Strong, who during his son's early years was the president of Tufts college. As a lad the future scientist had so decided a penchant for chemicals and for anything savoring of the laboratory, as to be regarded a dangerous, not to say undesirable member of the household and one who required not little surveillance. Happily various incipient conflagrations and explosions were avoided and his subsequent study in Cornell, Boston university and later some years in the university of Berlin, adjusted his erratic experiments to some degree of applied science. His mother was a sister of Francis Miles Finch, the author of that never-to-be-forgotten poem, "The Blue and the Gray." For eight years Dr Strong held the chair of electro-therapeutics in Tufts college. His health gave way and he made a long sojourn in Florida, where he engaged in perfecting his own process for manufacturing paper from the palmetto and from sea grass, a matter on which he is now engaged. Of one of Dr Strong's notable lectures in Boston the Transcript of this city said: "A few decades ago science attempted to interpret life and consciousness in terms of matter and force; to-day we recognize matter and force as manifestations of the one divine life, ever evolving through later forms into new glories of crea-

tionary progress

## The Realms Beyond the Senses

### The Reality of the Unseen

A SERIES OF THREE LECTURES BY

Dr. FREDERICK FINCH STRONG

LECTURER ON ELECTRICITY  
TUFTS MEDICAL COLLEGE, BOSTON

Thursday, Friday & Saturday Evenings

March 29, 30 and 31. at Eight o'clock

Odd Fellows Hall, Pyncheon Street, Springfield, Mass.

GIVEN UNDER THE AUSPICES OF  
THE THEOSOPHICAL SOCIETY

The general purpose of Dr. Strong's Lectures is to prove that the "Occult" Science of to-day will be the "Orthodox" Science of to-morrow, and to indicate by brilliant and spectacular experiments some of the ways through which this change is being brought about.

Still in his early youthful maturity, the future of Dr Strong may well be watched for results in his especial line of electrical science.

LILLIAN WHITING,  
Boston, March 9, 1917.

*Republican*  
*Mar 22. 17*  
THE SPRINGFIELD

against him, instead of the usual charge of drunkenness. After leaving jail, McAvoy went to the Orchard, where he was arrested yesterday afternoon by Officer J. H. O'Brien.

Dr Frederick Finch Strong, lecturer on electricity at the Tufts medical school, Boston, will give a series of three lectures, under the auspices of the Theosophical society, in Odd Fellows' hall, Pyncheon street, the 29th, 30th and 31st. The general purpose of Dr Strong's lecture is to prove that the "occult" science of to-day will be the "orthodox" science of to-morrow and to indicate by brilliant and spectacular experiments some of the ways through which this change is being brought about. The subject for the first lecture will be "Force and matter in the unseen," the second "Life and intelligence in the unseen," and the closing one will be "The science of the





## “The Science of the New Age.”

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A LECTURE BY

DR. FREDERICK FINCH STRONG,

*Lecturer on Electricity at Tufts Medical School,  
Boston.*

This lecture is intended to prove by brilliant and spectacular experiments that,—outside of the everyday world which we see, hear and touch,—there is a far more real and wonderful realm pressing upon us on all sides; a realm which we are just beginning to recognize through scientific discovery, although all the great philosophers and religious teachers of the ages have maintained that it exists.

The era into which the world is entering bids fair to inaugurate revolutions in all fields of human thought and activity; this is already apparent in the changed attitude of eminent scientific men toward the deeper things of life, and it is not too much to say that the results of modern laboratory research have infused a note of spirituality into the hitherto materialistic realm of physical science.

Dr. Strong's object in this lecture is to show the harmony between the latest scientific deductions



and the real fundamental truths of religion. Wonderful and beautiful experiments are shown illustrating the recent discoveries which have carried scientific minds out of the realm of "dead" matter into a world of ever-living, ever manifesting spirit.

Many persons of the present day, especially young men, are being driven from the church because of the apparent incompatibility of the teachings of science and religion. This lecture is an especial message to souls at this critical stage. By experiments and logical deduction it is shown that in this "New Age" science and religion will work hand in hand. The laboratory of the future will deal with forces and phenomena entirely beyond the present range of human consciousness, and the scientist will become the great ally of all true teachers and preachers of religion.

All religions are united by certain essential beliefs, namely the "Fatherhood of God,"—the "Brotherhood of man,"—the beneficence of the Divine Plan, and the evolution of the human soul. All of these truths will be recognized and taught by the "Science of the New Age."

It is a lecture compiled for thinking people, yet even young children witness with intense interest the many beautiful experiments employed in illustrating the various phases of the subject.

#### PRESS NOTICES.

*From the Boston Transcript—("Science at Greenacre").*

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"A large and attentive audience listened to Dr. F. F. Strong's lecture on 'The Reality of the Unseen' at Huntington Hall last evening. The speaker stated that the days of antagonism between science and religion were passed: 'We hear little today of the so-called scientific materialism of the last century'; 'the latest discoveries of science tend to confirm the hypothesis of the spiritual nature of the universe.' 'A few decades ago science attempted



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Dr. Strong’s object in this lecture is to show the harmony between the latest scientific deductions



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THIS lecture is designed to show how far our present laboratory science has carried us into the realms beyond the senses. The subject of "Vibration" will be considered, and Dr. Strong will show by experiment how science has demonstrated the existence of some forty-six octaves of vibrations of which our senses tell us absolutely nothing. In this connection he will use his Million-volt High-frequency coil, one of the largest ever shown on the lecture platform; it produces a marvelous discharge resembling a branching tree of electrical flame nearly four feet in height.

SPRINGER

## INTELLIGENCE IN THE UNSEEN

### CHURCH NEWS.

Dr. Fred F. Strong is coming the 14th of January. He will deliver the third and last of his series of lectures on the "Realms Beyond The Senses." During the course of the lecture he will take you on an imaginary visit to a laboratory of the future. He will also tell how the human aura was made visible. Dr. Strong is one of the foremost authorities on medical electricity, in the country; the December number of the Electrical Experimenter, one of our foremost magazines on the subject contains a cut of Dr. and Mrs. Strong and their million volt, high frequency coil in full operation. No one I know of, could be more capable of giving you spiritual Truths from a scientific standpoint, than Dr. Strong, a clear thinker and a close student of the Occult Sciences a man you must see and hear, to really appreciate his worth. The electrical experiments alone are the result of many years of study and you cannot afford to miss these as this will be your last opportunity to hear Dr. Strong, as he is about to go on an extended tour across the continent, where he will settle in Krotona, Cal., to work under the auspices of the Theosophical Society. A wonderful laboratory is being prepared for him at Krotona to carry on the research work, from which, we hope much of the mystery of life will be made clearer to us. The Doctor will also speak on the following evening, his subject will be, "The Occult Side of the War." The tickets for the Wednesday evening lecture will be fifty cents and will be for sale at the church entrance, there will be no charge for the lecture on Thursday.

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Springfield, Mass. Oct 29. 21. 21.



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## "LIFE AND INTELLIGENCE IN THE UNSEEN"

Eminent scientific men have stated, after years of patient investigation, that "*There is no Death*," — that the so-called "Dead" still live on different planes of consciousness and can, under suitable conditions, give us proof of this fact. Occult Science has taught this for ages. Dr. Strong will show experimentally how matter and force too fine for the physical senses can be made perceptible by laboratory means. The phenomena of Spiritualism will be considered both from the standpoint of Physical and Occult Science. Beautiful experiments with the ultra-violet rays will be shown, also the method by which science has made the Human Aura visible.



## "THE SCIENCE OF THE NEW AGE"

In this lecture Dr. Strong will discuss the process, long known to Occultists, but just beginning to be recognized by Science, whereby man may obtain direct knowledge of higher planes of life through the development of supernormal powers latent in the human organism. These faculties have already been used in founding the new science in "Occult Chemistry." Brilliant experiments will be shown demonstrating the existence of etheric and super-gaseous matter. The lecture will conclude with a description of an imaginary visit to a Scientific Laboratory of the future.



Dr. Strong's Million Volt Coil in action, giving a tree-like flaming discharge nearly four feet high

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MONTHLY

We are having a Mass Meeting this month, we expect you to furnish the MASS, we shall do the rest.

A church cannot run on traditions; you must have a combination of enthusiasm and work. That is the only thing that will "bring home the bacon". This is no attempt to open a restaurant.

When the Church is not run to suit you, find out whether it is being run to suit the majority of the members; if it is, then find out what the matter is with you. You will find it somewhere.

Don't despise a new idea; it may not be so bad after all.

Some people say, God made the world out of nothing; if this is so, we ought to manage a Church, we have more material to work with at any rate.

Are you a member of the First Spiritual Church. If not, why not? HURRY UP! DO SOMETHING AND DO IT QUICK. We need you a whole lot; but you need us a whole lot more than we need you. Because there is a great work you can do in the world, but in order to do it you must know how. We teach you how, is not that enough?

Nowadays all Sunday Schools give a prominent place to "Old Glory." Do you know that it was always in evidence in a Spiritualist Sunday School Lyceum ever since the institution of the lyceum. The spiritualists did not need the horrors of a world war to awaken their patriotism. It is "Old Glory" first, last, and always with us.

I have heard it said that some people object to saluting Our Flag on Sunday. It is to be hoped our boys at the front won't object to fighting on "the Lord's Day."

Springfield, Mass. Oct 29. 20. 21.



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*From the Springfield Republican*

### DR. STRONG LECTURES

"Force and Matter in the Unseen"

"'Force and matter in the unseen' was the topic of the first of a series of three lectures by Dr. Frederick Finch Strong of Tufts Medical College in Odd Fellows' Hall last night.

"Dr. Strong, with complete and extensive electrical apparatus, showed how far our present laboratory science has carried us into the realms beyond the senses. He laid particular stress on the subject of electrical vibration, what occult effect it had on life, and what its intrinsic value was. By means of various low and high frequency transformers and resonators, fluorescent tubes and other apparatus, Dr. Strong demonstrated the existence of some 46 octaves of vibration of which our senses tell us nothing.

"Several startling experiments were performed by means of the Tesla transformer, producing a high voltage, low amperage vibration. Many gasps of wonder were heard when the scientist received 100,000 volts into his body without seemingly feeling an effect. Illustrations of the violet ray, introduced into the medical profession 22 years ago by Dr. Strong, were shown and explained. Perhaps the most remarkable experiment performed was that of a million volt, high frequency resonator in action, which discharged great branches of vibratory energy into the air."

\* \* \*

### LIFE AND INTELLIGENCE IN THE UNSEEN

Second Lecture by Prof. F. F. Strong

"More startling and mystifying statements were made by Dr. Frederick Finch Strong of Tufts College last night in the second of his series of lectures on 'The Realms Beyond the Senses.'

"Experiments with the ultra-violet ray were shown, as laboratory proof of the lecturer's theory of the existence of forces and matter beyond earthly senses. Dr.

Strong said that eminent scientists admitted that there had been much investigation to show that 'there is no death'; that the so-called dead live on an astral plane, and that there is a means of communicating with them. Sir William Crooks and Sir Oliver Lodge were mentioned as scientists who believed in spiritualistic phenomena. 'There is no such thing as death,' declared Dr. Strong. 'Death as we know it is merely the release of a soul from its physical shell.' There was more than one incredulous expression when the scientist mentioned incidentally that there was doubtless a crowd of witnesses at the lecture from the astral world. These, he admitted, we could not see or sense, but this was because our minds were not trained in this particular respect."

*From the Springfield Union.*

### DR. STRONG PREDICTS THAT INTUITION WILL REPLACE REASON IN FUTURE.

In the third lecture of his series in Odd Fellows' Hall, last night, Dr. F. F. Strong foretold that the knowledge of the future would be obtained through intuition and not through the laborious materialistic processes of the nineteenth century, an age devoted to reason.

In his previous lectures of the course, Dr. Strong had demonstrated the possibilities of bringing inharmonious wireless instruments in accord, through the agency of step-down or step-up transformers. One of his demonstrations last night was halted until the tuning coil was adjusted to bring part of the apparatus in full rapport, after which the experiment proceeded smoothly. This was purposely shown, to enable the audience to follow the "tuning up" process of these transformers. The people of the future, Dr. Strong predicted, would be able to attune themselves when suffering from inharmonious vibrations, and the process would be accomplished by means of "step-up" transformers located in the brain of every individual, these "transformers" being known to medical science under the names of the pituitary body and the pineal gland, which are organs for the senses of inner sight and inner hearing — or the true intuition.

"Alcohol and tobacco, said Dr. Strong, have very bad effects upon the pineal gland and the pituitary body, the organs of intuition, and if indulged in by those who are endeavoring to develop these bodies, the results would be serious, producing spinal and mental troubles. That is why theology puts universal brotherhood at its first principle and requirement of membership, and a clean, unselfish life as requisites before attempting to develop these powers latent in all, for only with the development of character in tune with the infinite is it safe to force one's evolution to such an extent.

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## THE REALMS BEYOND THE SENSES The Reality of the Unseen

A Series of three Lectures by Dr. FREDERICK FINCH STRONG, Lecturer  
on Electricity, Tufts Medical College, Boston, MONDAY, TUESDAY  
and WEDNESDAY Evenings, Oct. 29, 30 and 31, at 8 o'clock  
Odd Fellows Hall, Pynchon Street, Springfield, Mass.

*Given under the auspices of the Theosophical Society*

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new experiments for demonstration.

Springfield Mass. Oct 29. 30. 31.

1917



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### Lecture 1

MONDAY, OCTOBER 29

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### Lecture 2

TUESDAY, OCTOBER 30

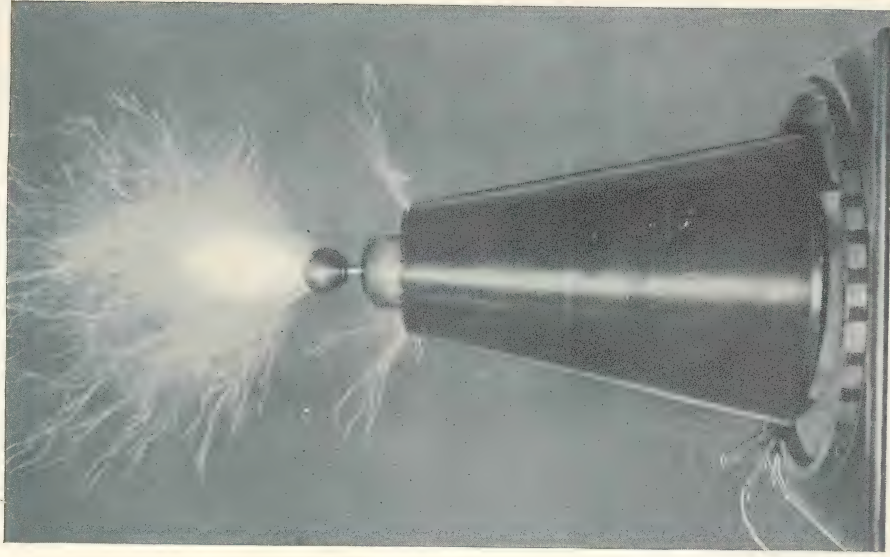
#### "LIFE AND INTELLIGENCE IN THE UNSEEN"

Eminent scientific men have stated, after years of patient investigation, that "*There is no Death*"—that the so called "Dead" still live on different planes of consciousness and can, under suitable conditions, give us proof of this fact. Occult Science has taught this for ages. Dr. Strong will show experimentally how matter and force too fine for the physical senses can be made perceptible by laboratory means. The phenomena of Spiritualism will be considered both from the standpoint of Physical and Occult Science. Beautiful experiments with the ultra-violet rays will be shown, also the method by which science has made the Human Aura visible.

#### LIFE AND

#### Second Lecture

"More statements were made by Dr. Strong of Tufts College, second of his series of lectures on 'Force and Matter in the Unseen.' The speaker called attention to the fact that science has studied sixty octaves of vibrations of which only about fourteen produce any impression on the human consciousness,—ten octaves as sound, three as heat and one as light. The purpose of the first lecture was to prove by experiment the existence of the inaudible, invisible waves beyond the sound waves and below the light waves. For this purpose an electrical high-frequency apparatus was used which is said to be the largest ever shown on the lecture platform outside of New York City. It produces a marvelous discharge resembling a branching tree of electrical flame nearly four feet in height. Dr. Strong took this current through his body without injury, explaining the harmless character of the apparently formidable current by the fact of its great frequency of alternation, it being a rapid electrical vibration rather than a true current."



### Lecture 3

WEDNESDAY, OCTOBER 31

#### "THE SCIENCE OF THE NEW AGE"

In this lecture Dr. Strong will discuss the process, long known to Occultists, but just beginning to be recognized by Science, whereby man may obtain direct knowledge of higher planes of life through the development of supernormal powers latent in the human organism. These faculties have already been used in founding the new science in "Occult Chemistry." Brilliant experiments will be shown demonstrating the existence of etheric and supergaseous matter. The lecture will conclude with a description of an imaginary visit to a Scientific Laboratory of the future.



## PRESS NOTICES

*From the Boston Transcript* — ("Science at Greenacre").

"On Wednesday evening Dr. Frederick Finch Strong, lecturer on electricity at Tufts Medical School, delivered the first of his series of lectures on 'Vibration.' The subject for Wednesday evening was 'Force and Matter in the Unseen.' The speaker called attention to the fact that science has studied sixty octaves of vibrations of which only about fourteen produce any impression on the human consciousness,—ten octaves as sound, three as heat and one as light. The purpose of the first lecture was to prove by experiment the existence of the inaudible, invisible waves beyond the sound waves and below the light waves. For this purpose an electrical high-frequency apparatus was used which is said to be the largest ever shown on the lecture platform outside of New York City. It produces a marvelous discharge resembling a branching tree of electrical flame nearly four feet in height. Dr. Strong took this current through his body without injury, explaining the harmless character of the apparently formidable current by the fact of its great frequency of alternation, it being a rapid electrical vibration rather than a true current."

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"A large and attentive audience listened to Dr. F. F. Strong's lecture on 'The Reality of the Unseen' at Huntington Hall last evening. The speaker stated that the days of antagonism between science and religion were passed: 'We hear little today of the so-called scientific materialism of the last century'; 'the latest discoveries of science tend to confirm the hypothesis of the spiritual nature of the universe.' 'A few decades ago science attempted to interpret life and consciousness in terms of matter and force; today we recognize matter and force as manifestations of the one Divine Life ever evolving through outer forms into new glories of creation.'"

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"Dr. Frederick F. Strong gave an informal lecture to the ladies of the Wintergreen Club last Tuesday evening. He chose as his subject, 'The Miracles of Modern Science,' and illustrated his remarks by many brilliant experiments. At the conclusion of the lecture Dr. Strong was tendered a vote of thanks by the club and appreciative remarks were made by Mrs. Mary A. Livermore."

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Strong said that eminent scientists admitted that there had been much investigation to show that 'there is no death'; that the so-called dead live on an astral plane, and that there is a means of communicating with them. Sir William Crookes and Sir Oliver Lodge were mentioned as scientists who believed in spiritualistic phenomena. 'There is no such thing as death,' declared Dr. Strong. 'Death as we know it is merely the release of a soul from its physical shell.' There was more than one incredulous expression when the scientist mentioned incidentally that there was doubtless a crowd of witnesses at the lecture from the astral world. These, he admitted, we could not see or sense, but this was because our minds were not trained in this particular respect."

*From the Springfield Union.*

DR. STRONG PREDICTS THAT INTUITION WILL REPLACE REASON IN FUTURE.

In the third lecture of his series in Odd Fellows' Hall, last night, Dr. F. F. Strong foretold that the knowledge of the future would be obtained through intuition and not through the laborious materialistic processes of the nineteenth century, an age devoted to reason.

In his previous lectures of the course, Dr. Strong had demonstrated the possibilities of bringing inharmonious wireless instruments in accord, through the agency of step-down or step-up transformers. One of his demonstrations last night was halted until the tuning coil was adjusted to bring part of the apparatus in full rapport, after which the experiment proceeded smoothly.

This was purposely shown, to enable the audience to follow the "tuning up" process of these transformers. The people of the future, Dr. Strong predicted, would be able to attune themselves when suffering from inharmonious vibrations, and the process would be accomplished by means of "step-up" transformers located in the brain of every individual, these "transformers" being known to medical science under the names of the pituitary body and the pineal gland, which are organs for the senses of inner sight and inner hearing—or the true intuition.

"Alcohol and tobacco, said Dr. Strong, have very bad effects upon the pineal gland and the pituitary body, the organs of intuition, and if indulged in by those who are endeavoring to develop these bodies, the results would be serious, producing spinal and mental troubles. That is why theosophy puts universal brotherhood at its first principle and requirement of membership, and a clean, unselfish life as requisites before attempting to develop these powers latent in all, for only with the development of character in tune with the infinite is it safe to force one's evolution to such an extent.

*From the Springfield Republican*

DR. STRONG LECTURES

"Force and Matter in the Unseen"

"Force and matter in the unseen" was the topic of the first of a series of three lectures by Dr. Frederick Finch Strong of Tufts Medical College in Odd Fellows' Hall last night.

"Dr. Strong, with complete and extensive electrical apparatus, showed how far our present laboratory science has carried us into the realms beyond the senses. He laid particular stress on the subject of electrical vibration, what occult effect it had on life, and what its intrinsic value was. By means of various low and high frequency transformers and resonators, fluorescent tubes and other apparatus, Dr. Strong demonstrated the existence of some 46 octaves of vibration of which our senses tell us nothing.

"Several startling experiments were performed by means of the Tesla transformer, producing a high voltage, low amperage vibration. Many gasps of wonder were heard when the scientist received 100,000 volts into his body without seemingly feeling an effect. Illustrations of the violet ray, introduced into the medical profession 22 years ago by Dr. Strong, were shown and explained. Perhaps the most remarkable experiment performed was that of a million volt, high frequency resonator in action, which discharged great branches of vibratory energy into the air."

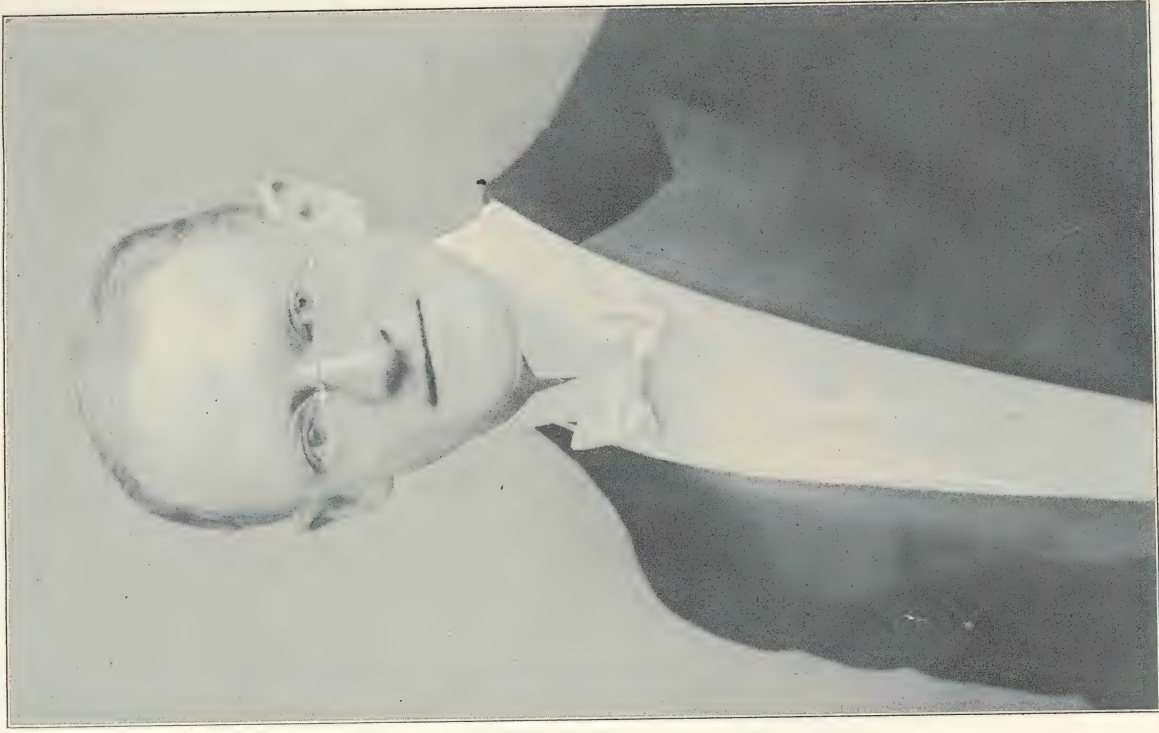
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LIFE AND INTELLIGENCE IN THE UNSEEN

Second Lecture by Prof. F. F. Strong

"More startling and mystifying statements were made by Dr. Frederick Finch Strong of Tufts College last night in the second of his series of lectures on 'The Realms Beyond the Senses.'"

"Experiments with the ultra-violet ray were shown, as laboratory proof of the lecturer's theory of the existence of forces and matter beyond earthly senses. Dr.



## THE REALMS BEYOND THE SENSES The Reality of the Unseen

A Series of three Lectures by Dr. FREDERICK FINCH STRONG, Lecturer on Electricity, Tufts Medical College, Boston, MONDAY, TUESDAY and WEDNESDAY Evenings, Oct. 29, 30 and 31, at 8 o'clock  
Odd Fellows Hall, Pynchon Street, Springfield, Mass.

*Given under the auspices of the Theosophical Society*

The general purpose of Dr. Strong's Lectures is to prove that the "Occult," Science of to-day will be the "Orthodox," Science of to-morrow, and to indicate by brilliant and spectacular experiments some of the ways through which this change is being brought about. Dr. Strong has several new experiments for demonstration.



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and showed a man of it. His explanation was concise that a creature's message from his natural eye. I had a relationship between the unseen and the unseen. In the spring, she was a scientific man in the deeper than the unseen. I am sure to hear a creature's message from an unseen Deity and it shows that reverence for the

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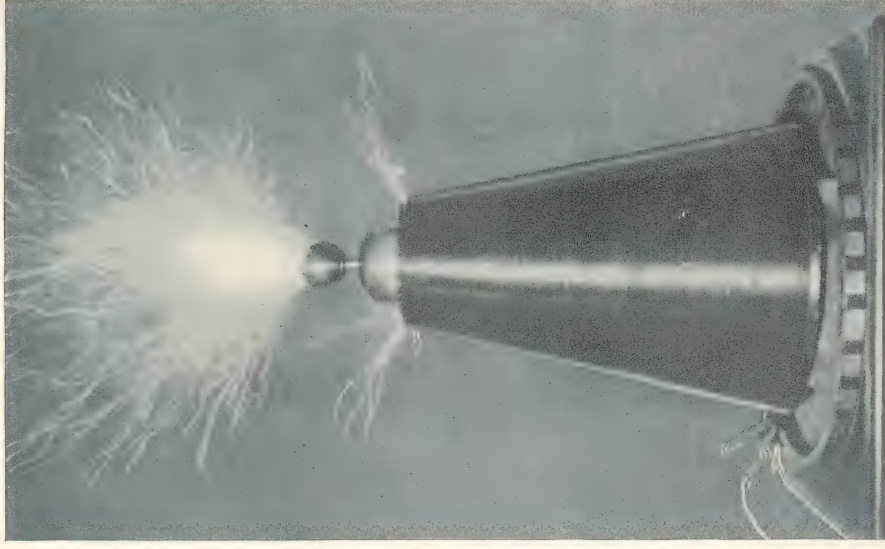
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231

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304 Central Hospital, Dr. J. C. G. apply 59

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Tickets for the Lectures may be procured from Members or Dr. W.  
S. Fulton, 32 Myrtle Street. Telephone, River 7720.

**Admission 50 Cents. Full Course \$1.00**



Democracy Will Be His Subject Tomorrow Night, Dr. Frederick Finch Strong, scientist, lecturer on electrical phenomena, will talk on "The Democracy" in Odd Fellows' hall, Wednesday evening. On Monday, Dr. Strong will give a lecture on "The Realms of the Senses," with his electrical apparatus demonstrating the advances on life and matter in unseen worlds. Tickets for the course may be purchased at 32 Myrtle Street, or from Dr. William S.

### HIGHER DEMOCRACY

of Dr. F. F. Strong in Lecture at Odd Fellows' Hall. The arrangement of the buildings and transportation of a great city are scarcely to a dweller in the slums, is the underlying spirit of the one life, carrying the word an ideal government of the higher democracy. by the mass of seemingly individuals struggling for the privilege of living. To them is merely a matter of "every day." This is a pessimistic life, but it is the motive which the majority of men in the day. It is a fallacy and leads to a self-seeking. This "original sin" is the idea of "honesty." In this way Dr. Strong, who has returned from a brief course of lecturing on "World forces," outlined last evening at Odd Fellows' hall in speaking of "The higher democracy."

terologist for many years, associated with Tufts medical school, and other famous universities, brought to his utterances light of scientific corroboration. He concluded his remarks with a quotation:— "The world there are only two people—those who know and those who do not know. and this is all that matters. What a man holds, to what race he belongs, these things are not important. The important thing is this: the plan of God for his race and that plan is evolution. A man sees that and really he cannot help working for it. It is so glorious, so beautiful, because he knows, he is on the working for good and redemption, standing for evolution and selflessness." Dr. Strong will lecture this evening on "The Realms of the Unseen," at Odd Fellows' hall. These are light, heat and sound. In order to penetrate these realms of finer forces it becomes necessary for the electrician to make use of a transformer. Dr. Strong is a well-known author of electro-therapeutics at Tufts school, is a well-known author on electrical subjects.

Girls to Hear Lecture Dr. Frederick Finch Strong, bacteriologist at Tufts medical school, giving a series of lectures in the auspices of the Tufts Medical Society, has consented to give a brief lecture on the practical wireless before the women of the Connecticut Valley club this evening. The lecture will be given at 9:30 o'clock, following his scheduled lecture in Odd



## ANNOUNCEMENT OF FREE THEOSOPHICAL ACTIVITIES IN BOSTON

AT THEOSOPHICAL HEADQUARTERS  
GAINSBORO BUILDING, ROOM 212  
295 HUNTINGTON AVENUE, BOSTON  
OPP. NEW ENGLAND CONSERVATORY OF MUSIC

1917-1918

UNDER THE AUSPICES OF THE  
COUNCIL FOR THEOSOPHICAL PROPAGANDA

DR. FREDERICK FINCH STRONG, PRESIDENT  
176 HUNTINGTON AVENUE  
MISS GRACE E. BROWN, SECRETARY  
23 HOLLIS STREET, NEWTON

### A MAN'S FUTURE ABILITY

Attunement to the Forces of Nature  
Foreseen by Dr Strong  
That there are only three octaves in the whole gamut of electrical vibrations which can at present be perceived by man's physical senses was told by Dr Frederick Finch Strong in his first lecture on "The Realms beyond the Senses" last night at Odd Fellows' hall. These are light, heat and sound. In order to penetrate these realms of finer forces it becomes necessary for the electrician to make use of a transformer.

Dr Strong demonstrated to his audience the ability of electrical transformers and stated it was in the power of man to develop within himself a similar ability that would enable him to vibrate in tune with the physical and spiritual realms about him. The doctor believed it would be quite possible in the not far future so to attune oneself so that a man could, for instance, drive a highly-g geared automobile simply by means of one of these self-transformers. This evening Dr Strong's topic will be "Life and Intelligence in the Unseen." He will give further experiments with the ultra-violet rays and explain the phenomena of spiritualism from the dual standpoint of physical and occult science.

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the great heresy of separateness and

will we help to dispel the cloud of

standing us all is the same. Thus

human physical bodies. Let us do

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out hatred, whether it be national

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minence the welfare of the hive. Let

humanity. Just now we are busy

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doctor, "we are all outposts of the

that particular hive.

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even as the drone bodies are carried

and re-incubated in fresh forms,

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TO DRONE BEES

COMPARES GERMAN

### Daughters of Massachusetts



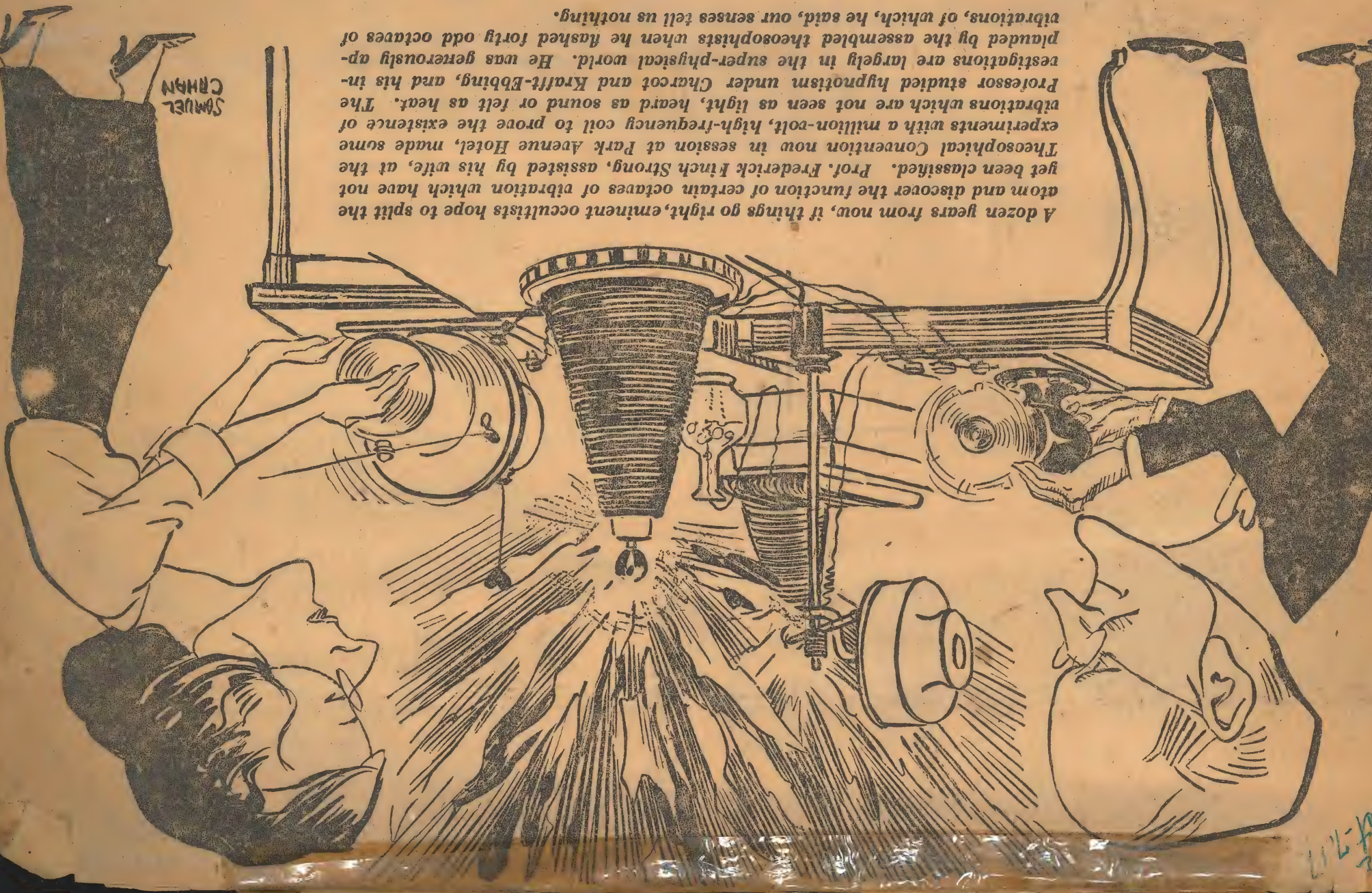
Hotel Brunswick, Boston  
Three o'clock

Thursday, November eight  
Nineteen seventeen

Speaker: Dr. Frederick Finch Strong, Lecturer in Electrotherapeutics, Tufts Medical School.

Theme: A description of an imaginary visit to a scientific laboratory of the future, with interwoven thoughts on "Science of the New Age."

Monopole Sales: Mr. Herbert Wellington Garrick



A dozen years from now, if things go right, eminent occultists hope to split the atom and discover the function of certain octaves of vibration which have not yet been classified. Prof. Frederick Finch Strong, assisted by his wife, at the Theosophical Convention now in session at Park Avenue Hotel, made some experiments with a million-volt, high-frequency coil to prove the existence of vibrations which are not seen as light, heard as sound or felt as heat. The Professor studied hypnotism under Charcot and Krafft-Ebbing, and his investigations are largely in the super-physical world. He was generously applauded by the assembled theosophists when he flashed forty odd octaves of vibrations, of which, he said, our senses tell us nothing.

SAMUEL CRAMER



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### "THE HIGHER DEMOCRACY"

Theme of Dr F. F. Strong in Lec-  
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Systematic arrangement of the  
streets, buildings and transportation  
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Neither is the underlying spirit of  
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to Springfield for a brief course of  
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his subject last evening at Odd Fel-  
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A bacteriologist for many years, as-  
sociated with Tufts medical school,  
Cornell and other famous universities,  
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the weight of scientific corroboration.  
Dr. Strong concluded his remarks with  
the following quotation:—

"In all the world there are only two  
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belongs, these things are not impor-  
tant; the important thing is this  
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a plan and that plan is evolution.  
When once a man sees that and really  
knows it, he cannot help working for  
it, because it is so glorious, so beauti-  
ful. So, because he knows, he is on  
God's side, working for good and re-  
sisting evil, standing for evolution  
and against selfishness."

Dr. Strong will lecture this evening  
on "Force and matter in the unseen,"  
using his famous million-volt high fre-  
quency coil, one of the largest ever  
shown on any lecture platform. Dr.  
Strong, who was for eight years lec-  
turer on electro-therapeutics at Tufts  
medical school, is a well-known au-  
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### Radio Girls to Hear Lecture

Dr. Frederick Finch Strong, bac-  
teriologist at Tufts medical school,  
who is giving a series of lectures in  
this city under the auspices of the  
Theosophical society, has consented to  
give a brief lecture on the practical  
use of the wireless before the wom-  
an's auxiliary of the Connecticut Val-  
ley radio club this evening. The lec-  
ture will be given at 9.30 o'clock, fol-  
lowing his scheduled lecture in Odd  
Fellows hall. Mrs. Ella M. Roberts,  
who arranged for the lecture, has re-  
quested any person interested to meet  
at the radio clubrooms, 264 Main  
Street at 9 o'clock.



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Pianoforte Solos: Mr. Herbert Wellington Carrick  
(a) Gavotte, B minor Bach (b) Cracovienne (Polish) Paderewski

Brief Business Session Please bring Patriotic Knitting Informal Reception and Tea  
Mrs. Austin C. Wellington, President Miss A. B. Prescott, Treasurer  
Mrs. A. L. Richards, Corresponding Secretary Admit One

## COMPARES GERMAN TO DRONE BEES

Kill Them Off in Spirit of  
Love, Says Dr.  
Strong.

Comparing the life of man to that  
of the bee, with its seemingly auto-  
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racy, Dr. Frederick Finch Strong gave  
an interesting address last night at  
Odd Fellows Hall. His subject was,  
"The Higher Democracy."

He compared the war we are now  
engaged in, to the war carried on by  
the workers in the beehive against  
the "drones," and explained that  
drone did not mean a lazy one, but  
any element which was felt to be  
out of place with the spirit of the  
hive. He said we were in the war  
to kill off the drones—those who are  
manifesting a spirit today contrary to  
that which mankind has reached. It  
is our duty, he said, to kill off these  
hostile members—releasing the life  
force back of them, to be restored in  
the great life force animating all,  
and re-incarnated in fresh forms,  
even as the drone bodies are carried  
out of the hives, by the workers, and  
the life that animated them is re-  
stored to the group-soul animating  
that particular hive.

"We are like the bees," said the  
doctor, "we are all outposts of the  
divine conscience, the group-soul of  
humanity. Just now we are busy  
killing off the drones and those who  
menace the welfare of the hive. Let  
us do our work thoroughly but with-  
out hatred, whether it be national  
bodies, pernicious social systems, or  
human physical bodies. Let us do  
our work in the spirit of love, under-  
standing that the one reality which  
ensouls us all is the same. Thus  
will we help to dispel the cloud of  
the great heresy of separateness and  
bring the realization of the oneness  
of humanity nearer. Thus will we  
hasten the coming of the higher  
world democracy—the ideal toward  
which America is leading the world  
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### Daughters of Massachusetts

The initial meeting of the season was  
held in the Hotel Lenox Italian room, where  
Dr. Richard Finch Strong, lecturer in  
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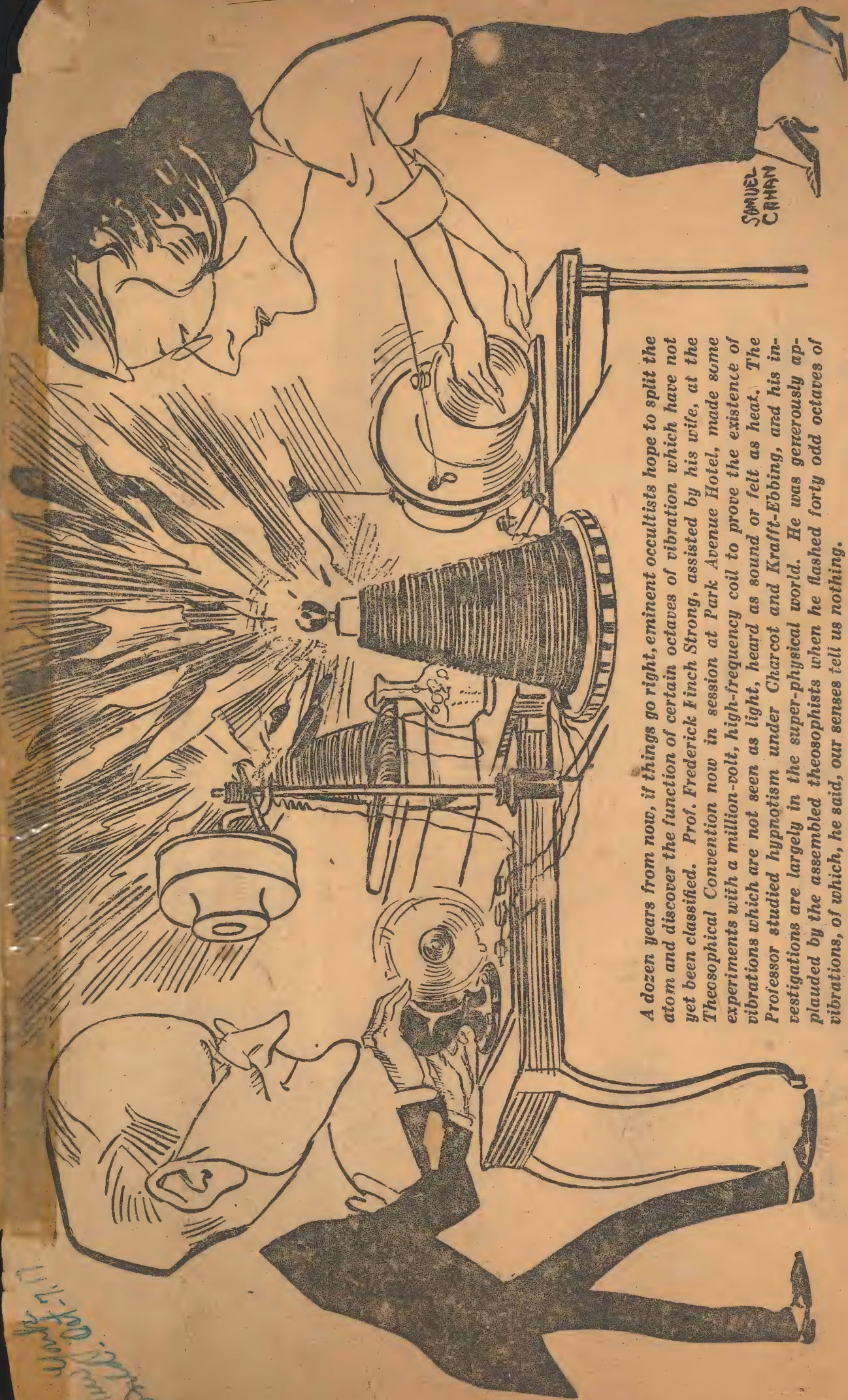
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A dozen years from now, if things go right, eminent occultists hope to split the atom and discover the function of certain octaves of vibration which have not yet been classified. Prof. Frederick Finch Strong, assisted by his wife, at the Theosophical Convention now in session at Park Avenue Hotel, made some experiments with a million-volt, high-frequency coil to prove the existence of vibrations which are not seen as light, heard as sound or felt as heat. The Professor studied hypnotism under Charcot and Krafft-Ebbing, and his investigations are largely in the super-physical world. He was generously applauded by the assembled theosophists when he flashed forty odd octaves of vibrations, of which, he said, our senses tell us nothing.

*Prof. Finch Strong*



## Democracy Will Be His Object Tomorrow Night.

Frederick Finch Strong, scientist, lecturer and lecturer on electrical therapeutics, will talk on "The Higher Democracy," in Odd Fellows' hall tomorrow evening. On Monday, Tuesday and Wednesday evenings in the same hall, Dr. Strong will give a course of lectures on "The Realms Beyond the Senses," with his electrical apparatus demonstrating the theories he advances on life and matter in the unseen worlds. Tickets for the course may be purchased at the door, or from Dr. William S. Fulton, 32 Myrtle Street.

## "THE HIGHER DEMOCRACY"

Theme of Dr F. F. Strong in Lecture at Odd Fellows' Hall

Systematic arrangement of the streets, buildings and transportation systems of a great city are scarcely apparent to a dweller in the slums. Neither is the underlying spirit of unity, of the one life, carrying the race toward an ideal government of the future, "the higher democracy," realized by the mass of seemingly separate individuals struggling for the simple privilege of living. To them life seems merely a matter of "every man for himself and the devil take the hindmost." This is a pessimistic view of life, but it is the motive which actuates the majority of men in the world to-day. It is a fallacy and leads to selfishness and self-seeking. This is the "original sin—the idea of separateness." In this way Dr Frederick Finch Strong, who has returned to Springfield for a brief course of lectures on "World forces," outlined his subject last evening at Odd Fellows' hall in speaking of "The higher democracy."

A bacteriologist for many years, associated with Tufts medical school, Cornell and other famous universities, Dr Strong brought to his utterances the weight of scientific corroboration. Dr Strong concluded his remarks with the following quotation:—

"In all the world there are only two kinds of people—those who know and those who do not know, and this knowledge is all that matters. What religion a man holds, to what race he belongs, these things are not important; the important thing is this knowledge of God's plan, for God has a plan and that plan is evolution. When once a man sees that and really knows it, he cannot help working for it, because it is so glorious, so beautiful. So, because he knows, he is on God's side, working for good and resisting evil, standing for evolution and against selfishness."

Dr Strong will lecture this evening on "Force and matter in the unseen," using his famous million-volt high frequency coil, one of the largest ever shown on any lecture platform. Dr Strong, who was for eight years lecturer on electro-therapeutics at Tufts medical school, is a well-known authority on electrical subjects.

## Radio Girls to Hear Lecture

Dr Frederick Finch Strong, bacteriologist at Tufts medical school, who is giving a series of lectures in this city under the auspices of the Theosophical society, has consented to give a brief lecture on the practical use of the wireless before the woman's auxiliary of the Connecticut Valley radio club this evening. The lecture will be given at 9.30 o'clock, following his scheduled lecture in Odd Fellows hall. Mrs Ella M. Roberts, who arranged for the lecture, has requested any person interested to meet at the radio clubrooms, 264 Main Street at 9 o'clock.

## THE REALMS BEYOND THE SENSES

A SERIES OF THREE LECTURES GIVEN BY  
DR. FREDERICK FINCH STRONG

Under the Direction of the Holyoke Theosophical Society

"FORCE AND MATTER IN THE UNSEEN"

HIGH SCHOOL AUDITORIUM

MONDAY EVENING, :: DEC. 3, 1917

COURSE TICKETS, 4 75 CENTS

## THE REALMS BEYOND THE SENSES

A SERIES OF THREE LECTURES GIVEN BY  
DR. FREDERICK FINCH STRONG

Under the Direction of the Holyoke Theosophical Society

"LIFE AND INTELLIGENCE IN THE UNSEEN"

HIGH SCHOOL AUDITORIUM

TUESDAY EVENING, :: DEC. 4, 1917

COURSE TICKETS, 4 75 CENTS

## THE REALMS BEYOND THE SENSES

A SERIES OF THREE LECTURES GIVEN BY  
DR. FREDERICK FINCH STRONG

Under the Direction of the Holyoke Theosophical Society

"THE SCIENCE OF THE NEW AGE"

HIGH SCHOOL AUDITORIUM

WEDNESDAY EVENING, DEC. 5, 1917

COURSE TICKETS, 4 75 CENTS

## A MAN'S FUTURE ABILITY

Attunement to the Forces of Nature  
Foreseen by Dr Strong

That there are only three octaves in the whole gamut of electrical vibrations which can at present be perceived by man's physical senses was told by Dr Frederick Finch Strong in his first lecture on "The Realms beyond the senses" last night at Odd Fellows' hall. These are light, heat and sound. In order to penetrate these realms of finer forces it becomes necessary for the electrician to make use of a transformer.

Dr Strong demonstrated to his audience the ability of electrical transformers and stated it was in the power of man to develop within himself a similar ability that would enable him to vibrate in tune with the physical and spiritual realms about him. The doctor believed it would be quite possible in the not far future so to attune oneself so that a man could, for instance, drive a highly-gearred automobile simply by means of one of these self-transformers. This evening Dr Strong's topic will be "Life and intelligence in the unseen." He will give further experiments with the ultra-violet rays and explain the phenomena of spiritualism from the dual standpoint of physical and occult science.

## Daughters of Massachusetts

The initial meeting of the season was held in the Hotel Lenox Italian room, where Dr. Richard Finch Strong, lecturer in electrotherapeutics, gave a profound address on "The Science of the New Age," with a description of an imaginary visit to a scientific laboratory of the future interwoven. Miss Lillian Whiting added to the interest of the occasion by her presence and spoke spiritually in continuance of Dr Strong's theme.

## Daughters of Massachusetts

Thursday, November eight  
Nineteen seventeen



Hotel Brunswick, Boston  
Three o'clock

Speaker: Dr. Frederick Finch Strong, Lecturer in Electrotherapeutics,  
Tufts Medical School.

Theme: A description of an imaginary visit to a scientific laboratory of the future, with interwoven thoughts on "Science of the New Age."

Pianoforte Solos: Mr. Herbert Wellington Carrick  
(a) Gavotte, D minor (b) Cracovienne (Polish) Paderewski

Brief Business Session Please bring Patriotic Knitting Informal Reception and Tea  
Mrs. Austin C. Wellington, President  
Mrs. A. T. Richards, Corresponding Secretary Miss M. B. Prescott, Treasurer  
Admit One

## COMPARES GERMAN TO DRONE BEES

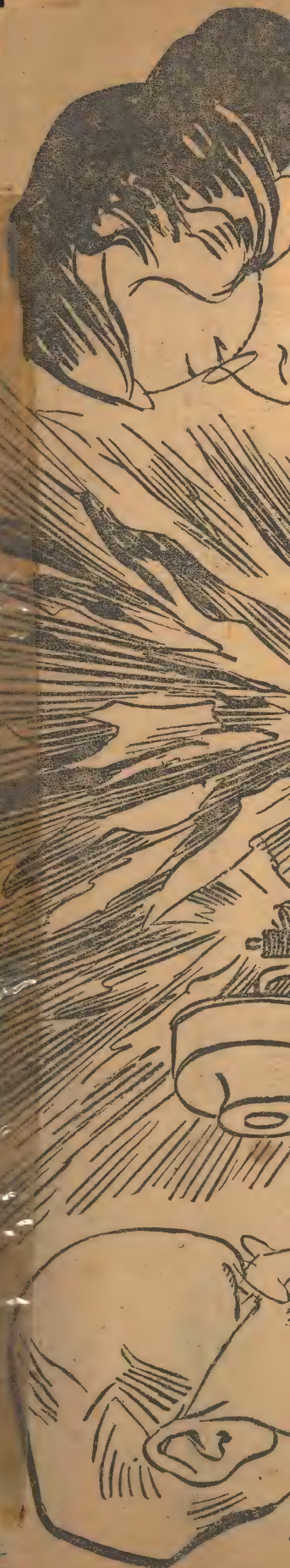
Kill Them Off in Spirit of  
Love, Says Dr.  
Strong.

Comparing the life of man to that of the bee, with its seemingly automatic form of Government, which in reality is the truest form of democracy, Dr. Frederick Finch Strong gave an interesting address last night at Odd Fellows Hall. His subject was, "The Higher Democracy."

He compared the war we are now engaged in, to the war carried on by the workers in the beehive against the "drones," and explained that drone did not mean a lazy one, but any element which was felt to be out of place with the spirit of the hive. He said we were in the war to kill off the drones—those who are manifesting a spirit today contrary to that which mankind has reached. It is our duty, he said, to kill off these hostile members—releasing the life force back of them, to be restored in the great life force animating all, and re-incarnated in fresh forms, even as the drone bodies are carried out of the hives, by the workers, and the life that animated them is restored to the group-soul animating that particular hive.

"We are like the bees," said the doctor, "we are all outposts of the divine conscience, the group-soul of humanity. Just now we are busy killing off the drones and those who menace the welfare of the hive. Let us do our work thoroughly but without hatred, whether it be national bodies, pernicious social systems, or human physical bodies. Let us do our work in the spirit of love, understanding that the one reality which ensouls us all is the same. Thus will we help to dispel the cloud of the great heresy of separateness and bring the realization of the oneness of humanity nearer. Thus will we hasten the coming of the higher world democracy—the ideal toward which America is leading the world today."

This evening, Dr. Strong will give the first of his lectures on "World Forces"—the subject for tonight being, "Force and Matter in the Unseen," using his million volt high frequency coil.





## DIRECTORY

of Theosophical and Allied Activities  
in Boston

### ALPHA LODGE

Meets at Headquarters, Thursday evening at 8 o'clock

Miss Marguerite Boice, Secretary  
Room 216, Kensington Bldg., Boylston St.

Textbook—Pedigree of Man

### BESANT LODGE

Meets at 121 St. Stephen St., suite 21, Wednesday evenings at 8 o'clock

Miss Eudora Morey, Secretary

### BOSTON LODGE

Meets at Headquarters, Wednesday evenings at 8 o'clock

Meeting for members only, Wednesdays from 7.15 to 7.45 P.M.

Miss Vercy H. Hill, Secretary

384 Washington St., Brookline

Textbooks—

The Inner Life

The Hidden Side of Things

### HUNTINGTON LODGE

Meets at Headquarters, Thursday evenings at 8 o'clock

Miss Florence B. Ross, Secretary

370 Austin St., West Newton

### ORDER OF THE STAR IN THE EAST

Meets at Headquarters, 1st, 2nd, 3rd and 5th Sundays of the month at 6.30 P.M. 4th Sunday at 8 P.M.

Membership open to all who look and

hope for the EARLY COMING of the WORLD TEACHER and who

desire to help prepare the way for

His advent

Local Representative, C. A. Russell

50½ Warren St.

### LIBRARY AND READING ROOM

Open Mondays, Wednesdays, Fridays and

Saturdays from 3.00 to 5.00 P.M.

Thursdays from 3.00 to 4.30 P.M.

## OBJECTS OF THE THEOSOPHICAL SOCIETY

To form a Nucleus of the Universal Brotherhood of Humanity, without distinction of Race, Creed, Sex, Caste or Color

To encourage the Study of Comparative Religion, Philosophy and Science

To investigate unexplained laws of Nature and the powers latent in man.

Mrs. ANNIE BESANT  
ADYAR, MADRAS, INDIA

World President of  
The Theosophical Society

"The Theosophical Society is composed of students belonging to any religion in the world or to none, who are united by their approval of the above objects, by their wish to remove religious antagonisms and to draw together men of good will, whatever their religious opinions, and by their desire to study religious truths and to share the results of their studies with others. Their bond of union is not the profession of a common belief, but a common search and aspiration for Truth.

"Every one willing to Study, to be tolerant, to Aim High, and to Work Perseveringly, is welcomed as a Member, and it rests with the Member to become a True Theosophist."



ANNOUNCEMENT OF

## FREE THEOSOPHICAL ACTIVITIES IN BOSTON

AT THEOSOPHICAL HEADQUARTERS  
GAINSBORO BUILDING, ROOM 212  
295 HUNTINGTON AVENUE, BOSTON

OPP. NEW ENGLAND CONSERVATORY OF MUSIC

1917-1918

UNDER THE AUSPICES OF THE  
COUNCIL FOR THEOSOPHIC PROPAGANDA

DR. FREDERICK FINCH STRONG, PRESIDENT  
176 HUNTINGTON AVENUE

MISS GRACE E. BROWN, SECRETARY  
23 HOLLIS STREET, NEWTON



## LECTURES

Sunday Evenings at Headquarters  
at eight o'clock

(See Saturday Evening Transcript for Notices.)  
(For information telephone Back Bay 2711)

☆The meeting on the fourth Sunday  
evening of each month is under  
the auspices of the

ORDER OF THE STAR IN THE EAST

SEPT. 30 The Rounds and Races in the  
Light of Geology

Mr. AUGUSTUS F. KNUDSEN  
National Lecturer

OCT. 7 The Pilgrimage of the Soul

Mrs. MARY L. PORTER

OCT. 14 Theosophy and the Churches

Mrs. HARRIET TUTTLE BARTLETT  
Divisional Lecturer

OCT. 21 Buddhism and Christianity

Mr. ERNEST E. POWER

☆OCT. 28 The Social Movement in the  
Churches

Miss GRACE SCRIBNER

NOV. 4 To be announced

NOV. 11 Subject to be announced

Rev. FRANK ABRAM POWELL

NOV. 18 What's in a Name? Pythagoras' Law of Vibration

Miss LOUISA POWELL

☆NOV. 25 Personal Preparation for the  
Great World Teacher

Dr. FREDERICK FINCH STRONG

DEC. 2 The Influence of Joy

Miss ISABEL HOLBROOK  
National Lecturer

DEC. 9 The Mystery of the Human  
Face

Miss ISABEL HOLBROOK

DEC. 16 The Deluge—and To-day

Miss ISABEL HOLBROOK

☆DEC. 23 The Christmas Story

Mrs. MARY GRAY

—DEC. 30 World Movements of the Present Day

Dr. FREDERICK FINCH STRONG

JAN. 6 Evolution in and thru Food

Mr. RICHARD MAYER

JAN. 13 Sleep and Super-consciousness

SISTER DEVAMATA

JAN. 20 "The Day"

Mrs. NATALIE WOODWARD

☆JAN. 27 Lives of some of the Great  
World Teachers

Mr. ARCHIBALD CAMPBELL

FEB. 3 Ancient Castes and Modern  
Classes

Mr. HENRY TALBOT

FEB. 10 "People Like That" or Planetary Influences

Miss FLORENCE B. ROSS

FEB. 17 The Healing Power of Music

Mrs. LUELLA K. HASTINGS

☆FEB. 24 The Bhagavad Gita

Mr. JAMES MIDDLETON

MAR. 3 India's Struggle for Home Rule

Mrs. EDITH MARSH TALBOT

MAR. 10 The Yoga of the Arts

Miss GRACE E. BROWN

MAR. 17 The Old Catholic Church

Mr. ARCHIBALD IVOR CAMPBELL

☆MAR. 24 The Need of a Great World  
Teacher

Mrs. MARY L. PORTER  
Mr. CHESTER GREEN

MAR. 31 Initiations—Past and Present

Miss MILDRED BENT

APR. 7 Subject to be announced

Mr. FRANK R. KIMBALL

APR. 14 Subject to be announced

Rev. FRANK ABRAM POWELL

APR. 21 Sagas of the North

Mr. JAMES MIDDLETON

☆APR. 28 Subject to be announced

Mrs. LUELLA K. HASTINGS

MAY 5 Socialism in the Light of Theosophy

Mrs. E. D. T. SARABIA

MAY 12 The Continuity of Life

Dr. GEORGE A. PORTER

MAY 19 To be announced

☆MAY 26 "Let the Greatest among you  
be as Him Who Serves"

Mr. C. A. RUSSELL



# TO DRONE BEES

Off in Spirit of  
Says Dr.  
Strong.

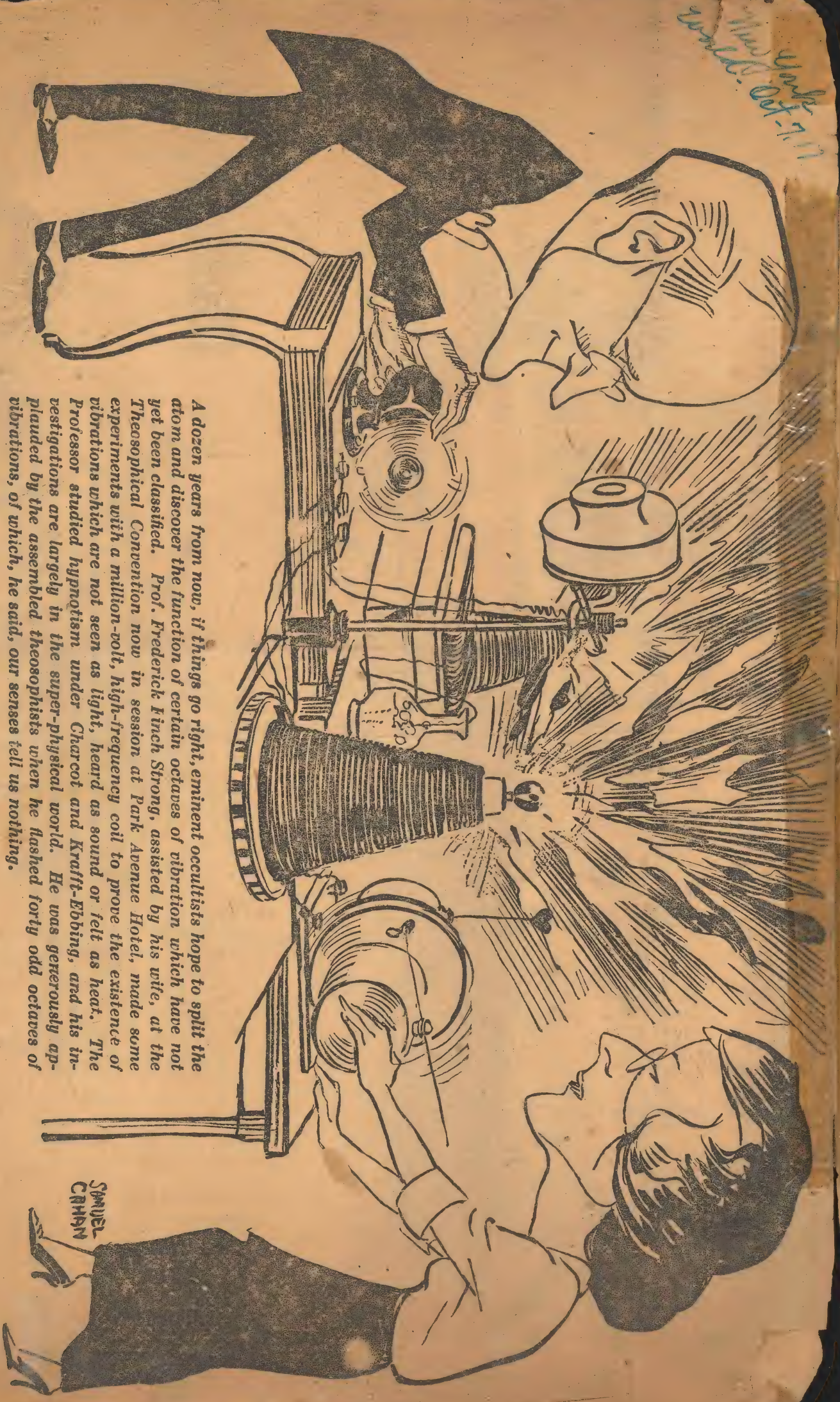
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SAMUEL CRAMER

World-Work  
11-17-1917



"Force and Matter in the Unseen" is Subject Before Theosophical Society

"Force and matter in the unseen" was the topic of the first of a series of three lectures by Dr Frederick Finch Strong of Tufts medical college in Odd Fellows' hall last night, held under the auspices of the Theosophical society of Springfield.

Dr Strong, with complete and extensive electrical apparatus, showed how far our present laboratory science has carried us into the realms beyond the senses. He laid particular stress on the subject of electrical vibration, what actual effect it had on life, and what its intrinsic value was. By means of various low and high frequency transformers and resonators, fluorescent tubes and other apparatus, Dr Strong demonstrated the existence of some 46 octaves of vibration of which our senses tell us nothing.

Several startling experiments were performed by means of the Tesla transformer, producing a high voltage low ampereage vibration. Many gasps of wonder were heard when the scientist received 100,000 volts into his body without seemingly feeling an effect. Illustrations of the violet ray, introduced into the medical profession 22 years ago by Dr Strong, were shown and explained. Perhaps the most remarkable experiment performed was that of a million volt high frequency resonator in action, which discharged great branches of vibratory energy into the air.

The second of Dr Strong's lectures will be given to-night in Odd Fellows' hall, of which the subject will be "Life and Intelligence in the unseen." Dr Strong will consider the phenomena of Spiritualism from the standpoint of physical and occult science.

## MAKES ELECTRICITY DO QUEER STUNTS

*Springfield Union*  
Dr. Strong Opens Series of Lectures to Theosophical Society.

*March 30, 1917*  
An interesting lecture on electrical effects on occultism was given by Dr. Frederick Finch Strong, under the auspices of the Springfield Theosophical Society in Odd Fellows' Hall last night. The well known vaudeville act in which electricity is passed through the body and made to light incandescent lamps and fill glass tubes with multi-colored fire was shown, and many other interesting experiments were tried.

The experiments were conducted on a scientific basis and aimed to show the extent to which laboratory research has penetrated into the realms unperceived by the human senses. Dr. Strong stated that beyond the four known properties of matter—solids, liquids, gases and ethers—were four grades of still finer matter, existing between the atom and the electron, discovered by the use of instruments far more sensitive than any laboratory test-tubes or retorts that had been invented, releasing forces of such subtle character that only by the light of electrical waves could we determine their existence, or by their effects upon the human body. The electrical lectures continue tonight and tomorrow night in Odd Fellows' Hall, with further experiments.

*Springfield Union*

ING. MARCH 31, 1917

## LISTS MARCONI AS SPIRIT HUNTER

Greatest Scientists Probing Unseen World, Says Theosophical Lecturer.

The second lecture of the series by Dr. Frederick Finch Strong was given in Odd Fellows' Hall last night. The main idea of the second lecture was to prove the existence of life beyond our knowledge. Actual proof of spirits will be so clearly defined in the near future, it was declared by Dr. Finch, that even the most skeptical will be convinced.

Impressions of the spirit world, he said, can be obtained now with the aid of the Roentgen Ray and a fluorescent screen, but science is working on a screen that will receive impressions even stronger than it is at present possible to obtain. Dr. Finch stated that the greatest of scientists are now striving to prove the existence of an astral body which may be made to communicate with people of the world as we know it. Among the names of the scientists whom he mentions as engaged in this work are Sir Oliver Lodge and Marconi.

"I never heard of a scientist who set out to investigate the spiritualistic world who was not a sceptic at the start," the speaker said, "and, furthermore, I was a materialist and an agnostic for 10 years, although my father was a Presbyterian minister." Also he stated that there had been no scientist who had made a thorough investigation who had not been convinced of a spirit population.

## REALMS BEYOND SENSES

Second Lecture by Prof F. F. Strong Under Auspices of Theosophical Society

More startling and mystifying statements were made by Dr Frederick Finch Strong of Tufts college last night in the second of his series of lectures on "The realms beyond the senses" under the auspices of the Theosophical society of Springfield. Dr Strong's topic last evening was "Life and intelligence in the unseen."

Experiments with the ultra-violet ray were shown, as laboratory proof of the lecturer's theory of the existence of forces and matter beyond earthly senses. Dr Strong said that eminent scientists admitted that there had been much investigation to show that there is no death; that the so-called dead live on an astral plane, and that there is a means of communicating with their souls. Sir William Crookes and Sir Oliver Lodge were mentioned as scientists who believed in spiritualistic phenomena. "There is no such thing as death," declared Dr Strong. "Death as we know it is merely the release of a soul from its physical shell." There was more than one incredulous expression when the scientist mentioned incidentally that there was doubtless a crowd of witnesses at the lecture from the astral world. These, he admitted, we could not see or sense, but this was because our minds were not trained in this particular respect.

Dr Strong is to give the third of his series to-night in Odd Fellows' hall, when he will speak on "The science of the new age," which will conclude with an imaginary visit to a scientific laboratory of the future.





## PROBING REALM OF THE UNSEEN

Dr. F. F. Strong of Tufts to  
Lecture on Powerful  
Invisible Forces.

Dr. Frederick Finch Strong, for eight years lecturer on electro-therapeutics at Tufts Medical College, Boston, will give a series of three unusual lectures on electricity in Odd Fellows' Hall, Pyncheon Street, next Thursday, Friday and Saturday evenings.

Dr. Strong is recognized as one of the leading electrical authorities of the country, and his experiments are being followed with keen interest by scientific men, as well as by the public, to whom the subject of electricity is always an absorbing one. Dr. Strong's father, the Rev. T. C. Strong, was president of Wells College. His mother was a sister of Francis Miles Finch, the author of the famous Civil war poem, "The Blue and the Gray." Dr. Strong was a student of Cornell, of Boston University and the University of Berlin. He brings to Springfield his latest electrical apparatus, including his million-volt high-frequency coil.

The first lecture, "Force and Matter in the Unseen" will show the extent to which present-day laboratory science has carried humanity into the realm beyond the senses. Although science has succeeded in harnessing the weird force we know as electricity and making it the servant of man, and although everyone has grown so accustomed to it that life would seem queer without its daily use, yet nobody knows what electricity really is, where it comes from, nor where it goes.

Dr. Strong, in this initial lecture, will show by electrical experiments the existence of 46 octaves of vibrations beyond the reach of our normal optic nerves, and of which our senses record absolutely nothing. In this lecture he will use the million-volt high-frequency coil, one of the largest ever shown on the lecture platform. The enormous discharge produced, as shown by the picture, is brilliant and resembles a gigantic electrical tree.

Friday evening Dr. Strong will tell of "Life and Intelligence in the Unseen." Having proved the existence of life in realms beyond our normal sight or hearing, the next step is to show the existence of intelligence behind that life, since where life is, there intelligence must precede the life. Men of science have for years been investigating the subjects of vibration, finally reaching the conclusion that different planes of consciousness correspond to differing rates of vibration. Under suitable conditions this theory may be easily proven to be fact. Dr. Strong will show by electricity just how matter and force, which are too subtle-vibrating too rapidly for the physical senses to grasp, can be rendered perceptible by laboratory means. Beautiful experiments with ultra-violet rays will be shown, also the method by which science has made the human aura visible.

Saturday evening, March 31, the subject will be "The Science of the New Age." Here Dr. Strong will discuss the process long known to occultists,

now just beginning to be accepted by scientists, whereby direct knowledge can be gained of higher planes of life, through development of powers existing in man's organism, but latent in the average individual. These faculties have long been recognized by students of "occult chemistry." The existence of etheric and supergaseous matter will be demonstrated by a se-

## Dr. Strong's Million-Volt Coil Discharging Electricity

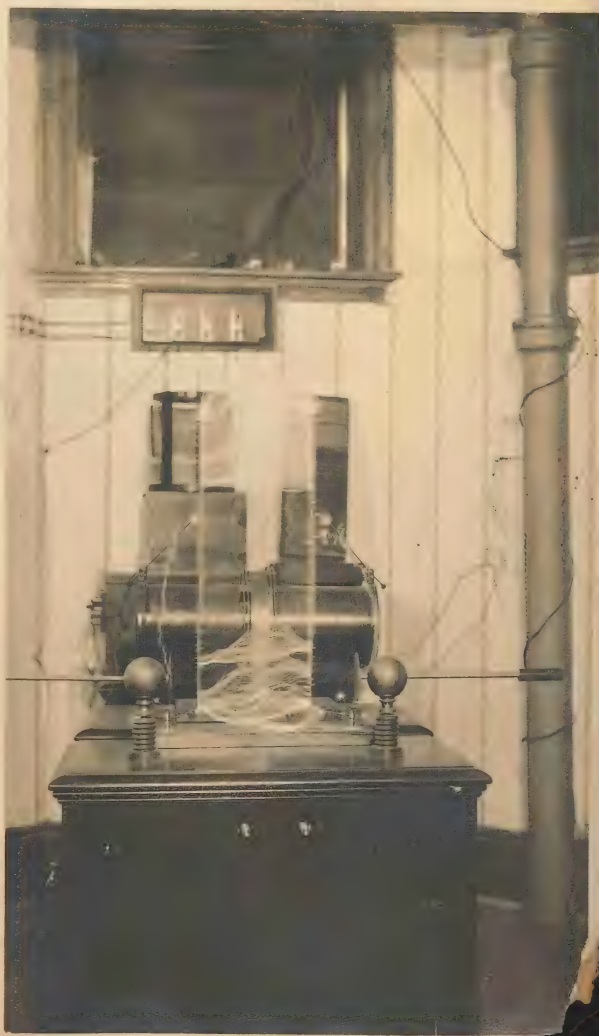


PROF. FREDERICK F. STRONG.

ries of experiments that fairly open up a new world. The possibilities of this superphysical world, on which Edison, Marconi, Tesla and other great scientists have drawn, will be presented by Dr. Strong in a manner at once clear and interesting, and this lecture is considered an important extension of and an addition to the latest scientific knowledge along these lines. These spectacular experiments reveal the fact that just beyond the vibrations of sight, hearing and touch, just beyond the realm of the visible, audible and tangible, lie vast fields that man has not begun to explore. New and fascinating fields of thought and speculation open up. The conditions of man's life, present and future, are suggested with a force and rational interpretation that offer unusual interest.

The series will conclude with a description of an imaginary visit to the scientific laboratory of the future.

The Boston Transcript, referring to Dr. Strong's lectures, recently said: "A few decades ago science attempted to interpret life and consciousness in terms of matter and force; today we recognize matter and force as manifestations of life, even as through water forms into ice."





## DR. STRONG TELLS ALL ABOUT THEOSOPHY

### Dr. Strong Predicts That Intuition Will Replace Reason in Future.

In the third lecture of his series in Odd Fellows' Hall, last night, Dr. F. F. Strong foretold that the knowledge of the future would be obtained through intuition and not through the laborious materialistic processes of the 19th century, an age devoted to reason.

In his previous lectures of the course, Dr. Strong had demonstrated the possibilities of bringing inharmonious wireless instruments in accord, through the agency of step-down or step-up transformers. One of his demonstrations last night was halted until the tuning coil was adjusted to bring part of the apparatus in full rapport, after which the experiment proceeded smoothly. This was purposely shown, to enable the audience to follow the "tuning up" process of these transformers. The people of the future, Dr. Strong predicted, would be able to attune themselves when suffering from inharmonious vibrations, and the process would be accomplished by means of "step up" transformers located in the brain of every individual, these "transformers" being known to medical science under the names of the pituitary body and the pineal gland, which are organs for the senses of inner sight and inner hearing—or the true intuition.

Alcohol and tobacco, said Dr. Strong, have very bad effects upon the pineal gland and the pituitary body, the organs of intuition and if indulged in by those who are endeavoring to develop these bodies, the results would be serious, producing cerebro spinal meningitis and other mental troubles. That is why theosophy puts universal brotherhood at its first principle and requirement of membership, and a clean, unselfish life as requisites before attempting to develop these powers latent in all, for only with the development of character in tune with the infinite is it safe to force one's evolution to such an extent.

The purpose of theosophy, Dr. Strong said, was in order to make life more harmonious and to be of service to humanity.

This evening Dr. Strong will conclude his course in Springfield with a free lecture in Odd Fellows' Hall, outlining the theosophic schemes of life and the plan of evolution in which Theosophists believe.

### WILL SEE THOUGHTS

#### Dr. Strong Predicts Future Scientific Developments in Theosophical Lecture

"One hundred years from now a lecturer in addressing his audience will speak no word. Instead we will watch his thoughts in the air." This prophecy was made by Dr. Frederick Finch Strong of Tufts medical college, Boston, in the third of his series of lectures under the auspices of the Theosophical society in Odd Fellows' hall last evening. Dr. Strong explained that with the occult science mastered in a century from now we would be able to read the thoughts of persons without difficulty. He also stated that the etheric aura which surrounds everyone would be plainly visible to the naked eye.

Brilliant experiments were shown with electrical apparatus demonstrating the existence of etheric and supergaseous matter, Dr. Strong said that, with the training of certain parts of the brain, communication with the spirits in the astral plane could be established. Such training, he said, would result from concentrated study, and could be applied by anyone physically and morally fit. Dr. Strong will give the last of his lectures to-night in Odd Fellows' hall. He will discuss the life of the future and how it can be attained.



### THEOSOPHICAL LECTURE

Dr. Frederick F. Strong delivered the last of a series of lectures on Theosophy in Odd Fellows' hall last night before a capacity house. His subject last night was "The Science of Life from a Theosophical Standpoint." "While Theosophy is the occult science of today," he said, "it is destined to be the orthodox science of the future. It is not a religion, but a science which helps people to understand their own religion."



### The Cornell Medical School

Last evening the medical society greeted Mr. F. F. Strong, of the senior class, with a goodly audience and he fully met their expectations in an admirable and masterly dress upon "The Leucocytes of Blood in Health and Disease Differentiated by the Methods Prof. Ehrlich of Berlin."

Mr. Strong is the only American who has taken this special work under Prof. Ehrlich, and his collection of microscopic slides upon this work is a unique American collection. Mr. Strong spoke with special reference to the investigations of Dr. Metschnikoff in the pathology of inflammation and of Prof. Ehrlich in special staining methods. The work of the latter is that of detecting these leucocytes; that of the former the explanation of their function.

The speaker introduced the subject by explaining the composition of the blood and the function of the elements in it, especially the corpuscles; the study of these corpuscles being facilitated by these methods of staining which were very fully described. After a description of the various forms of the corpuscles and their origin.



**Strong Will Be in High School Monday Evening**

Dr. Frederick Finch Strong, for eight years lecturer on electricity at Tufts college, Boston, is coming to Holyoke Monday evening to speak on "The Science of the New Age," Dr. Strong has been giving a most interesting course of lectures in Springfield the past week in Odd Fellows Hall and brings to Holyoke the famous million volt high frequency coil which he had in Springfield and which produces a discharge like a huge Christmas tree.

Other experiments and demonstrations will be given and Holyoke students may look forward to a treat in this lecture which will be given Monday evening in the High school. The lecture is free to all.

**HOYOKE DAILY TRANSC**

**THE SCIENCE OF THE NEW AGE.**

Noted Electrical Lecturer Coming to Holyoke Monday Evening.

Dr. Frederick Finch Strong, who has been giving a series of unusually interesting lectures on electricity in Springfield this week, will give a free public lecture in Holyoke Monday evening in the Holyoke high school. Dr. Strong for eight years held the Chair of Electro-Therapeutics at Tufts Medical college, Boston, and is a well-known lecturer on electrical subjects. He will bring to Holyoke his famous million-volt high frequency coil, which produces an electrical display like a Christmas tree, and will conduct other experiments and demonstrations of an equally interesting nature. His subject will be "The Science of the New Age."



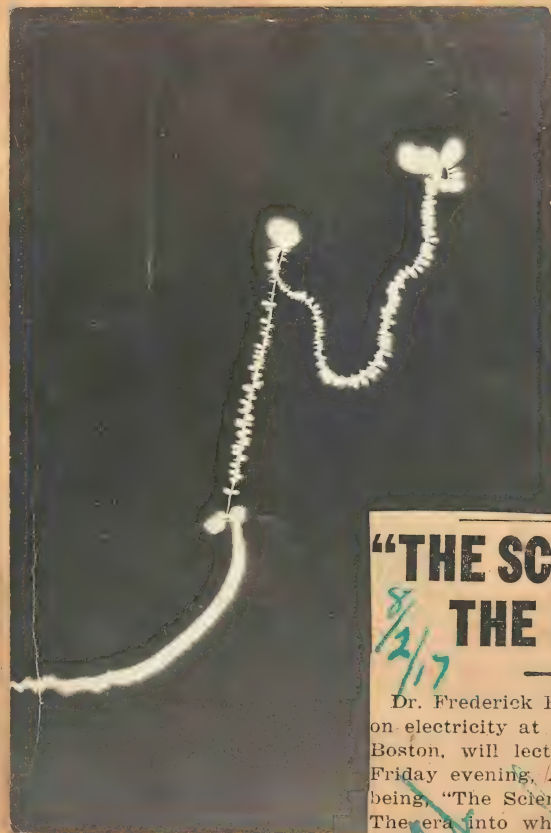
**DR. F. F. STRONG.**

The lecture will be of undoubted interest to High school students and electrical experts as well. Dr. Strong is a noted authority on this subject and has made a deep study of the force we call electricity, but which in spite of its daily use remains a mystery today so far as physical senses can penetrate.

Next fall, Dr. Strong has promised to come to Holyoke with the same service he has been giving in Springfield this week and students may look forward to his return visit with anticipation.



*Made by Dr. Strong for Dr. Frank Strong's Physical Therapy School*



**"THE SCIENCE OF THE NEW AGE"**

Dr. Frederick Finch Strong, lecturer on electricity at Tufts Medical school, Boston, will lecture at Greenacre on Friday evening, August 3, the subject being "The Science of the New Age." The era into which the world is entering bids fair to inaugurate revolution in all fields of human thought and activity; this is already apparent in the changed attitude of eminent scientific men towards the deeper things of life and it is not too much to say that the results of modern laboratory research have infused a note of spirituality into the hitherto materialistic realm of physical science.

fundamental truths of religion. Wonderful beautiful experiments are shown illustrating the recent discoveries which have carried scientific minds out of the real of "dead" matter into a world of ever-living, ever-manifesting spirit.

In this lecture, Dr. Strong will use his million volt high frequency coil, one of the largest ever shown on the lecture platform. It gives a radiating, tree-like discharge of electric flame over three feet high. The lecture will begin promptly at 8 p. m. and will be given in the Eirenon, the Greenacre lecture hall. All Greenacre lectures are free to the public who are cordially invited to attend.

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) and say "I don't want this"  
comes your money by the first

the, shoes, hats, furnishings.  
r man will be with you May 7  
Find him at Ithaca Hotel.



G. A. R. Hall, 55 Pearl Street  
May 18th is the date 8 P. M. is the time

## LECTURE

By DR. FREDERICK FINCH STRONG

Subject:

### "The Realms beyond the Senses"

This Lecture is designed to show how far our present Laboratory science has carried us into the realms beyond the senses. The subject of 'Vibration' will be considered and Dr. Strong will show by experiment how science has demonstrated the existence of some forty-six octaves of vibrations of which our senses tell us nothing. In this connection he will use his Million-volt High-frequency coil, one of the largest ever shown on the lecture platform it produces a marvellous discharge resembling a branching tree of electric flame nearly four feet in height.

Dr. Strong is recognized as one of the leading electrical authorities in the United States.

For Tickets Apply at G. A. R. HALL  
or Telephone Park 6920  
TICKETS 50 CENTS

Friday, May 18.

8.00 P. M. Dr. Frederick Finch Strong will give his famous lecture entitled "The Realms Beyond The Senses." Dr. Strong is the lecturer on Electric Therapeutics for Tufts Medical College, Boston, Mass., and is recognized to be one of the foremost authorities on electricity in the United States. His lecture will be illustrated by experimentation in which he will use his Million-Volt-High Frequency Coil, one of the largest ever seen on the lecture platform. Tickets sold in advance, price fifty cents.

## FIRST WEEK OF GREEN ACRE CONFERENCES

The first of the Sunday devotional services for this season was held in the Eirenon last Sunday morning. In the afternoon, Mr. W. H. Randall of Boston spoke on "The Mission of Green Acre." He paid a sincere tribute to the memory of Miss Sarah Farmer the founder of Green Acre. Brief remarks as to the ideals and purposes of the Green Acre Conferences were also made by Prof. Shook, of Williams College, and Dr. Strong of Boston.

On Monday afternoon, Dr. Frederick F. Strong lectured on "The Unity of Science and Religion." The idealistic tendency of modern science was mentioned, and the testimony of leading scientists of the world was cited in evidence of the statement that laboratory investigation is rapidly leading us out of the material and into spiritual realms. The scientific trend of all great religions of the day was also indicated; dogmas are being eliminated and different sects and creeds are rapidly becoming united on a platform common to them all. In the religion and science will be harmony.

On Wednesday, July 11, I spoke on "World Forces of Nature." Ancient records were indicating the use of great forces which have since been neutralized gravitation seems to have been used by the builders of the great monuments of antiquity. This force will be rediscovered and will form the basis of the future. "World forces of the Future liberated by the break of the atom as seen in the phenomenon of radioactivity, was also suggested as a great world force which would take a great part in the economic future. The use of vital and "forces was also suggested, and a mechanical device was which was made to revolve magnetic force emanating from the hand of the lecturer.

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Dr. F. F.

of Tufts College, will speak at the LEAGUE FOR

THE LARGER LIFE, 222 West 72d Street,

New York, on

## The Idealism of Modern Science

Sunday evening, October 14, at 8.15 o'clock.

Everybody Cordially Invited.

Free Will Offering.

## Reception Day

Thursday, October 4

10 A. M. to 3 P. M. Registration.

The Registration Committee will furnish badges, programs and all information. You may also purchase your tickets for the Vegetarian Banquet on Saturday and the Hudson River trip on Monday.

2 P. M. Meeting of Board of Trustees.

3 P. M. Informal Reception.

Welcome by the Lodges of New York City.  
Refreshments served.

8:15 P. M. Illustrated Lecture by Dr. Frederick Finch Strong, of Tufts College, Boston. Subject, "The Science of the New Age." Dr. Strong uses a million-volt high-frequency coil in his brilliant and spectacular experiments. He aims to prove that the "Occult" Science of today will be the "Orthodox" Science of tomorrow. (Silver collection.)

DR. STRONG OF BOSTON

We have received good reports of the work done by Dr. Frederick F. Strong, lecturer on electricity at Tufts Medical College, Boston, in various cities in the East, and we are interested to learn that Dr. Strong contemplates devoting his entire time to lecturing. The American Section is fortunate in the possession of its National Lecturers, in that they all present the theosophic message from widely different points of view. Dr. Strong appeals to a section of the public that it is most important to reach—the educators, scientists and doctors. His field is unique, for he demonstrates, by the aid of stage experiments, the existence of forty octaves of vibrations beyond the perception of physical consciousness.

Lodges (especially those in the East) interested in this work should ascertain details by writing direct to Dr. Frederick F. Strong, 176 Huntington Avenue, Boston, Mass. Up to the present Dr. Strong's theosophic work has naturally been in and around Boston. C. H.

*The Messenger*



8 P. M. is the time

By DR. FREDERICK FINCH STRONG

## "The Realms beyond the Senses"

Dr. Strong is recognized as one of the leading electrical authorities in the United States.

**TICKETS 50 CENTS**

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entality. This force will be rediscovered and will form the "World forces of the Future." Forces liberated by the breaking of the atom as seen in the phenomenon of Radium, was also suggested as a possible world force which would play a great part in the economic future. The use of vital and "atomic" forces was also suggested, and a mechanical device was described which was made to revolve by magnetic force emanating from the hand of the lecturer.

Thursday, October 4

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3 P. M. Informal Reception.

8:15 P. M. Illustrated Lecture by Dr. Frederick Finch Strong, of Tufts College.  
Subject, "The Francis Street Church."

Subject, "The Theosophical School at Santa Clara, N. M."

"The omnipresence of the unseen is one of the great revelations of science."—*Sir Oliver Lodge.*

of Tufts College, will speak at the LEAGUE FOR  
THE LARGER LIFE, 222 West 72d Street,  
New York, on

Sunday evening, October 14, at 8.15 o'clock.

## Free Will Offering.



# The Realms Beyond the Senses

## The Reality of the Unseen

A SERIES OF THREE LECTURES BY

**Dr. Frederick Finch Strong**

LECTURER ON ELECTRICITY  
TUFTS MEDICAL COLLEGE, BOSTON

Monday, Wednesday and Friday  
Evenings

October 15, 17 and 19, 1917, at 8:15 o'clock

Auditorium of Public Library  
Franklin Avenue near Fulton Street, Brooklyn

Given under the auspices of the Theosophical Society  
95 Lafayette Avenue, Brooklyn

The general purpose of Dr. Strong's "Occult" Science of today will be to indicate by brilliant experiments the ways through which this change of the unseen vibrations of Nature" on October 15, 16, and 17, at 8:15 in the evening, in the Brooklyn Public Library, Franklin Avenue and Fulton Streets. Dr. Strong will use a million-volt high-frequency coil, and the ultra-violet ray in demonstrations which he will give.

### Will Talk on Vibration.

## DR. STRONG TALK ON UNSEEN REALITIES

"The reality of the unseen" was the topic of Dr. Frederick Finch Strong's lecture, under auspices of First Spiritualist church, 55 Pearl street, last night.

Our physical bodies, according to Dr. Strong, may be compared to overalls. We don them and come on earth to dig in the trenches. When the labor is over the overalls are cast aside and man stands in his spiritual underclothes, a reality but as yet invisible to the material eye.

Hundreds of scientific men, says Dr. Strong, who have passed years of study and investigation along the line of psychic phenomena are emphatic in their statements of the spiritual life of man on earth, even after he has passed thru what is called, or mis-called, death. The men who voice these opinions started their researches as rank materialists, sceptic.

Men are born unequal, according to science, and the only logical way to account for the difference in the mental and spiritual caliber of the great financier and the day laborer is thru the theory of former existence and life on this earth. The brain of the financier is keener and more fully developed simply because he has lived longer, has had more lives than the day laborer.

Science has proved that there are vibrations so powerful around us at all times that it is beyond our physical senses to see or hear them, to be aware of their presence in any way, except thru a scientific vibratory transformer. These vibratory transformers are beyond the grasp of the lay mind. We cannot understand the technical side of the question because we have not been trained along scientific lines. Dr. Strong, by several spectacular experiments, left no doubt in the minds of the audience regarding the existence of the ultra-violet ray, a higher and more powerful vibration than the famous "violet ray."

Altho the public mind cannot often follow the scientific end of the story, still the public mind accepts the scientific proofs of the unseen reality of the powerful vibrations. Why does the public mind turn a deaf ear to science when, speaking from deep study and investigation, it tells of a material life, on a higher and invisible plane. It is true, but nevertheless a real life after the physical overalls have been laid aside?

All around us, says Dr. Strong, are the astral bodies of friends and relatives who have done their bit in the trenches of life, and now stand in spiritual underclothes. We cannot see them because the matter which shapes their bodies is too fine for the physical eye, just as the ultra-violet ray was invisible to the senses.

There are some people who are sensitive to the unseen realities. These are the psychics or mediums. They are the vibratory transformers of the psychic world.

Dr. Strong concluded with wonderful experiments with the ultra violet ray, laboratory proof of the lecture's theory of the existence of forces and matter beyond the earthly senses.

Dr. Strong will lecture on the "Star of the east" at the First Spiritualist church, Dec. 2. The third and last of the series of "Realms beyond the senses," will be held the second Wednesday in January.

*Public Library, Brooklyn, N.Y., 1917*







## Bulletin Number Three

NOVEMBER, 1903

Mentioning some extensive alterations and improvements.

Some interesting matter on electrical apparatus.

Information on the fitting of trusses.

A list of instruments and books at very low prices.

*Otis Clapp & Son*

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## The Story of a new Electro-Therapeutic Appliance.



The brilliant achievements of scientific investigators in the field of electrical science during the past decade have served to concentrate the attention of the medical profession upon the wonderful possibilities to be found in the field of electro-therapeutics. Although conservative members of the medical profession have ever been wary of experimenting in the treatment of disease by electricity, yet since the days of Gilbert and Franklin this important subject has been forcing itself more and more to the front, until many of the leading lights of the healing art are to-day numbered among the believers in its efficacy.

The wonderful discovery of Roentgen, made known to the world in 1896, gave a great impetus to the use of electricity in medical and surgical diagnosis, which bids fair to be surpassed by the perhaps greater serviceability of the X-rays as a therapeutic agent in the treatment of some of the most formidable diseases which afflict the human race. Finsen's discovery of the usefulness of the ultra violet rays in the treatment of various diseases has given an added impetus to the subject.

### The Strong Static Induction and High Frequency Apparatus.

Among the first to experiment with the X-rays in this country, after the announcement of Prof. Roentgen's discovery, was a young medical student in the city of Boston who showed his genius by building for himself an apparatus for the production of the X-rays early in 1896. This student, Dr. Frederick F. Strong, now instructor in electro-therapeutics in Tufts Medical College, selected the Tesla or High Frequency type of apparatus for his experiments, and it was not long before he noticed that patients who were exposed to the X-rays generated by his apparatus were in many cases benefited in their general health. This led him to investigate the therapeutic possibilities of electric currents of high frequency and high potential with astonishing results. Up to date he has treated several hundred cases, many of which had proved refractory to other forms of treatment, and in the majority of instances beneficial results have followed.\*

During this time he made a number of improvements in his apparatus and many ingenious adaptations for the therapeutic application of High Frequency currents, among others being the use of vacuum electrodes and other methods of treatment through glass. Dr. Strong has discovered many interesting things in the course of his investigations and has succeeded in adapting his apparatus to a variety of uses.

\*Dr. Strong is now writing a book giving in detail the result of his work, which will soon be put in the hands of a printer for publication.



twenty breaks per second as ordinarily found in the Resonator types, and even only two or three per second as found in H. F. attachments for static machines, such as Piffard's Hyperstatic Transformer. The enormous increase of the rate of condenser discharge in the Strong apparatus manifestly increases the power of the apparatus in like ratio.

Another unique feature is the air rheostat which permits of an exact regulation of the dosage. Still another feature of much value is the device for regulating the frequency and potential of the apparatus, which is accomplished by alterations in the capacity, inductance and resistance. These are placed at the command of the operator by means of specially constructed high tension switches placed on one end of the machine.

A point of much importance in this class of apparatus is the question of insulation. This, we believe, has been satisfactorily solved by Dr. Strong, who has spent many hours in his laboratory experimenting with different materials and has finally obtained a substance of surpassingly greater resistance than oil, and, therefore, an ideal insulator. Nor is the apparatus left to depend upon insulation, being so constructed electrically and mechanically as to be subjected to the least possible amount of electrical strain when in use.

The apparatus is manufactured under the direct supervision of Mr. Earle L. Ovington of the Massachusetts Institute of Technology, who was connected with Edison's laboratory for over two years. He personally tests every instrument, subjecting it to double the strain while testing that it will be called upon to endure afterwards.

### High Frequency Therapeutics.\*

The physiological effects of high frequency currents are chiefly exercised upon the vaso-motor system causing a flushing of blood through the peripheral capillaries, opening up the sweat glands and relieving local congestion. The blood becomes oxygenated and uric acid is oxydized into urea and elimination of waste products greatly increased. There is a marked germicidal action due to what is termed "electric ozonization," which is the result of the large amount of ozone generated by high frequency currents and carried into the tissues by electric bombardment. This is of much value in the treatment of infected sores, tubercular ulcers, chronic skin diseases, etc. There is an increased elimination of  $\text{CO}_2$  and respiration is favorably affected. There is also an undoubted anesthetic action when the current is concentrated over a small area.

It is obvious that an agent of such valuable and varied physiological effects must be useful in the treatment of a large number of diseases. Among those in which it has been found of special value are diabetes, gout, chronic rheumatism, obesity, hysteria, neurasthenia, insomnia, headache, anæmia and chlorosis, dyspepsia, atonic dilatation of the stomach, colitis, hemorrhoids, chronic constipation, prostatitis, neuralgia and pulmonary tuberculosis. Herschell has obtained excellent results in the treatment of gastric ulcer, chronic gastritis and chronic catarrh of the intestines.†

Among local diseases benefited by high frequency treatment may be mentioned lupus vulgaris, lupus erythematosus, chronic eczema, acne rosacea, psoriasis, pityriasis, sciatica, pruritis, rodent ulcer, trachoma, prolapsus and fissure of the anus, etc.

There are certain essentials to be taken into consideration by the physician about to purchase high frequency apparatus. Many inefficient machines of little value are on the market, and the purchaser should not be misled by low price or unwarranted claims to purchase a cheap or inferior piece of apparatus. A first-class instrument should be capable of giving 500 milliamperes or more of current in the secondary circuit and should supply a heavy spray of from 5 to 8 inches in length. It should be adjustable as to tension and frequency, as the low frequencies of five or six hundred thousand oscillations per second are only suitable for X-ray work, the most efficient frequencies for therapeutic work ranging from a million to a billion per second.

The Strong Static Induction and High Frequency Apparatus is designed with especial reference to the above mentioned requirements which have been found by leading workers to be necessary to obtain first-class therapeutic results. The price of the apparatus with therapeutic attachments is \$350. The X-ray attachment is \$25 extra. The Ultra Violet attachment is also \$25 extra. These can be obtained at any time after the apparatus is installed.

\* For further details of the therapeutic uses of high frequency currents see Chisholm Williams book on the subject. Price, \$2.75. For sale by Otis Clapp & Son.

† Herschell Manual of Intragastric Technique, London, 1903.



## Static Electricity.

In his private practice Dr. Strong has succeeded in securing all results from his apparatus that can be obtained with a Static machine. The value of this fact can only be appreciated by those who have experienced the disheartening and unsuccessful effort to make a static machine work in humid weather. To those who have been accustomed to rely upon the cumbersome static machine with its fragile glass plates and its susceptibility to atmospheric conditions, this neat, compact and handsome apparatus of Dr. Strong's seems a wonder. That an instrument which can be attached directly to any incandescent lighting circuit and is not affected by moisture or temperature should be capable of producing the static breeze, spray or spark, or produce effects similar to the static induced and wave currents seems almost beyond belief. Yet all this and much more can be accomplished with this new apparatus. For that reason it is called the "*Strong Static Induction and High Frequency Apparatus*."

Among the late therapeutic appliances designed by Dr. Strong for use with his apparatus may be mentioned the *Vacuum Head Spray*, the *Combination Fluorescent Electrodes*, and the *Adjustable Condensing Effleuve Electrode*, with attachments which enable the operator to use a spark through glass or the effleuve directly against the body of the patient, either through the clothing or against the bare skin. He has also devised a unique apparatus for the inhalation of ozone generated by high frequency discharges. This apparatus is constructed so as to eliminate the disagreeable nitrogen fumes, which is a great improvement upon the ordinary types of ozone inhalers.

## Ultra Violet Rays.

Another late addition to Dr. Strong's apparatus is an attachment for generating pure Ultra Violet Rays of great power and quantity. This attachment is a modification and improvement of the condenser spark lamp used by Görl of Nuremburg, in which advantage is taken of the fact that the condenser spark is very rich in ultra violet light. In the Görl lamp the discharge from a pair of leyden jars is carried to a series of three or four small iron balls placed about one-eighth inch apart. The discharges of current are necessarily intermittent and follow each other at comparatively long intervals. In Dr. Strong's improvement the discharge from a condenser of much greater capacity is utilized in such a way as to obtain a continuous arc between the electrodes. Hence the ultra violet rays are much more powerful and of surpassingly greater quality.

## X-Rays.

The X-rays produced by this apparatus are steady and powerful, seeming to possess in a large measure the actinic power of X-rays generated by a powerful coil, combined with the penetration noticeable in X-rays generated by large static machines with a great number of revolving plates. The result is an X-ray that gives splendid definition for fluoroscopic work, with excellent results in radiographic work, the length of exposure being much shorter than is necessary with even the largest static machine.

## High Frequency Currents.

Although Morton used high frequency currents therapeutically as far back as 1881, the power and tension of his currents were very low, being obtained simply from the discharge of a pair of Leyden jars and were by him denominated "Static Induced Currents." In 1890 D'Arsonval commenced his experiments with high frequency currents and obtained some very encouraging results with a high frequency solenoid. In 1893 Oudin devised his "Resonatur," which is the instrument now almost universally used abroad for the production of high frequency currents. With this class of apparatus some remarkable results have been obtained by European electro-therapeutists.

## Unique Features.

Many notable improvements upon this type of generator have been made in the Strong Static Induction and High Frequency Apparatus, however. Among others may be mentioned the spark gap which gives over a thousand breaks of the condenser discharge per second as against ten or



Feb-28-18

## SAYS GHOSTS ARE MATERIAL THINGS

Their weight ranges from few ounces to 50 pounds, says Dr. Strong.

## VIEW OF A SPIRIT WORLD

Lecturer says some of a low order come back to earth and cause woe.

## FRUITFUL CAUSE OF INSANITY

Asylums filled, he says, with unfortunate thus possessed by strange spirits.

Dr. Frederick Finch Strong gave his second lecture at the Statler last night to a large audience. In the latter part of his talk, after he had given a series of electrical experiments with a vibrator which he says vibrates 1,500,000 times a second, he told of conditions of life in the astral plane, also called the spirit world.

"There are various conditions of life in the astral plane corresponding to the life we lead here and though life there is much the same it is purged of its lower passions and desires. Thus persons of low intellectual order, who find their pleasure in drunkenness or other forms of debauchery, are unhappy there when they are suddenly taken away from the earthly life," said the lecturer.

"They yearn to return to their fleshly desires," he continued, "and consequently they form the lower strata of astral life much as they occupied the lowest level of earthly society. They are constantly looking for a chance to return and take up a human habitation."

"I remember very strongly that one time, while experimenting with hypnotism, I hypnotized a woman and was greatly surprised to hear her address me in a coarse and guttural masculine voice. That was because during the time the spirit was absent from her body, one of these lower spirits, seeking a human habitation and yearning for the earthly life, took possession of her body which it found untenanted. This shows the dangers of hypnotism—exposing an unoccupied body to the lower spirits which are constantly roaming back to earth."

Dr. Strong said that spirits can be materialized and as such have a perceptible weight ranging from a few ounces to 40 or 50 pounds.

"I myself have weighed a materialized spirit, though it weighed but a few ounces. Others have weighed them on scales and have found them to weigh as much as 50 pounds."

The lecturer blamed the returned spirits for the crowded condition of our insane asylums and said that much insanity of the type other than that formed by brain lesions was the result of the lower spirits taking possession of human bodies and ousting the rightful occupants. He didn't explain where the rightful spirit went when thus evicted.

"Our insane asylums are filled with those who have made themselves a channel for the drainage from the astral plane," he declared with conviction.

"When you attempt to sum up my lecture," said he, "and attempt to judge it for yourself, you must take one of four courses. Either you must say 'Dr. Strong may believe these things, but he has been deceived,' or else, 'Dr. Strong is crazy, anyway,' or else, 'Dr. Strong is a cheerful liar,' or else you must say, 'Dr. Strong is right.'"

He ended his lecture with an electrical experiment in which he used what he said was a 500,000-volt coil. When properly tuned up it threw a blue, fork-shaped flame a foot or two into the air. The last lecture of the series, which promises final proofs of a life in the astral plane after death, will be given on Wednesday night at the Statler.

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To the latter statement he added that it would be possible to use current, generated at Niagara Falls, in Buffalo without the aid of wires. He showed in a demonstration how this could be done by the use of transformers. He made his demonstration on a million volt high induction coil which sent out a tree-like flaming discharge nearly four feet high.

BUFFALO NEWS

2-28-18

## PREDICTS WIRELESS POWER TRANSMISSION

Dr. Strong Makes Statement in Talk on "Reality of Unseen."

Wireless transmission of electrical energy, which has with a small measure been put to practical use, power generated at Buffalo will be transmitted to Dr. Frederick F. Strong, closing lecture of the Reality of the Unseen, was given last evening at the Statler.

Many startling claims made within the past few years, Dr. Strong said. Most, however, have held no laboratory experiments, studied theosophy, knowledge of the unseen gained through clairvoyance through the laboratory processes now used, he said.

Through the development of normal organs which human organism, obtained knowledge of life, he said, and wireless telegraphy and of the air as predicted by clairvoyants which have



## SPECIAL

Arrangements have been made for a series of Lectures on

## "The Reality of the Unseen,"

By DR. FREDERICK FINCH STRONG,  
(Lecturer on Electricity, Tufts Medical School.)

The Course will consist of three lectures given one week apart.

LECTURE I. The Nature and Limitations of Sense Perception. The nature of matter, and experimental demonstration of substance beyond human perception. The human aura made visible by scientific means.

LECTURE II. The Vibratory Nature of all Phenomena. Harmony and discord. Pitch and wave length. Invisible forces made visible by experiment.

LECTURE III. The Common Origin of Matter and Force. Universal Mind. Life in the Rock and in the Ether. Scientific proof of the possibility of Materialization, Telepathy and Clairvoyance. The permanence of the Ego and the relative unreality of the Objective.

The lectures will be illustrated by brilliant experiments, some of which have never before been demonstrated outside the laboratory.

The course will be given twice during the ensuing year. Time and place to be announced later.

For further information apply to

MRS. L. JENNIE MILLER,

Lodge Room, 320 Huntington Chambers.

Buffalo

2-28-18

## Air to sup motive for

Vehicles to come  
pulling force  
the ether, say

That scientific knowledge would be obtained through the medium of materialistic processes of the nineteenth century was the subject of a lecture of a series of lectures given last night on the "Reality of the Unseen."

Dr. Strong discussed which he said has been held by clairvoyants for years, by the knowledge of him through the development of normal organs which human organism.

The speaker cited wireless telegraphy and air as predictions which have come true many more startling than be made within the past few years, he declared that most have held to their predictions too closely and have not been open to the possibility of a change.

1906-7



Feb-28-18

## SAYS GHOSTS ARE MATERIAL THINGS

Their weight ranges from few ounces to 50 pounds, says Dr. Strong.

## VIEW OF A SPIRIT WORLD

Lecturer says some of a low order come back to earth and cause woe.

## FRUITFUL CAUSE OF INSANITY

Asylums filled, he says, with unfortunates thus possessed by strange spirits.

Dr. Frederick Finch Strong gave his second lecture at the Statler last night to a large audience. In the latter part of his talk, after he had given a series of electrical experiments with a vibrator which he says vibrates 1,500,000 times a second, he told of conditions of life in the astral plane, also called the spirit world.

"There are various conditions of life in the astral plane corresponding to the life we lead here and though life there is much the same it is purged of its lower passions and desires. Thus persons of low intellectual order, who find their pleasure in drunkenness or other forms of debauchery, are unhappy there when they are suddenly taken away from the earthly life," said the lecturer.

"They yearn to return to their fleshly desires," he continued, "and consequently they form the lower strata of astral life much as they occupied the lowest level of earthly society. They are constantly looking for a chance to return and take up a human habitation.

"I remember very strongly that one time, while experimenting with hypnotism, I hypnotized a woman and was greatly surprised to hear her address me in a coarse and guttural masculine voice. That was because during the time the spirit was absent from her body, one of these lower spirits, seeking a human habitation and yearning for the earthly life, took possession of her body which it found untenanted. This shows the dangers of hypnotism—exposing an unoccupied body to the lower spirits which are constantly roaming back to earth."

Dr. Strong said that spirits can be materialized and as such have a perceptible weight ranging from a few ounces to 40 or 50 pounds.

"I myself have weighed a materialized spirit, though it weighed but a few ounces. Others have weighed them on scales and have found them to weigh as much as 50 pounds."

The lecturer blamed the returned spirits for the crowded condition of our insane asylums and said that much insanity of the type other than that formed by brain lesions was the result of the lower spirits taking possession of human bodies and ousting the rightful occupants. He didn't explain where the rightful spirit went when thus evicted.

"Our insane asylums are filled with those who have made themselves a channel for the drainage from the astral plane," he declared with conviction.

"When you attempt to sum up my lecture," said he, "and attempt to judge it for yourself, you must take one of four courses. Either you must say, 'Dr. Strong may believe these things, but he has been deceived,' or else, 'Dr. Strong is crazy, anyway,' or else, 'Dr. Strong is a cheerful liar,' or else you must say, 'Dr. Strong is right.'"

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BUFFALO NEWS

2-28-18

## PREDICTS WIRELESS POWER TRANSMISSION

Dr. Strong Makes Statement in Talk on "Reality of Unseen."

Wireless transmission of electrical energy, which has been accomplished with a small measure of success, will be put to practical uses so that the power generated at Niagara Falls can be transmitted to Buffalo wirelessly, Dr. Frederick F. Strong predicted in a closing lecture of a series on "The Reality of the Unseen." The lecture was given last evening in the Hotel Statler.

Many startling discoveries will be made within the next few years, Dr. Strong said. Most research scientists, however, have held too closely to their laboratory experiments and have not studied theosophy, he said. Scientific knowledge of the future will be obtained through intuition and not through the laborious materialistic processes now used, he declared.

Through the development of super-normal organs which are latent in the human organism, occultists have obtained knowledge of higher planes of life, he said, and he cited the X-ray, wireless telegraphy and the navigation of the air as predictions of the occultists which have come true.

Buffalo Express

2-28-18

## Air to supply motive power for future car

Vehicles to come will grab propelling force right out of the ether, says scientist.

That scientific knowledge in the future would be obtained through intuition and not through the laborious materialistic processes of the nineteenth century was the statement of Dr. Frederick F. Strong in his closing lecture of a series at the Statler hotel last night on the Reality of the Unseen.

Dr. Strong discussed a process, which he said has been known to occultists for years, by which may obtain the knowledge of higher planes of life through the development of the super-normal organs which are latent in the human organism.

The speaker cited the X-ray, wireless telegraphy and navigation of the air as predictions of the occultists which have come true. He said that many more startling discoveries will be made within the next few years and declared that most research scientists have held to their laboratory experiments too closely and have not studied theosophy.



reaches it. The same principle will perhaps one day be used to operate machinery, but long before that we shall draw energy in an unlimited amount directly from the earth in the form of electrical waves."

Sir Oliver Lodge states that if we could release the energy locked up in a cubic inch of ether of space we could run a 30 Kilowatt power plant for thirty years!

Another recent discovery of much interest purports to come as the result of the solution of the "Baconian Cypher." It is claimed that the history of the occult side of Lord Bacon's life is contained in a Cryptogram in "Shakespeare's" plays. Through the discovery of a key to this cipher, details have been obtained for the construction of an airship on principles entirely unknown to modern science: - the use of bronze bells in which cones revolve destroying or neutralizing the gravitational attraction of the earth and the ship rises. This has actually been tested in the laboratory of the Massachusetts Institute of Technology. The "re-inventor" proved that when a certain vibration was reached the machine lost half its weight. He attributed the effect to synchronism with the vibrations of the earth. No one took up his discovery, and, as yet, it has not been made public; but when it is, we may look for some sensational newspaper stories and perhaps the final vindication for the claims as to the Baconian authorship of the plays attributed to Shakespeare.

It is high time that a laboratory be established in which scientific research may be carried on under occult authority and in the light of occult knowledge. When important discoveries are made under such conditions they will establish once for all the validity of occult teaching in the eyes of the world, and the laboratory in which the work is done will become the birth-place on the physical plane of the science of the future.

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In my public scientific lectures I endeavor to present some experimental evidence of superphysical powers and forces; showing that already in our scientific laboratories we are using types of energy that would have been called "Occult" fifty years ago.

## NOTED SCIENTIST TO SPEAK IN CITY

Dr. Strong, of Tufts Faculty,  
to Discuss Theosophy  
in Akron

Dr. Frederick Finch Strong, a member of the faculty of Tufts college, Boston, and noted scientist, will speak on "Science and Theosophy" at The Forum, Walsh block, 55-57 S. Main st., Saturday evening at 8 o'clock.

Dr. Strong has studied at Cornell, at the University of Berlin, and in Vienna and Paris, and studied psychotherapy under Charot and Kraft-Ebbing. He invented the first apparatus for the generation of the Tesla currents for X-ray and medical use, and also the vacuum electrode used to generate the violet ray.

He has written several scientific text books and patented 16 scientific and electrical inventions. He has been a college lecturer for 20 years, and a student and lecturer on psychic phenomena, theosophy and comparative religion for 15 years.

## NOTED SCIENTIST TO DISCUSS THEOSOPHY

Dr. Frederick Finch Strong, of Tufts Medical college, Boston, a lecturer widely known for his extraordinary demonstrations in the realm of the occult, will speak at The Forum, Walsh block, Saturday evening of "Theosophy and Science."

Dr. Strong has been a college lecturer for 20 years and has written a number of widely used text books. He invented the first apparatus for the generation of Tesla currents for X-ray and medical use, and the vacuum electrode used to generate the violet ray.

For the last 15 years Dr. Strong has been a student and lecturer on psychic phenomena, theosophy and comparative religion.

Dr. Strong comes to Akron on the invitation of the local Theosophical society, whose guest Dr. and Mrs. Strong will be during their stay in Akron. Admission to the lecture is free.

## OF WONDERS SPIRIT REALM

Lecturer Once Endeavored to  
Show That Belief is  
All a "Fake."

Says Ultra-Violet Ray Opens  
Gateway to Unseen  
World.

Dr. Frederick Finch Strong became an expert magician and was taken into the Society for American Magicians in order to prove, he says, that Spiritualism is a fake.

He had studied at Cornell, at Berlin and Vienna. He was a lecturer on electricity in Tufts Medical college, Boston. He thought, he says, he could not be fooled in the field of his own sciences.

He was a confirmed materialist, he says. "I was an agnostic with regard to the occult. I studied magic and applied my knowledge of science in order to prove that all Spiritualism is nothing but spookery."

After I had learned enough so that I could see the Spiritualistic phenomena, I found that there was a great deal of truth in my first guess that could

## Holds Communications With Spiritual World



Frederick  
Strong

not be fake and that could only be explained in the language of the occult."

"Matter and force too fine for the physical senses can be made perceptible by laboratory means," says Dr. Strong. "By means of ultra violet ray experiments it is possible to enter the world of unseen forces. The spiritual world becomes a scientific fact with which we can hold communication."

Dr. Strong will give the third of his lectures in Theosophy hall, E. 66th street and Euclid avenue, tonight. A public lecture will be given tomorrow night at 8.

"The lectures are intended to prove by spectacular experiments," Dr. Strong says, "that outside of the everyday world which we see, hear, touch, there is a far more real and wonderful realm pressing upon us on all sides."

"We are just beginning to recognize this realm through the medium of scientific discovery. All the great philosophers and religious teachers of the ages have maintained that it exists."

"This era of thought into which the world is entering bids fair to inaugurate revolutions in all fields of human thought and activity. This is already apparent in the changed attitude of scientific men toward the deeper things of life."

Cleveland  
Plain Dealer  
May 13, 18



## Frederick Finch Strong, M. D.

### Personal Data

Studied at Cornell University (Chemistry and Biology), also University of Berlin, and in Paris and Vienna. Studied psychotherapy and hypnotism under Charcot and Krafft-Ebbing.

Invented the first apparatus for the generation of Tesla currents for X-ray and medical use.

Invented the "Vacuum Electrode," which is now generally used under the name of "The Violet Ray."

Author of several scientific text books, among them the first large book on "High Frequency Currents."

Has patented sixteen scientific and electrical inventions. Twenty years experience as a College Lecturer and public speaker. For fifteen years a student and lecturer on psychic phenomena.

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### Holds Communications With Spiritual World



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Cleveland  
Plain Dealer  
May 15, 18



Feb-28-18

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"There are various conditions of life in the astral plane corresponding to the life we lead here and though life there is much the same it is purged of its lower passions and desires. Thus persons of low intellectual order, who find their pleasure in drunkenness or other forms of debauchery, are unhappy there when they are suddenly taken away from the earthly life," said the lecturer.

"They yearn to return to their fleshly desires," he continued, "and consequently they form the lower strata of astral life much as they occupied the lowest level of earthly society. They are constantly looking for a chance to return and take up a human habitation.

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BUFFALO NEWS

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Buffalo

2-28-18

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For further information apply to

MRS. L. JENNIE MILLER,

Lodge Room, 320 Huntington Chambers.

1906-7







The members of The Columbus Theosophical Society wish to express to  
Dr. Frederick Finch Strong <sup>and his estimable wife Mrs. Strong</sup> their appreciation of his splendid scientific  
~~manner~~ <sup>of presenting</sup> the Theosophical Teachings. His lectures have been the  
means of presenting Theosophy to a class of people few of our lecturers  
can reach. At the second lecture we had present with us, many different  
Ministers, Lawyers, Doctors and Teachers. All left with a better understand-  
ing of the Occult laws, having been inspired from a new angle and <sup>they received</sup> an  
impetus to seek further knowledge of the hidden laws of nature. Many  
Spiritualist's of this city were given a very clear and logical explanation  
of the difference between "White and Black Magic," and the seeds planted  
by Dr. Strong will surely develop into an endless chain of good.

Signed--March 16, 1918

Marion Humphreys

Mary E. Munselle

Dr. Hirt

E. R. Blakeby

Effie Seigel

Charles Young

Harriet Schwartz

Scott Van Etten

Alb. Butler

Eugene T. ...

Paul ...

M. ...

Alice B. Orr

Mabel M. Jacobs

J. Cain

Rose Steinberg







## TREATMENT FOR DEAFNESS WILL BE EXPLAINED

More than 200 members of the visiting staff of Monte Sano Hospital and their friends have been invited to the hospital tonight to hear an address on electrical vibrations and radiant energy in application to disease and see a demonstration of a new treatment for deafness—the "photosonic synchronizer" recently invented by Dr. Frederick Finch Strong of Hollywood. Dr. James M. Watson, pediatrician of the hospital, will be on the program to discuss Dr. Strong's inventions and the practical application of his theories, particularly in connection with children's ailments.

Believing that every organ and cell responds to definite vibrations or key-notes and that disease and discord are closely related terms, Dr. Strong for more than 30 years has tested all available forms of vibratory and radiant energy in the attempt to evolve a truly scientific system of physical therapeutics.

Tonight for the first time he will explain ultra-violet technic which has enabled him successfully to regenerate the skin in faces pitted by small-pox or similar pustular diseases hitherto impossible of correction.

10:30 P.M. 1934





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omobile parts. They have replaced th  
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## No. 3' Safety Rouses Interest

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their autos' brakes inspected regu  
larly. It often happens that brake  
that seem to be in good working  
order are potentially dangerous—  
and that only an expert brake in  
spection can reveal that danger.

In conjunction with their safet  
campaign, Muller Bros. are makin  
an attractive offer on brake in  
spection and adjustment and invit  
car owners to take advantage of it

DAM GUIDE SERVICE











## Will Give Spectacular Lecture to Show Electricity at Million Volts

Dr. Frederick Finch Strong, lecturer on Electricity at Tufts College, Boston will give a series of three striking lectures at the Woman's club building tonight and Thursday and Friday night, March 26, 28, 29, the general subject being "The Science of the New Age."

These lectures are intended to prove by brilliant and spectacular experiments, that outside of the everyday world which we see, hear and touch, there is a far more real and wonderful realm pressing upon us on all sides; a realm which we are just beginning to recognize through scientific discovery, although all the great

philosophers and religious teachers of the ages have maintained that it exists.

The era into which the world is entering bids fair to inaugurate revolutions in all fields of human thought and activity; this is already apparent in the changed attitude of eminent scientific men toward the deeper things of life, and it is not too much to say that the results of modern laboratory research have infused a note of spirituality into the hitherto materialistic realm of physical science.

Dr. Strong's object in these lectures is to show the harmony between the latest scientific deduction and the real fundamental truths of religion.

## Dr. Strong to Describe Possibility of Science Preventing War in Future

Dr. Frederick F. Strong, who is to lecture tonight at the Woman's club building on "The Science of the New Age," is one of the experts who was consulted by the submarine defense association regarding the possibilities of detection and destruction of enemy submarines by vibratory forces.

In his lecture tonight, Dr. Strong will describe some of the possible discoveries in this line which may make future war impossible. The wireless transmission of power has already been accomplished experimentally by

Nikola Tesla, who operated a one horse power motor without wires five miles from his generating plant.

With his wonderful million-volt coil which gives a flaming discharge four feet high, Dr. Strong will show the character of the vibratory forces Tesla used to accomplish this feat. Other brilliant experiments will be shown with invisible forces, and the human body will also be considered as a generator of "wireless" waves.

## Dr. Strong to Give Closing Lecture at Woman's Club House Sunday Night

The third lecture of the series was given last night by Dr. Frederick F. Strong on "The Science of the New Age" at the Woman's clubhouse. In eloquent language and striking electrical experiments he described the wonderful advance that twentieth century science has already made in piercing the, to us, hitherto invisible regions and he predicted that much greater wonders and advance in science would be made as time went on.

He postulated that occultist had taught such things for the past twenty-five years or longer and that finally secular science began to study

the propositions and prove them true. He said such men as Tesla do not work but things by law and tedious labor, but that they "come" to them, through a small organ in the brain, called the pineal gland. Any person may develop this organ by proper methods and thus reach out for the knowledge of the higher regions.

Dr. Strong will conclude his series of lectures here Sunday evening, by taking for his topic "Science and Theosophy." Next week he lectures in Grand Rapids at the Ladies' Literary club. This last lecture will be free to the public, and will be at the Woman's clubhouse.

Grand Rapids, Mich.

SATURDAY MAR 23 1918

DR. F. STRONG TO LECTURE

Dr. Frederick Finch Strong, author, scientist and inventor of the vacuum electrode, known as the "violet ray," will deliver a series of lectures, April 2, 3 and 4, at the Ladies' Literary club.

Dr. Strong believes that the survival of man after the death of the body, and the existence of spheres of matter and forces of which occultists have long taught, are now being clearly demonstrated by science.

Electrical apparatus will be used in fascinating experiments to illustrate his statements. Among these are experiments showing how science has made the human aura visible.

In the three lectures, "Force and Matter in the Unseen," "Life and Intelligence in the Unseen," and "Science of the New Age," Dr. Strong expects to prove that much of what was once spurned as occultism is now a matter of scientific knowledge.

Dr. Strong holds degrees from Cornell, Boston university, Tufts college, Boston, and the University of Berlin, and has lectured for more than 20 years on science, comparative religion and theosophy. He is now finishing an extensive tour of this country.

## TO GIVE PROOF OF 'LIFE BEYOND GRAVE'

G. R. Huald

TUFTS COLLEGE PROFESSOR

SAYS HE WILL DO IT IN

THREE LECTURES.

Mar. 31. 18

To prove that "life beyond the grave" is not a dream of the religionists, but a demonstrable, scientific fact and that there is harmony between the latest scientific deductions and the real fundamental truths of religion, Dr. Frederick Finch Strong, a Tufts college lecturer will speak at the Ladies' Literary club Tuesday, Wednesday and Thursday evenings at 8.

He will have a stage full of electrical appliances in which to prove his contentions and in his first course, "Force and Matter in the Unseen," he will speak on vibration. In other courses he will speak on the phenomena of spiritualism, and will complete his lectures in the city with an imaginary visit to a scientific laboratory of the future.

GRAND RAPIDS PRESS  
MONDAY APR 1 1918

Dr. Strong to Lecture.  
In the first of a series of four lectures Tuesday night in All Souls' church Dr. Frederick Finch Strong of Tufts Medical college, Boston, will attempt to prove from the deductions of natural science the fact of the immortality of the soul. In his first lecture "The Realm Beyond the Senses," he will show by means of electricity the finer grades of matter and force which lie beyond the evidence of the physical senses, but which can be revealed through electricity.

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Dr. F. F. Strong will lecture at the Ladies' Literary club April 2, 3, 4 and 5, his topics including "Force and Matter in the Unseen," "Life and Intelligence," and "The Science of the New Age."

## STRONG TALKS ON FORCE AND MATTER OF UNSEEN

"There are 60 octaves of vibration and of these only 11 are recognizable by the physical senses," said Dr. Frederick Finch Strong Tuesday night in his lecture on "Force and Matter in the Unseen," the first in a series of four to be given in the Ladies' Literary clubhouse on Sheldon av., S. E. Dr. Strong, who is lecturer on electricity at Tufts Medical college, Boston, and who has made various important researches and discoveries, is advancing the theory in this course of lectures that the psychic realities will eventually be demonstrable according to science.

"The laboratory, by the aid of electricity," he said, "has already proven the existence of tremendous forces which are beyond the cognizance of the physical senses. At the present time the ultra violet ray and the X-ray are the highest rates of vibration that have been revealed. I am convinced that we shall soon be able to reach even higher forces than that of the X-ray."

"The science of the nineteenth century," said Dr. Strong, "explained the construction of the material universe upon the atomic theory that of blind force working through dead matter. The science of the twentieth century goes farther and discovers the electron to be the unit of matter, the electron being a center of force. Beyond that is a divine intelligence which animates the universe."

Following the lecture Dr. Strong conducted many interesting demonstrations with electric apparatus.

In his lecture Wednesday night he will speak on "Life and Intelligence in the Unseen," in which he will conduct experiments with the ultra violet ray in proof of the existence of the psychic realities.

THE REALMS BEYOND THE SENSES  
THE REALITY OF THE UNSEEN  
A SERIES OF THREE LECTURES BY  
DR. FREDERICK FINCH STRONG  
Lecturer on Electricity, Tufts Medical College, Boston  
Wednesday, Thursday and Friday, April 10th, 11th and 12th, 1918  
at 8 o'clock P. M.  
RECITAL HALL, AUDITORIUM BLDG.  
Wabash Avenue Entrance  
86  
"FORCE AND MATTER IN THE UNSEEN"  
"LIFE AND INTELLIGENCE IN THE UNSEEN"  
"THE SCIENCE OF THE NEW AGE"  
COURSE TICKETS \$1.00  
SINGLE ADMISSION 50c

Muskegon Mich  
N CHRONICLE, MONDAY, APRIL 1, 1918.

## Dr. Strong Refutes Theory of Darwin; Speaker Declares the Reverse is True

Not since the days when Mrs. Besant, president of the Theosophical society, was in Muskegon many years ago, has this city been visited by such an eloquent lecturer on this topic as Dr. Frederick Strong has shown himself to be in his series of talks at the Woman's club during the past week.

Dr. Strong is a prominent scientist and has studied thoroughly such subjects as hypnotism and psychic phenomena in their varied aspects.

In his lecture last night he gave a synopsis of theosophic teachings and refuted the well known Darwinian theory that mankind sprang from the apes as occult science has always claimed the reverse is true.

Dr. Strong will visit some of the cities in the northwest before reaching the national headquarters at Krontona, near Los Angeles. Here the doctor will establish a laboratory for research along scientific and occult lines.



# CREATES FLAME BY ELECTRICITY DURING LECTURE

Dr. Frederick F. Strong Tells Teachers of Phenomena of Scientific Matter.

A lecture on electricity was given Tuesday afternoon at Stivers high school by Dr. Frederick Finch Strong of Boston. The lecture was given under the auspices of the Dayton Teachers' Club. Until recently Dr. Strong was a lecturer on electrical phenomena at Tufts College and has written several books on "High Frequency Currents."

Dr. Strong illustrated his lecture with demonstrations of apparatus and methods by means of which science has arrived at the modern conception of matter. In showing his million volt high frequency coil in action an electrical flame nearly four feet high was discharged.

Dr. Strong maintained that scientists no longer believe there is such a thing as dead matter. Instead of the former materialistic belief of existence as the play of blind force through dead matter, scientists now regard matter as formed of living whirls or bubbles in a subtle medium called ether.

"These bubbles are the units of force as well as matter," said Dr. Strong. "In the latter form we call them electrons. Life and intelligence use these centers to form its outer garments. There is no longer a basis for belief in dead matter."

## NOTED SCIENTIST SPEAKS TWICE HERE

Dr. Frederick Finch Strong, Formerly of Tufts College, Lectures To Teachers of Dayton.

Dr. Frederick Finch Strong, formerly lecturer on electricity at Tufts college, Boston, will lecture Wednesday evening at 8 o'clock at the Y. W. L., on "Vibration." The public is cordially invited.

Dr. Strong lectured on "Moderns' Conceptions of Matter," before the Dayton Teachers' club, Tuesday afternoon.

Illustrating the "Electron Theory," in which science has now interpreted all phenomena of the outer world in terms of electricity and life, the lecturer demonstrated some of the newer and finer forces through the study of which this theory has been formulated. The cathode rays, ultra violet rays and the X-rays were used as the basis of many beautiful experiments.

Perhaps the most spectacular display was the discharge of electricity at one million volts, a veritable tree of flame nearly four feet high.

Dr. Strong emphasized the fact that the 20th century conception of matter is radically different from that of the materialistic conception of the 19th century. He contends that science has demonstrated that so-called dead matter is really a living force, and that there is no longer any basis for a belief in dead matter.

## Scientist To Lecture Here



DR. F. F. STRONG.

Scientific discoveries in connection with the superphysical world will furnish the themes for three lectures next Monday, Tuesday and Wednesday nights at the Chamber of Commerce Auditorium by Dr. Frederick Finch Strong of Boston.

Electrical and other scientific apparatus will be used in illustrating the lectures. Experiments with ultra-violet rays will be included in demonstrations accompanying a discussion by Dr. Strong of the phenomena of spiritualism.

Dr. Strong has for some time been a lecturer on electricity at Tufts College and is the author of several scientific textbooks.

## LECTURES ON ELECTRICAL TOPICS

Dr. Frederick Strong, Inventor and Author, to Explain Latest Discoveries.

Dr. Frederick F. Strong, of Boston, for a long time lecturer on electricity at Tufts Medical college of that city, also an inventor and author of several scientific text books, will lecture in the auditorium of the Chamber of Commerce Monday, Tuesday and Wednesday evenings on subjects dealing with the latest scientific discoveries and advanced conceptions of leading scientific investigators.

The lectures will be illustrated with an extensive line of scientific and electrical apparatus and many spectacular experiments will be given. The subjects will be: Monday night, "Power and Matter in the Unseen;" Tuesday night, "Life and Intelligence in the Unseen," and Wednesday night, "The Science of the New Age."

## GET POWER FROM AIR

Dr. Strong Suggests Possibility in Lecture Here.

Will the automobile driver of the future pick out of the air power required to propel his machine, just as he uses it?

By means of a pole extending into the air, he will extract it from etheric waves, according to the prophecy of Dr. Frederick Finch Strong, lecturer on electricity at Tufts Medical College, Boston.

"No need to worry about the exhaustion of the coal supply," said Dr. Strong, who thinks vibrations of force, generated from water power, can be thrown into the air in sufficient quantities to keep the whole country warm when picked up by proper coils. With his million-volt high-frequency coil, one of the largest ever seen on the lecture platform, a spectacular discharge of electrical flames was produced last evening.

Fort Wayne. Ind.  
one lecture  
Science & Philosophy  
and  
Detroit. Mich.  
same lecture

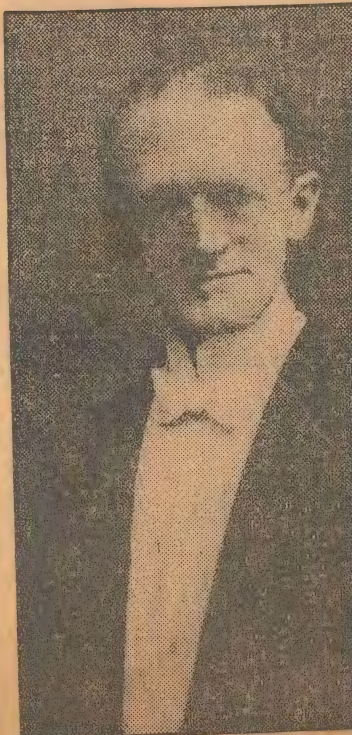
## By Dr. Frederick Finch Strong OF TUFTS COLLEGE—TONIGHT AT THE Woman's Club House

The First of Three Unusual Lectures on

## "The Realms Beyond The Senses"

Illustrated with spectacular experiments with electricity at one million volts. Tickets for the course \$1.00. Single admissions 50c.

## TO LECTURE HERE ON SUBJECT OF OCCULT



Dr. Frederick Finch Strong.

Dr. Frederick Finch Strong of Boston, will be in Muskegon next week to give a series of lectures, under local auspices, on the subject of "The Realms Beyond the Senses—the Reality of the Unseen."

These lectures have created wide spread interest wherever given and it is believed that Dr. Strong will create much interest here also, particularly among students of the "occult."

Dr. Finch has had wide experience as a lecturer and student of psychic phenomenon, theosophy and comparative religion. He was lecturer on electricity and other scientific subjects at Tufts Medical college, Boston, for many years.

The doctor has sixteen scientific and electrical inventions to his credit. Among them is the first apparatus invented for the generation of Tesla currents for the X-ray and medical use, and the vacuum electrode, now generally used on the violet ray. He brings with him a quarter of a ton of different electrical machines which he uses in a number of brilliant demonstrations during his lectures.

In these demonstrations he is ably assisted by Mrs. Strong. The lectures will be given in the Woman's club house under the auspices of Unité lodge of the Theosophical society and the dates are Tuesday, Thursday and Friday evenings.

Dayton Daily News - Feb. 20, 1910





FREDERICK FINCH STRONG

Dr. Strong, lecturer on electricity at Tufts Medical college, Boston, will give three lectures at Hotel Statler. Next Sunday at 8 p. m. the title will be "Force and Matter in the Unseen." Next Monday at 8 p. m., "Life and Intelligence in the Unseen." Next Wednesday at 8 p. m., "The Science of the New Age." See ad. in another column.

**THE REALMS BEYOND THE SENSES**  
THE REALITY OF THE UNSEEN  
A Series of Three Lectures by  
**Dr. Frederick Finch Strong**  
Lecturer on Electricity at Tufts Medical College, Boston  
Given Under the Auspices of  
**THEOSOPHICAL SOCIETY**  
BUFFALO LODGE  
Main and Utica Sts.  
**Sunday, Monday and Wednesday Evenings**  
**February 24, 25 and 27**  
at 8 o'clock  
**Hotel Statler**  
Course Tickets, \$1.00  
Single Admission 50 Cents

**THEOSOPHICAL SOCIETY.**

Theosophical Society, Henkel Building, Main and Utica streets. Study class, Wednesday evening, 8 P. M. Lending library of Theosophical and Occult literature free to public. Series of lectures by Dr. Frederick Finch Strong, lecturer on electricity, Tufts Medical College, Boston, will be given at Hotel Statler, Sunday, Monday and Wednesday evenings, February 24, 25 and 27 on "The Realms Beyond the Senses." Course tickets one dollar. Single admission fifty cents. The regular Sunday afternoon lecture at the Henkel building will be omitted February 24.

**PROMINENT ELECTRICAL EXPERT WHO LECTURES AT HOTEL STATLER**



Dr. Frederick Finch Strong.

Dr. Frederick Finch Strong, for many years a lecturer on electricity in Tufts college, will give a series of three lectures in the Hotel Statler next week. The lectures will be at 8:15 o'clock Sunday, Monday and Wednesday evenings.

With electrical apparatus of spectacular variety Dr. Strong will give experimental demonstrations to show the harmony between the latest scientific deductions relating to life beyond death and the basic facts which underlie all religion.

**Scores science for attachment to the material**

Dr. Strong, with a dark room and a buzzer, begins trip to the invisible.

Dr. Frederick Finch Strong, lecturer on electricity at Tufts college, spoke to several hundred theosophists and others at the Hotel Statler last night, and among other things raked nineteenth century science over the coals. He said it was all wrong, but that the scientists of today are gradually getting out of the state of crass materialism that dominated their dogmatic, intellectual forebears.

Dr. Strong hopped the theory that molecular bodies are the real basis of all matter, as the majority of scientists believe. He said that the universe is vibrant with life, and that there are humans living a very real and active existence in the realms beyond our imperfect senses.

"Everybody in this room, including myself, has got to die," said Dr. Strong, "and it behooves us all to try to get some knowledge of what is for us after death. If we were going to Hawaii to live, we'd take care to learn of living conditions there before we started. So we should try to find out something of the realms beyond our senses before we go there."

This was all very interesting to the audience. When the doctor turned out the lights, set in motion a little buzzer which, it appears, vibrates about a thousand times a second, and finished by lighting tapers and melting metal into small gobs with the current passing through his body, the assemblage was as pleased as a child with a new toy. There were waves of "ohs" and "ahs."

The lecture was the first of a series of three. In the next two Dr. Strong, having laid his foundation, will try to show some of the forces invisible to the senses, and to prove that there are strange things afloat in the subtle ether that permeates our world and our beings.

**Dr. Strong to Deliver Spectacular Lecture**

Dr. Strong will deliver a series of three lectures at the Hotel Statler on the topic, "The Science of the New Age," Sunday, Monday and Wednesday evenings, February 24th, 25th and 27th, under the auspices of Buffalo Lodge, Theosophical Society.

These lectures are intended to prove by brilliant and spectacular experiments that, outside of the everyday world which we see, hear and touch, there is a far more real and wonderful realm pressing upon us on all sides; a realm which we are just beginning to recognize through scientific discovery, although all the great philosophers and religious teachers of the ages have maintained that it exists.

The era into which the world is entering bids fair to inaugurate revolutions in all fields of human thought and activity; this is already apparent in the changed attitude of eminent scientific men toward the deeper things of life, and it is not too much to say that the results of modern laboratory research have infused a note of spirituality into the hitherto materialistic realm of physical science.

Dr. Strong's object in these lectures is to show the harmony between the latest scientific deduction and the real fundamental truths of religion. Wonderful and beautiful experiments are shown illustrating the recent discoveries which have carried scientific minds out of the realm of "dead" matter into a world of ever-living, ever-manifesting spirit.

The laboratory of the future will deal with forces and phenomena entirely beyond the present range of human consciousness, and the scientist will become the great ally of all true teachers and preachers of religion.

They are lectures compiled for thinking people, yet even young children witness with intense interest the many beautiful experiments employed in illustrating the various phases of the

**BUFFALO NEWS**

Feb-25-18

**TRIES TO REVEAL LIFE AFTER DEATH**

Dr. Frederick Finch Strong of Tufts College Opens Lecture Series.

Theosophists, with those that are interested in it and those that are curious about it, last night heard Dr. Frederick Finch Strong of Tufts college at the Hotel Statler discuss the subject. He prefaced his lecture with an attack on what he termed the "crass materialism of scientific men in holding the molecular theory as all-embracing. He held that there was a real and active existence beyond the senses to appreciate."

"Everybody in this room has got to die," he declared, "and it behooves us to try to get some knowledge of what lives for us after death. If we were going to Hawaii to live, we'd care to learn of living conditions there before we started. So we should try to find out something of the realms beyond our senses before we go."

The lecture was the first of a series of three. In those remaining Dr. Strong will discuss forces invisible to the senses.

**BUFFALO NEWS**

Feb-26-18

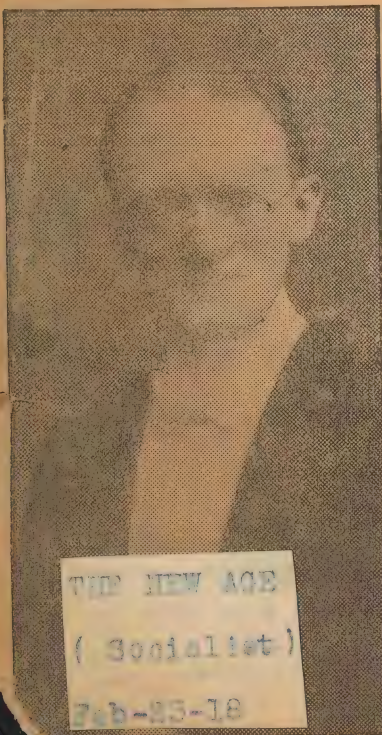
**THEOSOPHIST TELLS WHY INSANE ASYLUMS ARE FULL**

Materialized spirits vary in weight from a few ounces to as much as 50 pounds, said Dr. Frederick Finch Strong in the second of a series of lectures arranged by the Theosophical society in the Hotel Statler last evening. Dr. Strong told of conditions of life in the spirit world, or the astral plane, as he called it.

The lower spirits of those who led lives of debauchery while on earth try to get some knowledge of what lives for us after death. If we were going to roam about in the lower levels of the astral sphere, he said, and seek to take possession of human bodies. This, he said, explains why insane asylums are filled with the degraded spirits seizing possession of human bodies.

**THE REALMS BEYOND THE SENSES—The Reality of**

A Series of Three Lectures by DR. FREDERICK FINCH STRONG  
Sunday, "FORCE OF MATTER IN THE UNSEEN"; Monday, "LIFE IN THE UNSEEN"; Wednesday, "THE SCIENCE OF THE UNSEEN"  
**Sunday, Monday and Wednesday Evening**  
**FEBRUARY 24, 25 and 27, 1918, AT 8:15 O'CLOCK**  
**AT HOTEL STATLER.**  
COURSE TICKETS \$1.00  
SINGLE ADMISSION 50 CENTS



**THE NEW AGE**

(Socialist)

Feb-23-18

FREDERICK FINCH STRONG.



Boston

## Here and There: This and That

By E. J. P.

Dr. Frederick Finch Strong and Mrs. Strong were the guests of honor at an informal reception tendered them by the members and friends of The Psychic Inquiry Club at 9 Leamington Road, Thursday evening, February 14. The evening was charmingly spent in speech making and music and delightful interchange of thought. Dr. and Mrs. Strong are members of the club and it was with regret that goodbyes were spoken, for they are to make a lecture tour across the continent reaching California sometime in June, where a laboratory waits their coming in which many wonderful demonstrations will be made. After refreshments had been served the merry party broke up with assurances that when the California work was done the friends would again meet to give the wanderers a royal welcome "home."

Dr. Strong has always given generously of his time and gifts to the Club and assisted by his most able wife has given some of his marvelous electrical experiments with tubes and apparatus which give some idea of the vast fields of knowledge as yet unnoticed and unexplored by science; and all who have known them as club members and friends will follow with unabated interest the work which calls them so far from Boston and love which fails not though distance falls between will be to them a strength and shield in the new domain of labor for truth.

\* \* \*

## SCIENTIST ON THEOSOPHY

Man of Notable Attainments to Be Heard in Lecture.

Dr. Frederick Finch Strong, lecturer on electricity at Tufts Medical College, Boston, and a noted scientist, will speak on "Science and Theosophy" at Theosophical Hall, No. 101 Cornwall building, at 8:15 o'clock Friday evening. Admission will be free.

The object of Dr. Strong's lectures is to correlate theosophy and science. He has been a student at Cornell, at the University of Berlin, and in Vienna and Paris, and studied psychotherapy under Marcot and Kraft-Ebbing. He invented the first apparatus for the generation of the Tesla currents for x-ray and medical use, and also the vacuum electrode now used under the name of violet ray.

Dr. Strong has written several scientific text books and patented sixteen scientific and electrical inventions. For twenty years he has been a college lecturer and for fifteen years a student and lecturer on psychic phenomena, theosophy and comparative religion.

## DR. FREDERICK F. STRONG TO LECTURE ON OCCULTISM

"Science and Theosophy" is the subject of a free public lecture to be given to-night at 91 North Pearl street at 8:15 o'clock by Dr. Frederick Finch Strong of Boston. Dr. Strong, formerly a lecturer on electricity in Tufts Medical college, has done research work along both physical and occult lines. He has devised much interesting apparatus, which was exhibited at the recent National Theosophical convention in New York.

The closing lectures of the series under the auspices of the local Theosophical society will be given on March 3, 4 and 5 by Dr. K. D. Shastri, a Hindu scholar and physician.

### "SCIENCE AND THEOSOPHY."

Lecture To Be Given To-night By Dr. Strong Of Boston.

"Science and Theosophy" is the subject of a free public lecture to be given to-night (Thursday), at 91 North Pearl street, at 8:15 p. m., by Dr. Frederick Finch Strong of Boston. Dr. Strong, formerly lecturer on electricity in Tufts Medical college, has done research along both physical and occult lines.

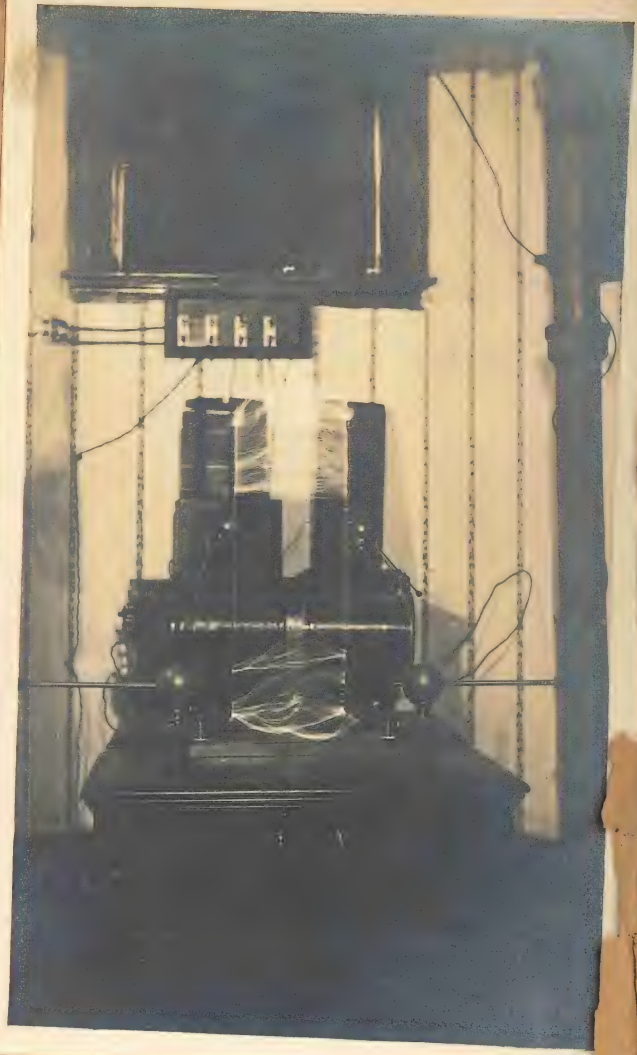
The closing lectures of the series being held under the auspices of the local Theosophical society will be given on March 3, 4 and 5 by Dr. K. D. Shastri, a Hindu scholar and physician.

### SCIENCE AND THEOSOPHY.

To Be Topic of Address by Tufts Medical College Lecturer.

"Science and Theosophy" will be the topic of a lecture by Dr. Frederick Finch Strong, of Tufts Medical College, Boston, at Theosophical Hall, 101 Cornwall Building, Friday evening 8:15 o'clock. Admission will be free.

Dr. Strong studied at Cornell, University of Berlin, Vienna and Paris and he aims in his lecture to correlate theosophy and science. He has written electrical and other scientific books.



## The Realms Beyond the Senses The Reality of the Unseen

A SERIES OF THREE LECTURES BY

# Dr. Frederick Finch Strong

LECTURER ON ELECTRICITY

TUFTS MEDICAL COLLEGE, BOSTON

SUNDAY, MONDAY AND WEDNESDAY EVENINGS

February 24, 25 and 27, 1913, at 8 o'clock.

## HOTEL STATLER

The general purpose of Dr. Strong's Lectures is to prove that the "Occult" Science of today will be the "Orthodox" Science of tomorrow, and to indicate by brilliant and spectacular experiments some of the ways through which this change is being brought about.

Course Tickets \$1.00.

Single Admission 50c



DR. F. F. STRONG.

Dr. Frederick Finch Strong, lecturer on electricity, Tufts Medical College, Boston, Mass., will give three electric lectures in the ballroom of the Hotel Statler on Sunday, February 24; Monday, February 25; and Wednesday, February 27, at 8:15 P. M. The general purpose of the lectures will be to show the realms beyond the senses and demonstrate the reality of the unseen. Apparatus will be used which can seldom be seen outside a laboratory. Tickets at the entrance of the lecture room.

Dr. Frederick F. Strong, of Tufts College, Boston, Mass., scientist, inventor, author and lecturer, will give three lectures at Hotel Statler on Sunday, February 24; Monday, February 25; and Wednesday, February 27, at 8:15 P. M. The general purpose of the lectures will be to show the realms beyond the senses and demonstrate the reality of the unseen. Apparatus will be used which can seldom be seen outside a laboratory. Tickets at the entrance of the lecture room.



# THE WOMAN'S CLUB

AGAIN DISCUSSED BY DR. STRONG  
WHO HAS GREAT FAITH IN  
THE LEWIS PLANS.

Says He Has Caused Close Investigation to Be Made—Will Meet the Ladies Next Tuesday Afternoon.

To the Editor Independent:

At the request of a number of the St. Petersburg ladies, who are members of the American Woman's League, I delivered a lecture last Thursday afternoon in the Star Theatre, giving a brief outline of the work of Mr. E. G. Lewis at University City, and showing a number of lantern slides illustrating the institutions behind the American Woman's League. I was asked to present the subject to the ladies of this city in order to obtain a large number of members for the league and thereby obtain a fine chapter house for St. Petersburg. I consented to speak upon the subject because I have carefully followed every step of Mr. Lewis' work for the past decade and have seen him rise from relative obscurity to the head of one of the greatest institutions in the world to-day. I am also an honorary member of the Woman's League.

One result of my lecture was a letter in Friday's Independent, signed "A Friend," reviewing the main features of the league plan, in a somewhat skeptical vein, and stating that Mr. Lewis had founded a bank which had been closed as a fraudulent institution, while his publications had been excluded from the mails. In conclusion, "A Friend" advised the ladies of St. Petersburg to go slowly and to thoroughly investigate Mr. Lewis and his enterprises before associating themselves therewith.

Now, much that "A Friend" says is true, and his (or her) advice is sound and good; all that I, or any other member of the league could ask or desire, is that the ladies of this city should thoroughly investigate the league and inform themselves regarding all phases of the Lewis enterprises. Things that are honest and true investigation, and it is largely the world-wide publicity given Lewis and his work through the destruction of his enterprises and the loss of his good name that he has gained his present high position. It grows brighter by rubbing, least friction serves to expose the metal under the surface. There is no alloy of character or motives, or has been exposed long since, certainly "been up against the hard." That time is all over and at present his great accomplishment is a fact. He has the defence of his friends and the results of his work are evidences of his honesty and

with a capital of \$2 ten Mr. Lewis built up a great plant in less than five established a postal savings

tion with over two million dollars on deposit. With no apparent reason the then Postmaster-General issued a fraud order which virtually destroyed the postal bank at a single blow, and also debarred the Lewis publications from the U. S. mails. At that time Gen. Edwin C. Madden was Third Assistant Postmaster-General (a position which he had held for nine years). When he was directed to issue the above fraud order he instituted a minute investigation of the Lewis enterprises and reported to his chief that there was absolutely no ground for the action of the P. O. Department. Despite Gen. Madden's protest the order was issued. Gen. Madden thereupon resigned his position and shortly afterward issued a book entitled "The United States Government's Shame; a History of the Great Lewis Case." This book tells the whole story plainly, and is written by a high government official, whose position gave him a knowledge of the inside facts. The accusations made in Gen. Madden's book have never been refuted, and it is believed that this exposure practically ended the political advancement of the then Postmaster-General, who might otherwise have ultimately risen to the highest office in the land. After a long fight, Mr. Lewis finally succeeded in having his case reviewed in the courts, and as a result he was absolutely vindicated. The judge condemned the proceedings against Mr. Lewis as iniquitous and an insult to the genius of the American people. Mr. Lewis' publications were restored to their rightful mail privileges, but his bank was of course destroyed. He exhausted his own fortune in the fight, which cost him nearly two millions of dollars, but not one of his stockholders or depositors lost a cent. The present bank, which has arisen, Phoenix like, from the ashes of its predecessor, is a far greater and stronger institution, and numbers among its directors some of the best known financiers of the State of Missouri. At the present time there is not a village or town in the country, having two hundred or more inhabitants, that does not include some subscribers to Mr. Lewis' publications. (Copies of his journals will be found at the Free Reading Room for those who are not familiar with them.)

The following extracts are from a letter written to the Daily Banner, the leading newspaper of Mount Vernon, O., by one of the most prominent business men of that city. He describes a ten-days' visit to University City, undertaken for the purpose of thoroughly investigating the Lewis Publishing Company and especially the American Woman's League.

"While in St. Louis I personally interviewed Ex-Governor Francis (former Governor and Treasurer of the State of Missouri), Judge Barclay (for nine years Supreme Court Judge of Missouri), Mr. L. B. Tebbetts (director of the largest bank of St. Louis); also, lawyers, business men, college professors, laboring men and many others, and, without exception, they spoke in the highest terms of Mr. Lewis and his enterprises. From a conservative estimate there is at least four millions

to the Lewis Company. During my visit to the publishing plant subscriptions were being received at the rate of over five thousand dollars per day. The advertising value of the Lewis publications is beyond computation, and will alone enable Mr. Lewis to carry out all his plans for the league, and to erect chapter houses in hundreds of cities and town throughout the country. To show my faith in the Lewis plan I will personally guarantee in writing the investment of the first fifty women who join the league in Knox county. We are going to have the largest chapter in the State and the most costly chapter house before the snow flies next fall and I shall personally see that it is done. All the woman's clubs of Knox county may be permitted to use the building for their meetings, and it will provide a rest room and reading room for all women visitors to our city. It is hoped that with the co-operation of our citizens a woman's gymnasium with baths, etc., will form a part of the accommodations. It will be worth the while of every citizen to wake up to the feasibility and desirability of this enterprise; those who join now become members of the Founders' Chapter and receive annual dividends which will be paid only to the first one hundred thousand members of the league. This limit will soon be reached. There is a tide in the affairs of men which taken at its flood, leads on to fortune, and it takes more good judgment to know when to jump in than to know when to stay out—any one can stay out—but the alert person perceives the day of his opportunity.

F. H. HUNTSBERGER."

The above letter is one of many which I have read showing the attitude of prominent business men toward the American Woman's League.

I wish I were able to make a similar guarantee to the ladies of St. Petersburg. I would gladly do so had I the means. I want to see a large chapter formed in this city, inasmuch as the larger the chapter the more expensive will be the chapter house to which we will be entitled, as well as the annual income received from the league for its maintenance. A woman's club house would mean much to St. Petersburg; it would become a social center for the resident ladies as well as a meeting place for the tourists, many of whom are, or will be, members of the league, who may become members of the St. Petersburg chapter during the winter, while still retaining their membership in the chapters of their respective homes in the north. One can be a member of the league without associating with any local chapter, but the formation of a chapter (by five or more members) greatly increases the advantages and benefits which they receive without adding to the expense. To join the league one agrees to send in one dollar each week for fifty-two weeks in subscriptions to the Lewis publications. Fifty-two new names on the subscription list means increase in value and profits which could not

This is the keynote of the league. One half of each dollar paid in subscriptions goes into the endowment of the league and the other half eventually comes back to the league or it is part of the plan that the publishing company shall ultimately pass completely into the hands of the league as part of the assets of the league. It is a great trust, but, unlike oil or steel trusts, which give enormous profits to one man, the "League Trust" gives life-long benefits and advantages to hundreds of thousands of American women and their children. After the payment of the fifty-two dollars in subscriptions (which can be paid by the prospective member, subscriptions being presented as a gift among our friends; or can be solicited by her from fifty-two friends, in which case he is not desirous of personally paying the amount) there are no further dues or obligations of any kind, no matter whether the league member is enrolled in a local chapter or not. This is a feature which many cannot understand, as it seems to give a return out of all proportion to the modest fee required for membership. In order to help those who are interested in the subject I will meet the members of the league and all others who care to present in the Park Pavilion next Tuesday, April 6th, at half-past two o'clock in the afternoon. Please bring any questions that you would like to have answered, and I will do my best to clear them up. I trust that there will be present a number of ladies who have decided to join the league so that we may at once apply for a charter for a local chapter. I trust that "A Friend" will be present and I will do my best to give him a clearer and more favorable understanding of Mr. Lewis and his work. I have ordered two of Gen. Madden's books, and will present them to the Free Library and to the League Room, so that all can have access to them. If any one wishes to hear further from "Government Officials" or to ex-Gov. Francis, or ex-Gov. of St. Louis, Mo. In conclusion, let me thank the editor of The Independent, in the name of the American Woman's League, for my own name as well, for his courtesy in opening the columns of his paper to the discussion of this subject, which I cannot but feel will prove a lasting benefit to the citizens of our beautiful little city.

FREDERICK FINCH STRONG

Springfield  
Union  
Apr 1, 1917  
UNION: SUNDAY. AM







# WOMAN'S CLUB

AGAIN DISCUSSED BY DR. STRONG  
WHO HAS GREAT FAITH IN  
THE LEWIS PLANS.

Says He Has Caused Close Investigation  
to Be Made—Will Meet the  
Ladies Next Tuesday Afternoon.

To the Editor Independent:

At the request of a number of the St. Petersburg ladies, who are members of the American Woman's League, I delivered a lecture last Thursday afternoon in the Star Theatre, giving a brief outline of the work of Mr. E. G. Lewis at University City, and showing a number of lantern slides illustrating the institutions behind the American Woman's League. I was asked to present the subject to the ladies of this city in order to obtain a large number of members for the league and thereby obtain a fine chapter house for St. Petersburg. I consented to speak upon the subject because I have carefully followed every step of Mr. Lewis' work for the past decade and have seen him rise from relative obscurity to the head of one of the greatest institutions in the world to-day. I am also an honorary member of the Woman's League.

One result of my lecture was a letter in Friday's Independent, signed "A Friend," reviewing the main features of the league plan, in a somewhat skeptical vein, and stating that Mr. Lewis had founded a bank which had been closed as a fraudulent institution, while his publications had been excluded from the mails. In conclusion, "A Friend" advised the ladies of St. Petersburg to go slowly and to thoroughly investigate Mr. Lewis and his enterprises before associating themselves therewith.

Now, much that "A Friend" says is true, and his (or her) advice is sound and good; all that I, or any other member of the league could ask or desire is that the ladies of this city should thoroughly investigate the league and inform themselves regarding all phases of the Lewis enterprises, things that are honest and true investigation, and it is largely the world-wide publicity given Lewis and his work through the destruction of his enterprises and the loss of his good name that he has to his present high position. It grows brighter by rubbing, least friction serves to expose the metal under the surface. There is no alloy in character or motives, or that has been exposed long since, certainly "been up against the hard." That time is all over and at present his great accomplishment is the fact. He has no the defence of his friends, the results of his work are the evidence of his honesty and

with a capital of \$2 ten Mr. Lewis built up a great plant in less than five established a postal savings was a successful opera-

tion with over two million dollars on deposit. With no apparent reason the then Postmaster-General issued a fraud order which virtually destroyed the postal bank at a single blow, and also debarred the Lewis publications from the U. S. mails. At that time Gen. Edwin C. Madden was Third Assistant Postmaster-General (a position which he had held for nine years). When he was directed to issue the above fraud order he instituted a minute investigation of the Lewis enterprises and reported to his chief that there was absolutely no ground for the action of the P. O. Department. Despite Gen. Madden's protest the order was issued. Gen. Madden thereupon resigned his position and shortly afterward issued a book entitled "The United States Government's Shame; a History of the Great Lewis Case." This book tells the whole story plainly, and is written by a high government official, whose position gave him a knowledge of the inside facts. The accusations made in Gen. Madden's book have never been refuted, and it is believed that this exposure practically ended the political advancement of the then Postmaster-General, who might otherwise have ultimately risen to the highest office in the land. After a long fight, Mr. Lewis finally succeeded in having his case reviewed in the courts, and as a result he was absolutely vindicated. The judge condemned the proceedings against Mr. Lewis as iniquitous and an insult to the genius of the American people. Mr. Lewis' publications were restored to their rightful mail privileges, but his bank was of course destroyed. He exhausted his own fortune in the fight, which cost him nearly two millions of dollars, but not one of his stockholders or depositors lost a cent. The present bank, which has arisen, Phoenix like, from the ashes of its predecessor, is a far greater and stronger institution, and numbers among its directors some of the best known financiers of the State of Missouri. At the present time there is not a village or town in the country, having two hundred or more inhabitants, that does not include some subscribers to Mr. Lewis' publications. (Copies of his journals will be found at the Free Reading Room for those who are not familiar with them.)

The following extracts are from a letter written to the Daily Banner, the leading newspaper of Mount Vernon, O., by one of the most prominent business men of that city. He describes a ten-days' visit to University City, undertaken for the purpose of thoroughly investigating the Lewis Publishing Company and especially the American Woman's League.

"While in St. Louis I personally interviewed Ex-Governor Francis (former Governor and Treasurer of the State of Missouri), Judge Barclay (for nine years Supreme Court Judge of Missouri), Mr. L. B. Tebbetts (director of the largest bank of St. Louis); also, lawyers, business men, college professors, laboring men and many others, and, without exception, they spoke in the highest terms of Mr. Lewis and his enterprises. From a conservative estimate there is at least four millions

to the Lewis Company. During my visit to the publishing plant subscriptions were being received at the rate of over five thousand dollars per day. The advertising value of the Lewis publications is beyond computation, and will alone enable Mr. Lewis to carry out all his plans for the league, and to erect chapter houses in hundreds of cities and towns throughout the country. To show my faith in the Lewis plan I will personally guarantee in writing the investment of the first fifty women who join the league in Knox county. We are going to have the largest chapter in the State and the most costly chapter house before the snow flies next fall and I shall personally see that it is done. All the woman's clubs of Knox county may be permitted to use the building for their meetings, and it will provide a rest room and reading room for all women visitors to our city. It is hoped that with the co-operation of our citizens a woman's gymnasium with baths, etc., will form a part of the accommodations. It will be worth the while of every citizen to wake up to the feasibility and desirability of this enterprise; those who join now become members of the Founders' Chapter and receive annual dividends which will be paid only to the first one hundred thousand members of the league. This limit will soon be reached. There is a tide in the affairs of men which taken at its flood, leads on to fortune, and it takes more good judgment to know when to jump in than to know when to stay out—any one can stay out—but the alert person perceives the day of his opportunity.

F. H. HUNTSBERGER.

The above letter is one of many which I have read showing the attitude of prominent business men toward the American Woman's League.

I wish I were able to make a similar guarantee to the ladies of St. Petersburg. I would gladly do so had I the means. I want to see a large chapter formed in this city, inasmuch as the larger the chapter the more expensive will be the chapter house to which we will be entitled, as well as the annual income received from the league for its maintenance. A woman's club house would mean much to St. Petersburg; it would become a social center for the resident ladies as well as a meeting place for the tourists, many of whom are, or will be, members of the league, who may become members of the St. Petersburg chapter during the winter, while still retaining their membership in the chapters of their respective homes in the north. One can be a member of the league without associating with any local chapter, but the formation of a chapter (by five or more members) greatly increases the advantages and benefits which they receive without adding to the expense. To join the league one agrees to send in one dollar each week for fifty-two weeks in subscriptions to the Lewis publications. Fifty-two new names on the subscription list means increase in value and profits which could not

This is the keynote of the league. One half of each dollar paid in subscriptions goes into the endowment of the league and the other half eventually comes back to the league or it is part of the plan that the publishing company shall ultimately pass completely into the hands of the league as part of the assets of the league. It is a great trust, but, unlike oil or steel trusts, which give enormous profits to one man, the "League Trust" gives life-long benefits and advantages to hundreds of thousands of American women and their children. After the payment of the fifty-two dollars in subscriptions (which can be paid by the prospective member, subscriptions being presented as a gift among our friends; or can be solicited by her from fifty-two friends, in which case he is not desirous of personally paying the amount) there are no further obligations of any kind, no matter whether the league member is enrolled in a local chapter or not. This is a feature which many cannot understand, as it seems to give a return out of all proportion to the modest payment required for membership. In order to help those who are interested in the subject I will meet the members of the league and all others who care to present in the Park Pavilion next Monday, April 6th, at half-past two in the afternoon. Please bring any questions that you would like to have answered and I will do my best to clear them up. I trust that there will be present a number of ladies who have decided to join the league so that we may at once apply for a charter for a local chapter. I trust that "A Friend" will be present and I will do my best to give him a clearer and more favorable understanding of Mr. Lewis and his work. I have ordered two of Gen. Madden's books, and will present them to the Free Library and Reading Room, so that all can have access to them. If any one wishes to hear further from "Government Officials," letters of inquiry may be addressed to Congressman Bartholt at Washington, or to ex-Gov. Francis, or ex-Gov. Francis, of St. Louis, Mo.

In conclusion, let me thank the editor of The Independent, in the name of the American Woman's League, in my own name as well, for his courtesy in opening the columns of his paper to the discussion of this subject, which I cannot but feel will prove a lasting benefit to the citizens of our beautiful little city.

FREDERICK FINCH STRONG

Springfield  
Union  
Apr 1, 1917  
UNION: SUNDAY, A



# "THE REALITY OF THE UNSEEN."

A lecture by Dr. Frederick Finch Strong, (late Lecturer on Electricity at Tufts Medical College, Boston, Massachusetts.)

This lecture is intended to prove by brilliant and spectacular experiments, that—outside of the every-  
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## New England Association of Physical Therapeutics



1916

7

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Dr. F. B. Granger, of Boston, will give a paper on "The Physical Treatment of Dilated Stomach and Gasroptosis". Dr. Frederick Strong so well known on account of his original work in High Frequency advancement a few years ago has recently returned from Florida and will give a talk on the "Latest Developments on that Subject".

The following officers were nominated for the ensuing year, to be elected at this meeting.

|                     |                        |
|---------------------|------------------------|
| For President,      | Dr. GEORGE PERCY       |
| 1st Vice President, | Dr. SAMUEL J. BASSFORD |
| 2nd " "             | Dr. ARTHUR H. RING     |
| Treasurer           | Dr. FRANK A. DAVIS     |
| Secretary           | Dr. F. H. MORSE        |
| Executive Council   | Dr. WILLIAM MCFEE      |
|                     | Dr. FRANK GRANGER      |
|                     | Dr. CHAS. MILLS        |

A table will be reserved at the Hotel Brunswick Cafe for dinner at 6:15 P.M. Please notify the Secretary if you will be present at the dinner.

FRANK A. DAVIS, M. D. Treasurer  
Hotel Brunswick, Boston

WM. D. MCFEE, M. D., President

F. H. MORSE, M. D., Secretary  
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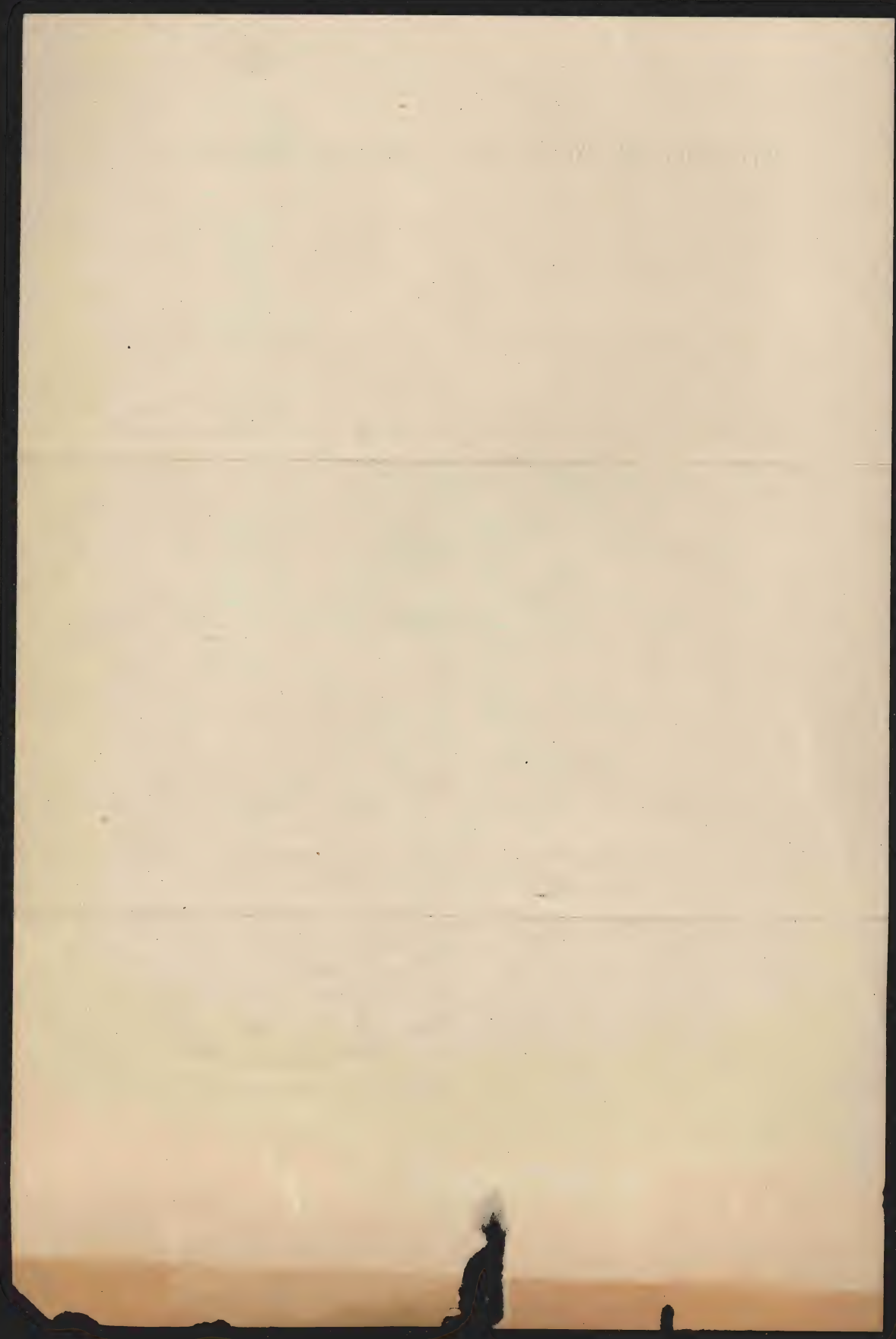
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A lecture by Dr. Frederick Finch Strong, (late Lecturer on Electricity at Tufts Medical College, Boston, Massachusetts.)

This lecture is intended to prove by brilliant and spectacular experiments, that—outside of the everyday world, which we see, hear and touch—there is a far more real and wonderful realm pressing upon us on all sides; a realm which we are just beginning to recognize thro scientific discovery, altho all the great philosophers and religious teachers of the ages have maintained that it exists. New and fascinating fields of thought are presented to the audience, and wonderful imaginary pictures are drawn of conditions of human life in future ages when man's consciousness shall have expanded and unfolded and life become vastly more 'abundant'.

It is a lecture compiled for thinking people, yet even young children witness with intent interest the many beautiful experiments employed in illustrating the various phases of the subject.

Among these experiments may be mentioned—

Demonstrations of light above and below the limits of human vision—Infra-red rays, Ultra-violet rays, Canal rays, Cathode rays, Radium emanations and X rays. Fluorescent fountain, phosphorescent soap bubbles; self luminous minerals, showing wonderful colors under 'invisible light' yet which are colorless in ordinary light.

Invisible electrical forces, wireless waves, high-frequency currents and electrical auras; magnetic fields and geometrical ether forms materialized. Experiments with a current of a half-million volts, and one million alternations per second; lamps lit thro the body without wires; cotton ignited thro glass, on the surface of water, etc., etc.

(Those who have opera glasses are advised to bring them as they will materially add to the enjoyment obtained from some of the finer experiments.)

At the close of the lecture the speaker will be glad to answer any questions pertinent to the subject which members of the audience may desire to ask.

(Note.—Dr. Frederick Finch Strong was born in Aurora, N. Y., his father, Rev. T. C. Strong, D. D., being then President of Wells College. Dr. Strong studied at Cornell, Boston University, Tufts College and the University of Berlin. He was for eight years Professor of Electrotherapeutics at Tufts College, Boston; he has written several books on this subject which are recognized as standards by the medical profession. He has spent much time in laboratory research and invention. For the past six years he has resided in Florida perfecting his new process for making paper from the Palmetto, Saw-grass, etc. The apparatus used by Dr. Strong in his lectures has for the most part been designed and constructed in his own laboratory.)

### PRESS CLIPPINGS—

"A large and attentive audience listened to Dr. F. F. Strong's lecture on 'THE REALITY OF THE UNSEEN,' at Chickering Hall, last evening. The speaker asserted that 'the days of antagonism between science and religion are past'. We hear little today of the so-called scientific materialism of the last century; 'the latest discoveries of science tend to confirm the hypothesis of the spiritual nature of the universe.' 'A few decades ago science attempted to interpret life and consciousness in terms of matter and force; today,—we recognize matter and force as manifestations of the one Divine Life, ever evolving thro outer forms into new glories of creation.'"—(Boston Transcript).

"Dr. Frederick F. Strong gave an informal lecture to the ladies of the Wintergreen Club, at the Hotel Brunswick, last Tuesday evening. He chose as his subject, 'The Miracles of Modern Science,' and illustrated his remarks by many brilliant experiments. At the conclusion of the lecture, Dr. Strong was tended a vote of thanks by the club, and appreciative remarks were made by Mrs. Mary A. Livermore and by Mrs. Julia Ward Howe."—(Boston Transcript).

"Dr. F. F. Strong gave an interesting lecture on 'Revolutions In Modern Scientific Thought,' at Tufts Medical School, last evening, (Jan. 20), to the members of the faculty and their friends. Dr. Strong showed a number of seemingly paradoxical experiments; such as glass, which would conduct electricity, and light, to which clear glass was entirely opaque."—(Boston Beacon).

1907



A LECTURE  
ON  
RECENT DISCOVERIES IN ELECTRICITY  
AND RADIANT ENERGY

WILL BE DELIVERED  
AT  
532 COLUMBUS AVE., BOSTON

FRIDAY EVENING, NOVEMBER TWENTY-FIFTH  
NINETEEN HUNDRED AND FOUR  
AT EIGHT O'CLOCK

BY  
DR. FREDERICK F. STRONG  
LECTURER ON ELECTRO-THERAPEUTICS AT TUFTS COLLEGE MEDICAL SCHOOL

THE LECTURE WILL BE ILLUSTRATED WITH BRILLIANT  
EXPERIMENTS, SHOWING THE PHENOMENA OF HIGH-  
FREQUENCY CURRENTS, THE X-RAY, THE FINSEN ULTRA-  
VIOLET RAY AND RADIUM.

YOU ARE CORDIALLY INVITED TO ATTEND.

THE REALMS  
BEYOND  
THE SENSES

The *Reality* of the Unseen

A SERIES OF  
THREE LECTURES  
BY  
Dr. Frederick Finch Strong  
FORMER LECTURER ON ELECTRICITY  
TUFTS MEDICAL SCHOOL

THURSDAY EVENINGS AT 8 O'CLOCK  
AT THE THEOSOPHICAL HALL  
ROOM 212 GAINSBOROUGH BUILDING  
295 HUNTINGTON AVENUE  
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PUBLIC INVITED ADMISSION FREE

Portsmouth  
Chronicle Aug 19/16

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His demonstration of what can be done with this mysterious power was a revelation to those who had the good fortune to be present and see the wonders of a power we know very little about.

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It was a pleasure to hear a scientific man pay tribute to an unseen Deity who governs the Universe and, and shows that Scientific men have a reverence for the beautiful in life which is above dogma and creeds formulated by mankind, and the best proof of this fact is demonstration by their works. It is men of this type that are doing so much to advance the world in its search for truth and the mysterious.

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He spoke a truth which was demonstrated to Peter and John on Mt. Transfiguration by Jesus the Christ, when Jesus presented to the gaze of these two disciples his body illuminated so that they were overcome with awe and amazement, and Peter wished to stay on the Mt.

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RECEIVED

LECTURE I

THURSDAY FEBRUARY 10. /6

"Force and Matter in the Unseen."

Illustrated by a  
Series of Brilliant Experiments  
demonstrating  
phenomena of Radiant Energy  
Invisible Waves  
Super-gaseous Matter, etc.

LECTURER OF

THE LECTURE  
EXPERIMENT  
FREQUENCY

YOU

LECTURE II

THURSDAY FEBRUARY 17. /6

"Consciousness and Intelligence in  
the Unseen Worlds."

A summary of the testimony of  
leading Scientists of  
the world  
as to the existence of Life Beyond  
Death, and the proofs obtained  
through Psychical  
Research.

Portsmouth  
Chronicle Aug 19/66

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RECEIVED

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LECTURE III

THU

THURSDAY FEBRUARY 24 1916

FRID

"Force

*"Direct Knowledge of Higher Planes  
of Life obtained through the  
Development of  
Super-normal Powers latent in the  
Human Organism."*

Series

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LECTURER OF

Su

Methods of Occult Training; the  
Laboratory of the Future.

THE LECTU

EXPERIMENT

FREQUENCY

YOU

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1904

Portsmouth  
Chronicle Aug 19/16

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May God give us more such men to enlighten the world by their works more than any wordy discourse.

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He spoke a truth which was demonstrated to Peter and John on Mt. Transfiguration by Jesus the Christ, when Jesus presented to the gaze of these two disciples his body illuminated so that they were overcome with awe and amazement, and Peter wished to stay on the Mt.

The Dr. made the statement that if the natural eye could see it would behold his body radiating light from every part while in contact with the machine.

Thus Dr. Strong testified to a fact which Jesus demonstrated and is recorded in the book of books, and the Dr. predicted would find its true relationship to a consciousness we know

very little about at present. He proved that Science was only discovered laws, and that the greatest of all Scientists is the Godhead Himself, because these laws which are discovered are only secondary so the great Lawmaker and giver, so let us welcome the scientific man and glory in their achievements which help to make the world brighter and better place to live.

For myself I shall always feel indebted to the Dr. for the loving and kind spirit he displayed by trying to bring pleasure and a ray of light to others through his art, and may he be one of the great factors in the world that is headed toward the beautiful and good in life.

No one should miss seeing and hearing the Dr. because his lecture is both conscientious and instructive and those who are in doubt about an unseen world will have it removed by hearing the Dr. in a lecture which is instructing and upbuilding to those who are in darkness regarding the subject.

The Dr. can be approached with any formal introduction and after conversing with him a few moments will imagine yourself in the presence

of an old friend instead of made a new one.

Good success to the Dr. for surely letting his light shine among mankind a message from a new seen world.



**THE X-RAY.**—This important part of the course will include lectures on the Apparatus and Requirements for the production of the X-Rays, relative efficiency of the Ruhmkorff Coil, the High Frequency Apparatus, and the Static Machine for generation of the X-Rays, Crook's Tubes, and their manipulation, Fluoroscopy, Skiagraphy, X-Ray Therapy, and practical instruction in the development and printing of Radiographs. Six clinics a week.

**HIGH FREQUENCY ELECTRICITY.**—This Department will be under the immediate charge of Dr. Frederick F. Strong, who was the pioneer in High Frequency Therapeutics in this country, and who will give his personal attention to this subject. The instruction will include the principles and demonstration of High Frequency Apparatus and Technique for its operation, also the therapeutic indications for, and physiological effects of High Frequency Currents. It will include all of the High Frequency Modalities, *viz*: Wave Current, Spray, Spark, Sinusoidal Effects, Effluve, d'Arsonval "Auto-Conduction" and "Auto-Conduction Currents," Superimposed Wave Currents, X-Rays, Ultra-Violet Rays, and the Multi-Frequency Currents. This will be the best course obtainable in this country on this wonderful form of electricity, and will be well worth the cost of the entire course.

**CLINICAL FACILITIES.**—The facilities of the School are such that students will have the opportunity of spending not less than three hours daily in the clinics with which its instructors are connected. In this way they will be enabled to familiarize themselves with Electro-Therapeutics as can be done in no other way.

FRANK A. DAVIS, Sc. B., M. D., SECRETARY AND TREASURER, Hotel Buckminster, Commonwealth Ave., and Beacon St., Visiting X-Ray Surgeon to the Boston Dispensary. *Lecturer* on the Principles, Technique and Therapeutics of Galvanic and Faradic Electricity, Light Therapy and Mechanical Vibration. *Clinical Instructor* on X-Ray Therapy, Radiography, Fluoroscopy and the Developing and Printing of Radiographs.

FREDERICK A. BARDWELL, B. C. E., M. D., The Warren, Warren and St. James Sts., Visiting X-Ray Surgeon to the Boston Dispensary. *Clinical Lecturer* on X-Ray Technique, Therapy and Practical Radiography, Fluoroscopy and the Developing and Printing of Radiographs. *Assistant* in Clinical Electro-Therapeutics.

L. DWIGHT GRANGER, A. M., Instructor in the Electrical and Mining Engineering Departments of Harvard University. *Lecturer* on the Physics of Electricity, including Electrical Measurements, Batteries, Coils, Rheostats, Rheotomes, Milliamperemeters, Shunt Circuits, etc., etc. *Demonstrator* of Electrical Appliances and Apparatus.

HERBERT G. DAVIS, Sc. B., General Manager Sea View R. R. (Electric), and the Narragansett Pier Electric Light and Power Co. *Lecturer* on Street Currents and their utilization for Electro-Therapeutic purposes, Generators, Motors, Convertors, Insulation, Wiring and Incandescent Lighting.

LOCATION OF SCHOOL : 532 COLUMBUS AVE., BOSTON, MASS.



## DEPARTMENTS OF INSTRUCTION.

**PHYSICS OF ELECTRICITY.**—In this department will be taught the fundamental principles of Electrical Science, with especial reference to Electro-Therapeutics, and as a knowledge of this subject is essential to those desiring to intelligently and successfully engage in Electro-Therapeutic practice, it will receive the consideration which its importance demands. Besides the usual instruction, special lectures will be given on the New Electron Theory and its Relation to Radium and Electro-Therapeutics, and on Street Currents, Generators, Motors, Convertors, Insulation, Wiring, Lighting, etc.. etc.

**ELECTRO-PHYSIOLOGY.**—The physiological, as well as the therapeutic effects of the various forms of electricity on the different tissues and organs of the body must ever be borne in mind, and careful attention will be given to the subject in both the didactic and clinical instruction of the School. Special lectures will be given on the Reaction of Degeneration and Electrical Diagnosis. Additional instruction if desired.

**VIBRATO-THERAPY.**—Mechanical Vibration as a therapeutic measure is a subject of much importance to the up-to-date Electro-Therapeutist. The instruction in this department will be didactic and clinical, and of such a character as will familiarize students with various types of Vibrators and the technique for their operation. Abundant clinical opportunity will be given for observing its physiological and therapeutic effects in a wide range of diseases. Clinics three times a week.

**LIGHT THERAPY.**—At the present time various kinds of Light are being used successfully for therapeutic purposes, and the physician who is not familiar with this subject finds himself more or less hampered and behind the times. Instruction in this department will include Incandescent Light Therapy, Finsen Light Therapy, Ultra Violet Light Therapy, Solar Therapy, Radium Therapy, Thermo-Therapy, etc., etc. A special lecture will be given on the Electro-Magnetic Theory of Light and its relation to Photo-Therapy. Clinical instruction.

**GALVANIC ELECTRICITY.**—The instruction in the important subject of Galvanism will be thorough and practical, and will include its physiological action, therapeutic indications and methods of application. Local, General and Interrupted Galvanism, Electrolysis, Cataphoresis, Polar effects, choice of Electrodes, Current and Length of Treatment, Removal of Superfluous Hair and Skin Blemishes, etc. Concise didactic instruction, and three clinics each week.

**FARADIC ELECTRICITY.**—This part of the course will include instruction in the physiological effects and clinical indications for the use of Faradism, General and Local Faradism, Faradism in Atonic and Paralytic diseases, Demonstration of Apparatus, etc., etc. Three clinics a week.

**STATIC ELECTRICITY.**—The instruction in Static Electricity will be didactic and clinical and include the study of various types of Static machines and the operative technique, the indications for the use of Static Electricity, the Static machine for X-Ray work, Static High Frequency Electricity, Spray, Sparks, Roller Massage, Electrodes, Leyden Jars, etc., etc. Eight to ten hours of clinical instruction each week.



Milwaukee, Wis.  
April 15, 1918.

Dear Sir:-

The conflict between Science and Religion is disappearing. It now seems that there is religion in science and science in religion. Scientists have been led to postulate another side to the universe - that side which the greatest philosophers and religious teachers of all ages have taught - a realm outside of the everyday world which is far more real and wonderful than that which we can see, hear and feel. Upon this hypothesis the new order of scientists have developed marvelously fine instruments as well as finer sense perception, and are now on the verge of actual demonstration of the existence of forces beyond the material world.

Dr. Frederick Finch Strong, of Tuft's Medical College, Boston, will give three lectures at Engleman Hall, Auditorium, April 23rd, 24th and 25th, at 8:15 P.M., on the following subjects:

"Force and Matter in the Unseen;"  
"Life and Intelligence in the Unseen;"  
"The Science of the New Age."

Dr. Strong uses a number of wonderful electrical machines (some of which are his own invention) in illustrating his lectures. He is the inventor of the first apparatus for the generation of Tesla Current for X-Ray and medical use and also of the "Vacuum Electrode" or "Violet Ray", and is the author of several scientific text books.

These lectures will appeal to any thinker upon either religious or scientific lines and are equally attractive to the young and inquiring minds. You are earnestly requested to bring notice of them to all whom you think would be benefited thereby. The electrical phenomena alone are well worth the price of admission.

Committee of Arrangements,

Dr. O. E. Severance, Chairman.

Tickets are \$1.00 for the three lectures or 50¢ per single admission. On sale at Geo. Des Forges & Co., 108 Wisconsin St.

the next month to deliver lectures on "The Realms of Senses," under the auspices of the Milwaukee Theosophical Society.



**STRONG TO LECTURE.**  
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## SUNDAY MEETINGS, 8:00 P. M.

Lodge Room, 144 Oneida St.

April 7th — Public Opinion

Mr. F. E. KING, of Minneapolis

April 14th — International Patriotism

Dr. W. B. HILL

April 21st — What does a Safe Democracy demand of our Educational System.

Mr. L. T. GOULD

April 28th — The Problems of Life as explained by Theosophy.

Dr. OSCAR UTESH

## SPECIAL LECTURES

By FREDERICK FINCH STRONG

of Boston, Mass.

At Engelmann Hall, Auditorium

Second Floor, Cedar St. Entrance

Tuesday, April 23, 8:15 P. M. —

Force and Matter in the Unseen

Wednesday, April 24, 8:15 P. M. —

Life and Intelligence in the Unseen

Thursday, April 25, 8:15 P. M.

The Science of the New Age

The Course of Three Lectures, \$1.00  
Single Tickets, 50c

FRIDAY, 8:00 P. M. Study Class—enquiries invited.  
Conducted by Dr. Utesh.

SUNDAYS 7:00 P. M. Order of the Star in the East.  
Public Invited.

WEDNESDAYS 8:00 P. M. Lodge Meeting for T. S.  
Members only.

Lodge Room open every Wednesday from 2 to 5.

## DR. FREDERICK FINCH STRONG

Dr. Strong studied at Cornell University, also University of Berlin, and at Paris and Vienna.

Studied psychotherapy and hypnotism under Charcot and Krafft-Ebbing.

Inventor of much apparatus in connection with production of "X Ray" and "Violet Ray" and other electrical phenomena. Author of several widely-known scientific text books. Twenty years' experience as college lecturer and public speaker; as an investigator into psychic phenomena, and as a student of the occult.

### Force and Matter in the Unseen

This lecture is designed to show how far present laboratory science has carried us into the realms beyond the senses.

The subject of "Vibration" will be considered. In this connection he will use his million-volt high-frequency coil, showing wonderful electrical displays.

### Life and Intelligence in the Unseen

Dr. Strong will treat in this lecture the subject of the existence of the so-called "dead" after physical death, and will demonstrate how matter and force too fine for the physical senses can be made perceptible by laboratory means. The phenomena of Spiritualism will be considered both from the standpoint of Physical and Occult Science. Beautiful experiments with the ultra-violet rays will be shown, also the method by which science has made the Human Aura visible.

### The Science of the New Age

In this lecture the process, long known to Occultists, will be discussed, whereby man may obtain direct knowledge of higher planes of life through development of super-normal powers latent in the human organism.

Brilliant experiments will be shown demonstrating the existence of etheric and super-gaseous matter.

## BOSTONIAN TO LECTURE ON "SCIENCE OF NEW AGE"

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## LIFE AFTER DEATH?

## REALMS BEYOND THE SENSES

DEMONSTRATIONS  
WITH WONDERFUL ELECTRICAL APPARATUS

BY  
DR. F. F. STRONG

OF BOSTON, MASS.

AT THE AUDITORIUM

FIFTH STREET ENTRANCE.

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3 LECTURES \$1.00. SINGLE TICKETS, 50 CENTS.

FOR SALE AT DES FORGES, 108 WISCONSIN STREET.

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## ANNOUNCEMENT

OF THE

MILWAUKEE LODGE

OF THE

Theosophical Society



APRIL, 1918

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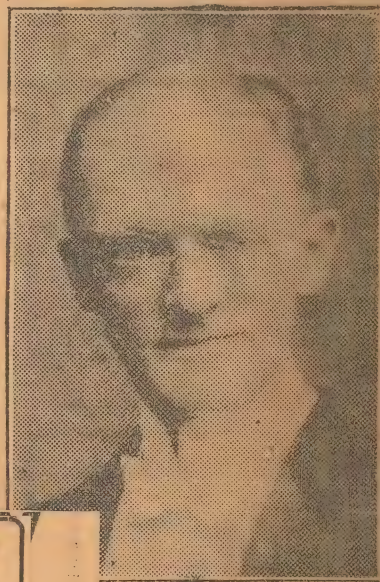
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### Boston Scientist Will Lecture on the Unseen World



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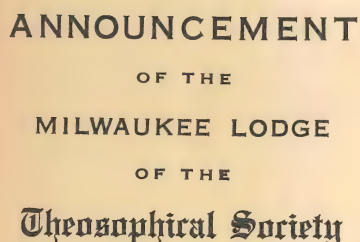
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APRIL, 1918

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Dr. Strong is the inventor of the apparatus. He reports that many committee. He reports that the managers a

chorus of ten will wear many  
zarre gowns to match the scenic  
equipment, says the advance man.  
Feighton, Belmont and Creighton,  
will offer a comedy turn called "The  
Utdowntown Fireman." Brady and Ma-  
oney have a submarine act called  
"The Cruise of a Doughnut." Wil-  
m Morrow is featured in a sketeh  
named "On a Country Road." The  
arguist brothers, accordionists; Dosta  
a musical novelty; and pictures con-  
clude the program. For the last of  
the week, starting Thursday matinee,  
the Scully family will hold the head-  
line position with a comedy, "The Rose  
Morocco."

er—Vaudeville.

committee. He reports that the subscription of the managers amount more than \$1,500,000, with prospect of reaching \$2,000,000 before the is over.

Individual firm subscriptions a  
follows: Klaw & Erlanger, \$15  
Martin Beck, \$100,000; Lee &  
Shubert, Cohen & Harris, Alf Hay  
Al H. Woods, Samuel A. Scriber  
cus Lee, E. V. Proctor, I  
Myerfeldt, A. Paul Keith, E. I  
bee, David Belasco, J. Herbert  
R. K. Hynicka, Columbia Amu  
company and William Fox, a  
each; Messrs. Elliott, Comstock  
\$30,000; Human, Wright, \$25,000

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# LIFE AFTER DEATH?

# A World of Vibrations

DEMONSTRATIONS OF THE TRUE NATURE of  
SOUND, COLOR, ELECTRICITY, THOUGHT; THE HUMAN AURA  
With WONDERFUL ELECTRICAL APPARATUS

By **DR. F. F. STRONG,** of BOSTON,  
At the **AUDITORIUM** MASS.  
FIFTH ST.  
ENTRANCE

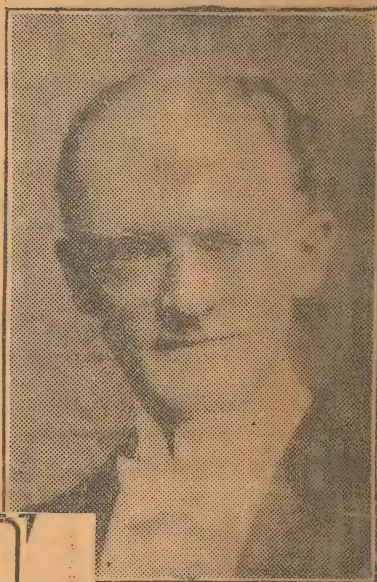
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Will Lecture on  
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## LIFE AFTER DEATH?

## WORLD OF VIBRATIONS

Demonstrations of the True Nature of  
Sound, Color, Electricity, Thought; the Human Aura  
With Wonderful Electrical Apparatus by

**F. F. STRONG** at the **AUDITORIUM**  
of Boston, Mass. Fifth St. Entrance.

Tuesday, April 23, 8:15 P. M.—Force and Matter in the Unseen.  
Wednesday, April 24, 8:15 P. M.—Life and Intelligence in the Unseen.  
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Three Lectures, \$1.00. Single Tickets, 50 Cents.

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Comes an engaging fellow to sell me a new typewriter contrivance which he works skillfully and I am for setting out the money for it albeit I know that when I acquire it I will not use it but a short time. Already I have bought four which are discarded. Came a letter from Sir A. Brisbane, the editor, which he signed himself and a card from Clare Briggs, the cartoonist, telling me of the baby girl that hath lately arrived at his home in New Rochelle.

In the late afternoon at my new magic tricks which I execute clumsily and in great despair. With my dog

Her—Vanderville.

A company is 250 men.  
A platoon is 60 men.  
A corporal's squad is 10 men.  
A field artillery brigade consists of 1,300 men.  
A field artillery has 195 men.  
A firing squad is 20 men.  
A supply train has 283 men.  
A machine gun battalion has 100 men.  
An engineers' regiment has 1,000 men.  
An ambulance company has 50 men.  
A field hospital has 55 men.  
A medicine attachment has 20 men.





ANNOUNCEMENT  
OF THE  
MILWAUKEE LODGE  
OF THE  
Theosophical Society



APRIL, 1918

SCIENCE AND NATURE

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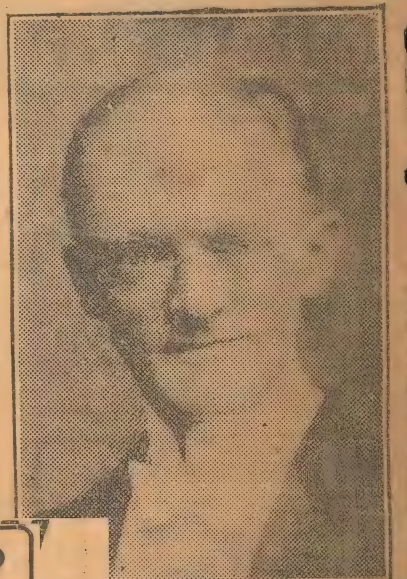
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LIFE AFTER DEATH?

SCIENTIFIC DEMONSTRATIONS  
WITH REMARKABLE ELECTRICAL APPARATUS BY  
DR. F. F. STRONG  
OF BOSTON, MASS.

AT THE AUDITORIUM

(5th St. Entrance)

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3 LECTURES, \$1.00. SINGLE TICKETS, 50 CTS.

See Fox Farms, Flowers,  
Glasses and Totem Poles

The clean current gives  
Alaska a summer climate  
like England's.  
Scan mighty peaks sparkling  
with ice diamonds in glorious  
24-hour sunshine—while fields  
of wild flowers tempt you to  
pluck armfuls of blossom.  
You go most comfortable.

WORLD MAGNA CHARTA  
IN U. S. WAR AIMS

El Paso, Tex.—"The president's declaration of war has made it imperative that we should have a plan of action for the future of our country. The president's declaration of war has made it imperative that we should have a plan of action for the future of our country. The president's declaration of war has made it imperative that we should have a plan of action for the future of our country."





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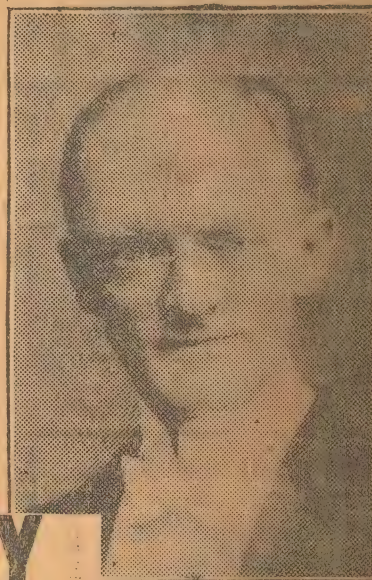
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## DEATH IS NO MYSTERY SCIENTIFIC DEMONSTRATIONS

OF THE  
Continuity of Life and Force in the Unseen Worlds

BY Dr. F. F. STRONG

OF  
BOSTON, MASS.

AT THE AUDITORIUM FIFTH STREET ENTRANCE

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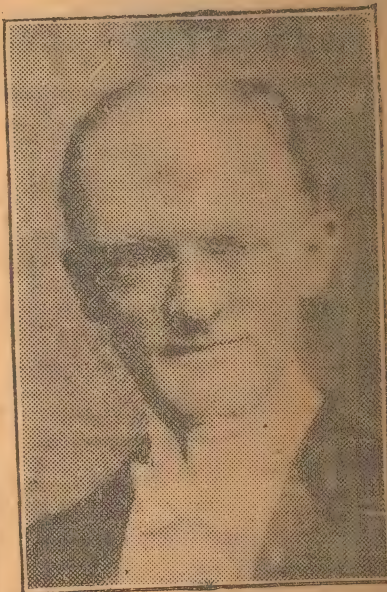
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In the face of this abandon of self-sacrifice by those stripping themselves of the comforts and even the necessities of life in order to make sure that they personally have a hand in the defense of their country and the vindication of their cause, it surely behooves the rest of us to rise, if not to the same lofty level of patriotism, at least to a higher level than the one we are on now.

At this critical hour a supreme effort is due to our country, and to those beloved young soldiers of our who have set out manfully on their crusade. The hardships that will be incurred by most of us thru the purchase of war bonds are negligible compared with the sacrifice voluntarily made by those whose lean purses are coupled with patriotic hearts. The Polish



# Dr. Frederick Finch Strong

Scientist, Inventor and Author  
Who Lectures at Lindell  
Hall Next Week.



Dr. Strong holds degrees from leading universities here and abroad, and is the inventor of the "Violet Ray," also the first apparatus to generate Tesla currents for the X-Ray.

He comes to Lincoln next week and will give a unique lecture at the Lindell Hall on "The Realms Beyond the Senses." He is recognized as one of the leading electrical authorities, is the author of many scientific text-books, and for some years has been lecturer on electricity at Tufts college, Boston. Dr. Strong was consulted as an expert by the Submarine Defense association regarding the possibilities of vibration for the detection and destruction of submarines. His lectures and experiments have been given with keen interest by his colleagues and the public. Mrs. Strong travels with him, and by means of extensive electrical apparatus shows numerous beautiful and spectacular experiments illustrating each lecture, many of which are entirely original. A branching tree of electrical flame nearly four feet high is among the most brilliant.

The lecture on "Force and Matter in the Unseen" deals with the extent to which modern laboratory science has carried humanity into the realms beyond the senses. "Life and Intelligence in the Unseen" states reasons for belief in life after death, reinforced by elaborate electrical experiments. "The Science of the New Age" will be concluded with a description of an imaginary scientific laboratory of the future.

Tickets now on sale at Meier's Drug Store.

Advertisement.

DAILY NEBRASKA

## The Realms Beyond The Senses

A series of three lectures by  
DR. FREDERICK FINCH STRONG  
Lecturer on Electricity, Tufts College,  
Boston

LINDELL HALL, MAY 7, 8, 9,  
8:15 p. m.

With brilliant electrical experiments Dr. Strong will prove that just beyond the realm of sight, hearing and touch, just beyond the visible, audible, tangible, lies a wonderful world that science is just beginning to explore. He will show how science has demonstrated



Dr. Strong's million-volt coil in action, giving a tree-like flaming discharge nearly four feet high.

the existence of some forty-six octaves of vibrations unknown to our senses, using in this connection his million-volt, high-frequency coil, one of the largest ever shown on the lecture platform.

Dr. Strong will show experimentally how matter and force too fine for the physical senses can be made perceptible by laboratory means. Beautiful experiments with the ultra-violet rays will be shown, also the method by which science has made the human aura visible.

Tickets on sale at Meier's, 1 to 9 p. m. Course, \$1; single admission, 50c.

## DR. FREDERICK STRONG FAVORITE OF STUDENTS

Noted Scientist Has Message to  
Bring to Advanced Thinkers  
on New Subjects

To harmonize science and religion is the primary purpose of Dr. Frederick Finch Strong, noted scientist who will open a series of lectures at the Lindell Hall, beginning tonight at 8:15 o'clock. The lecture tonight will be on "Force and Matter in the Unseen," in which he will lay a foundation for the theories which he will prove by a series of laboratory experiments.

"I will show," said Dr. Strong in an interview, "that there is a basis and an essential basis for the continuity of life beyond the physical realm, and my purpose is to make religion and science work hand in hand toward a common goal." The scientist has an extremely interesting personality and talks his subject without any hesitation. His style of lecture will probably be a direct talk to his audience concerning the experiments which he makes and the facts which they go to prove. He will show by means of vibratory transformers that there are matters and forces in existence that are beyond the human senses, elements that none of our senses can recognize, until, as will be shown by means of the transformers, they are reduced to a form and degree in which we can comprehend them.

### Harmonize Science and Religion

On this theory Dr. Strong goes on to show that science has only accomplished a part of its task. His belief is that it must be the foundation of true religious thought. "We must eliminate the material side of science and do away with dogma and superstition of religion," he said, "and make them each an essential part of the other."

Tonight's lecture should be well attended by the student body, as it will deal with a question wholly solvable according to the scientist and one which will come before the present generation soon.

Dr. Strong is highly interested in the work of the university and will make a visit to the campus either today or tomorrow. He was accorded a warm reception at the University of Chicago and other educational institutions and has been having record audiences from the student ranks.

### Dr. Frederick Finch Strong Lectures Here This Week

Brilliant and spectacular experiments with a stage full of electrical apparatus will be shown by Dr. Frederick Finch Strong, Tufts college lecturer, who comes to Omaha lodge of the Theosophical society, and will deliver a series of three public lectures, at 402 Lyric building, Nineteenth and Farnam streets, next Tuesday, Wednesday and Thursday, at 8:15 p. m. Inventor of the "Vacuum Electric Ray," now generally used under the name of the "Violet Ray," author of many scientific text books and lecturer for more than 20 years on science, psychic phenomena, theosophy and comparative religion, Dr. Strong is said to speak with authority on the subjects he has chosen.

## DR. F. F. STRONG IS INTERESTING SPEAKER

Famous Electrical Expert to  
Give Series of Addresses  
Week

Judging from authentic reports, the lectures on electricity to be given next week in Lincoln by Dr. Frederick Finch Strong of Boston bid fair to be of surpassing interest. A fortnight ago a number of professors in the University of Chicago heard his lectures, and as a result, at their request, he remained a day longer and addressed a score of the younger professors in all the departments of science.

Dr. Strong is a frequent contributor to the Electrical Experimenter. We understand from his representative that it is his pleasure, if desired, to give a half-hour talk at the close of his first lecture to members of wireless and radio clubs and those especially interested along this line. He will also explain how to construct apparatus such as he uses on the stage.

It is the conviction of Dr. Strong that future scientific discoveries will make another war practically impossible. Recently the submarine defense association consulted him as an expert regarding the possibilities of vibration for the detection and destruction of submarines.

### Science Confirming Second Sense, Says Dr. Frederick Strong

Dr. Frederick Finch Strong, in his third lecture at Lindell hall last evening, asserted that the latest discoveries in science are confirming the teaching given in theosophic and occult literature regarding the "fine bodies" of man. He showed the "auric screens" by which Dr. Kilmer, eminent London scientist, diagnosed certain diseases by their effect on the aura—which is the invisible cloud of etheric matter surrounding the physical body. The lecturer stated that many people can see this aura without the assistance of Kilmer's screens.

The existence of etheric matter between the gas atom and the electron is beginning to be recognized by scientists. Several experiments were shown proving the existence of an invisible aura.

When ether or chloroform are given to a patient, the matter of his etheric body is pushed out and can be seen by those having etheric vision. It has also been photographed by the use of the violet ray.

A trained occultist uses sense organs not actively developed in the average man. The pineal gland and pituitary body in the brain are stepped down transformers by means of which the occultist can contact matter and force too fine to be recorded by laboratory instruments. Intuition is an evidence of this development, and is coming into manifestation in many people throughout the world. In the laboratory of the future the scientist will use the higher sense organs now used only by the trained occultist. Intuition will largely supersede the present indirect method of contacting realities.

This evening Dr. Strong will give a free public lecture in Lindell hall on "Science and Theosophy," in which he will discuss various branches of scientific thought and show how occult study clarifies and amplifies facts obtained through laboratory search.



The lectures by Dr. Frederick Strong to be given at Lindell hall week began with a new line of thought, the medium of electrical experiments doctor who is an eminent scientific investigator and has lately ventured unexplored fields, undertakes to establish the validity of many scientific hypotheses hitherto considered fantastic or impossible.

The existence of matter apparently beyond the reach of physical sense is proven, it is said, that if this be true, it is not difficult to follow the effect of such discoveries, even as they do at this time of world-warfare. A citizen of Buffalo, at close of the lectures, wrote his check one thousand dollars to further this work of combating scientific materialism.

Strong's position as a leading electrical authority lends weight to his statement. He was consulted as an expert by Submarine defense association regarding the possibilities of vibration for the detection and destruction of submarine



## THE LECTURES

Tuesday, May 7th

FORCE AND MATTER IN THE UNSEEN

This lecture is designed to show how far our present laboratory science has carried us into the realms beyond the senses. The subject "Vibration" will be considered, and Dr. Strong will show by experiment how science has demonstrated the existence of some forty-six octaves of vibrations of which our senses tell us of only one. In this connection he will use his Million-volt high-frequency coil, one of the largest ever shown in a lecture platform; it produces a marvelous discharge resembling a branching tree of electrical flame nearly four feet in height.

Wednesday, May 8th

LIFE AND INTELLIGENCE IN THE  
UNSEEN

Eminent scientific men have stated, after years of patient investigation that "there is no Death!"—that the so-called "Dead" still live on different planes of consciousness and can, under suitable conditions, give us proof of this fact. Occult Science has taught this for ages. Dr. Strong will show experimentally how matter and force too fine for the physical senses can be made perceptible by laboratory means. The phenomena of Spiritualism will be considered from the standpoint of Physical and Occult Science. The beautiful experiments with the ultra-violet rays will be shown, also the method by which science has made the Human Aura visible.

Thursday, May 9th

THE SCIENCE OF THE NEW AGE

In this lecture Dr. Strong will discuss the process (long known to occultism, but just beginning to be recognized by science) whereby man may obtain direct knowledge of the higher planes of life through the development of supernatural powers latent in the human organism. These faculties have already been used in founding the new science of "Occult Chemistry." Many brilliant experiments will be shown demonstrating the existence of etheric and super-gaseous matter. The lecture will conclude with a description of an imaginary visit to a scientific laboratory of the future.

## THE PRESS

*From the Springfield Republican—(Lillian Whiting)*

"The possibilities of the super-physical world, from which many eminent scientists of this New Age are drawing, are presented by Dr. Strong in a manner so clear and so intelligible that his lectures are held to be a signal extension of latter-day knowledge. For by spectacular experiments with the properties of the laboratory it is revealed that just beyond the realm of sight, hearing and touch; just beyond the visible, the audible, the tangible—lies a marvelous realm that we have not even begun to explore. New and fascinating fields of thought and speculation are opened. The very conditions of man's life in the future are suggested with a force and a rational interpretation offering a peculiar zest of interest. Of one of Dr. Strong's notable lectures in Boston the *Transcript* said: 'A few decades ago science attempted to interpret life and consciousness in terms of matter and force; today we recognize matter and force as manifestations of the one divine Life ever evolving through outer forms into new glories of creation.' \* \* \* Still in his early maturity, the future of Dr. Strong may well be watched for results in his especial field of scientific investigation."

*From the Portsmouth Chronicle*

“Dr. F. F. Strong, a scientific lecturer at Tufts College, held a large audience spellbound with his exhibition of the marvels of electricity. The Doctor is a pleasant speaker and has a charming way of presenting his subject; but what is more, he understands that subject and shows a master's skill in the handling of it. His explanations were so clear and concise that a child could have understood his message from a world unseen by the natural eye. Dr. Strong illustrated the relationship between the world we live in and the unseen world whence all mysteries spring, showing that he is not only a scientific man but one who is interested in the deep philosophy of life. It was a pleasure to hear a scientist pay tribute to an unseen Deity who governs the universe, and it shows a reverence for the real and beautiful in life.”

Faulkner of Walton. Rev. Mr. Ractman of Holland presided over the meeting. The superintendent of the Hickman schools is M. A. Falkman and the principal of the female branch, Miss Nellie Baker is principal of the Walton school.

## LECTURED ON THEOSOPHY.

In his lecture at the Lindell hotel last evening Doctor Strong discussed the differences between the method of study employed by the laboratory scientist and the occult scientist. "Creation may be likened to a great tapestry of which science sees only the under or objective side; it seems a puzzle of tangled crossing threads of various colors. Each branch of science studies the threads of one color—the botanist the green threads, the biologist the red threads, and so on. Each reconstructs a part of a pattern and guesses at the rest.

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**Dr. Frederick Strong  
Gives Closing Lecture  
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Dr. Stung is on his way to California to establish a research laboratory where scientific investigations can be carried out under occult authority, and hopes to return east in another year to present the results of his work along this line. He expressed himself as being much pleased with the people he has met here and with his reception, and has made some very good friends among members of the university faculty.

Monday evening, "A Dream of the Future."  
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**Theosophical.** *May 12/88*  
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Materialization, which was studied by Sir William Crocker, under the most exact test conditions, was discussed, and Dr. Strong illustrated the technique employed by the materialization on the stage of invisible forms in the ether.

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The era into which the world is entering bids fair to inaugurate revolutions in all fields of human thought and activity. This is already apparent in the changed attitude of eminent scientific men toward the deeper things of life. The days of antagonism between science and religion have passed. Indeed, we hear little today of the so-called "scientific materialism"; the latest discoveries of science tend to confirm the hypothesis of the spiritual nature of the universe. In the course of these lectures are shown wonderful and beautiful experiments (many of which are entirely original) illustrating the recent discoveries which have carried scientific minds out of the realm of "dead" matter into a world of ever-living, ever-manifesting spirit.

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## THE PRESS

*From the Springfield Republican—(Lillian Whiting)*

"The possibilities of the super-physical world, from which many eminent scientists of this New Age are drawing, are presented by Dr. Strong in a manner so clear and so intelligible that his lectures are held to be a signal extension of latter-day knowledge. For by spectacular experiments with the properties of the laboratory it is revealed that just beyond the realm of sight, hearing and touch; just beyond the visible, the audible, the tangible—lies a marvelous realm that we have not even begun to explore. New and fascinating fields of thought and speculation are opened. The very conditions of man's life in the future are suggested with a force and a rational interpretation offering a peculiar zest of interest. Of one of Dr. Strong's notable lectures in Boston the *Transcript* said: 'A few decades ago science attempted to interpret life and consciousness in terms of matter and force; today we recognize matter and force as manifestations of the one divine Life ever evolving through outer forms into new glories of creation.' \* \* \* Still in his early maturity, the future of Dr. Strong may well be watched for results in his especial field of scientific investigation."

*From the Portsmouth Chronicle*

"Dr. F. F. Strong, a scientific lecturer at Tufts College, held a large audience spellbound with his exhibition of the marvels of electricity. The Doctor is a pleasant speaker and has a charming way of presenting his subject; but what is more, he understands that subject and shows a master's skill in the handling of it. His explanations were so clear and concise that a child could have understood his message from a world unseen by the natural eye. Dr. Strong illustrated the relationship between the world we live in and the unseen world whence all mysteries spring, showing that he is not only a scientific man but one who is interested in the deep philosophy of life. It was a pleasure to hear a scientist pay tribute to an unseen Deity who governs the universe, and it shows a reverence for the real and beautiful in life."

## THEOSOPHICAL SOCIETY LINCOLN LODGE

ANNOUNCES

### Three Lectures

By Dr. Frederick Finch Strong  
OF BOSTON

Lecturer on Electricity  
Tufts Medical College



LINDELL HALL  
13th and M Streets

May 7, 8, 9 8:15 P. M.



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## Strong Lectures Again on Theosophy

Dr. Strong, in his lecture at Lindell hall last night, sketched the methods of study employed by the laboratory and the occult scientists, and showed how the laboratory is beginning to sustain, point by point, the evidence offered by occultism. Statements made in theosophic literature twenty and thirty years ago, laughed at them as fantastic and impossible, are now being proven to the satisfaction of the physicists. The true scientist is always fair, he says; he wants to be shown, and has a right to be shown.

Theosophy, which Dr. Strong says is greatly misunderstood, was defined as "a great synthetic system of truth: it is religion, philosophy and science as seen from the divine rather than the human viewpoint. He showed scientific basis for the conviction, held in common by theosophists, that the brotherhood of man is a fact in nature, not a dream, and that evolution of life concurrent with evolution of form is the great plan whereby man unfolds all latent powers until individuality is perfected and the divine nature finds full expression. Darwin's evolutionary theory is admittedly in error, he said in that it is one-sided, dealing only with forms; the physical plane links are not sufficient to complete the chain of evidence, and according to occult science never can be.

A brief review of this great plan was given, life from the divine source being traced up through the mineral, vegetable and animal kingdoms until the evolving spirit, having stored up all experiences of these lives, is ready to enter the human kingdom; is able to say and realize "I am!" Interesting and illuminative explanations were given of instinct as contrasted with intelligence. In discussing the life of the bee Dr. Strong said: "When the drones have fulfilled their function of fertilization and remain eating the honey and obstructing the life of the hive, the worker-bees sting them to death quite without malice and as a part of the day's work. We are doing the same thing in the world today, and we should and will do it thoroughly. Let us kill the drones that have interfered with the workers in our human hive, but let us do it without hatred and because it is necessary for the progress of humanity."

It was shown also that modern anthropologists no longer hold to the Darwinian theory of the origin of species, but have come more closely to the occult idea, which regards the ape as a degeneration-form and not as man's progenitor.

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The lectures by Dr. Frederick Strong to be given at Lindell hall this week open up a new line of thought, the medium of electrical experiments, the doctor who is an eminent scientific investigator and has lately ventured into unexplored fields, undertakes to establish the validity of many scientific hitherto considered fantastic or impossible. The existence of matter entirely beyond the reach of physical sense is proven, it is said, by the fact that if this be true, it is not difficult to follow the effect of such discoveries, as they do at this time of world-warfare. A citizen of Buffalo, at close of the lectures, wrote his check for one thousand dollars to further the work of combating scientific materialism. Strong's position as a leading electrical authority lends weight to his statement. He was consulted as an expert by the Submarine defense association regarding the possibilities of vibration for the detection and destruction of submarine.

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Convention at Krotona  
July 23, 1918

Los Angeles Examiner  
1918 July 24, 1918 LOS ANGELES

## Occult Marvels Are Shown

### 'Invisible' Is Visualized

#### Ethereal Magnetic Waves From Human Body

FIRST Published Photograph (Exclusive to the "Examiner") of the Invisible Emanations From Human Body, Discovered by Dr. F. Finch Strong, Which He Says Are the Hitherto Unknown Magnetic Forces Employed in Healing. This Photograph Was Taken by Professor W. Scott Lewis of Dr. Strong's Hands by Means of the "Violet Rays"—or Vacuum Electrode—Which Was Dr. Strong's Invention and Is Used by the Entire Medical Fraternity for Healing Purposes Throughout the World.



Dr. Strong, Eminent Theosophist, Astounds Skeptics by Photographing Rays From Human Body

OCCULT phenomena of a previously invisible nature were demonstrated to an audience of skeptical scientific observers yesterday afternoon in the new Krotona laboratory of Dr. Frederick Finch Strong, eminent Boston scientist and inventor of the vacuum electrode, or "violet ray," now used by all the medical faculty for therapeutic healing.

To these critical observers, Dr. Strong showed the actual emanations of ethereal rays or magnetic currents which every human body invisibly throws off and which is the unknown medium used by all so-called therapists or "magnetic healers."

The reality of these invisible ether rays "was brought clearly to the vision of a crowded and excited public audience in the Krotona Temple of the Theosophical Society at an evening lecture by means of electrical apparatus used by Dr. Strong in conjunction with a powerful, high-frequency coil, which, under a million voltage, is capable of 1,100,000 vibrations per second, realizing by this means clouds of invisible ether known as "electrons" into the air—clouds of electrons hitherto undiscovered by those scientists who have refused to study occult methods.

#### Astral Bodies Visualized

By this apparatus Dr. Strong has on four occasions been able to visualize to members of his audience, who were neither clairvoyants nor students of the occult, the "astral," or spirit, bodies of persons who were identified as friends who had died.

One of these was of a young soldier who was killed in battle nearly three months ago, and was a former member of the Theosophical Lodge in which he appeared during the lecture, and was identified by four mem-

bers of the audience who were absolute skeptics not expecting to see any such phenomena. On none of these occasions did the scientist seek to produce such phenomena, though each time the form of the astral body was clearly outlined by the etheric rays drawn from his body in super-gaseous form.

"Occult science," said Dr. Finch Strong, "has revealed to us that in the time of Atlantis—some 12,000 years ago—they employed these occult forces to navigate ships and move great weights, even mountains.

"The Egyptian pyramids, those mighty puzzles to modern engineers, were built by this means by emigrants to Egypt from Atlantis, who brought with them these secrets that, in the absence of the press, were allowed to die."

"In my laboratory here at Krotona," continued Dr. Strong, "I hope to prove not only to the already sympathetic and enlightened scientist, but to the still more skeptical because less learned man in the street, that these occult forces which operate in every form of nature can be focused, controlled and utilized for the service and extended knowledge of men.

#### Leading Scientists Interested

"Already eighteen of America's leading scientists, including the entire faculty of science at Chicago University, as well as the members of the French Academy of Science, are awaiting results of the experiments we are conducting in this laboratory, built for my use by the Theosophical Society. I do not wish to make public the nature or results of these experiments, nor the photographs we have already been able to make, until my experiments have been perfected and laid before my fellow-scientists

Subsequently, however, agreed to allow the "Examiner" to publish the first successful photograph obtained by him and Prof. Scott Lewis, his photographic coadjutor, of the human emanations of the "etheric rays" used in modern therapeutic healing.

Following his lecture, Dr. Finch Strong conducted a series of experiments with 650 pounds of scientific apparatus, which by the transmission of high frequency electrical currents illustrated the power of the scientist to make visible, photograph and even direct the motions of these etheric rays from the human body and other forces of nature.

Dr. Strong started by showing how the claims of theosophy were being confirmed by the advance of modern science, and the recent discovery in occult science.

At the election of officers during the morning and afternoon sessions of the convention the following were elected the national officers for the ensuing year:

President, A. L. Warrington (re-elected); vice president, Irving S. Cooper; trustees, C. H. Holland, R. K. Walton, H. C. Stowe, New York, and Mrs. Marie King, Victoria, B. C.

Today's program includes what will prove a very illuminating illustrated lecture by Professor W. Scott Lewis, the distinguished American astronomer and naturalist, on "A United Life in Diversified Form." This will be given in the Temple of the Krotona Institute at 8 p. m., and will demonstrate by stereopticon slides the oneness of all forms of life and the high intelligence of birds, insects and even of flowers.

### PREDICTS WIRELESS POWER TRANSMISSION

#### SCIENTIST LOOKS FOR APPEARANCE SOON OF A NEW ETHERIC FORCE.

"Wireless transmission" whereby all water power could be utilized, and which will result in wide-reaching commercial readjustments, is the condition which Dr. Frederick Finch Strong declared yesterday he looks for soon.

This scientist, in an address at Krotona Institute, illustrated with 1,000,000 volt high-frequency machine, declared that he looks for the appearance soon of a new etheric force caused by the disruption of chemical atoms, and that great advance in scientific discoveries certain to come speedily.

The lecturer explained that study of the so-called higher planes of nature led to a revolutionizing of the natural sciences, mathematics and chemistry. "With actual photographic pictures of living beings from the planes, of finer bodies constituting his atmosphere, the doubts of scientists had been greatly overcome," said the speaker.

"Electricity has been an essential factor," he said, "in establishing the true composition of many chemical substances, and was the means of phenomena produced by Prof. N. P. S. during which the gravitation of the earth can be neutralized. Likewise can the discovery of source of light be safely predicted which will give light without heat."



5, 1918.

three Weber girls in a vaudeville surprise, complete the seven acts of this farewell road show.

A series of three lectures by  
DR. FREDERICK FINCH STRONG  
Lecturer on Electricity, Tufts College,  
Boston

8:15 p. m.

Admission 50c; Course \$1.00.



Dr. Strong's million-volt coil in action.

With brilliant electrical experiments Dr. Strong will prove that just beyond the realm of sight, hearing and touch lies a wonderful world that science is just beginning to explore. He will show how science has demonstrated the existence of some forty-six octaves of vibrations unknown to our senses, using in this connection his million-volt, high-frequency coil, the largest ever shown on the lecture platform.

Dr. Strong will show experimentally how matter and force too fine for the physical senses can be made perceptible by laboratory means. Beautiful experiments with the ultra-violet rays will be shown, also the method by which science has made the human aura visible.—Advertisement.

REINCARNATION.

know to what fair shire  
 when done with this;  
 to this before  
 any realm of bliss,  
 send to take my way  
 (tenement of clay).  
 I can see no sense,  
 going south and north;  
 I go here and going hence,  
 shifting back and forth,  
 in every former state  
 thing new incarnate.  
 sand friends have crossed the  
 mid—  
 watched full many die—  
 s in some fair home beyond  
 meet them by and by.  
 no hope with them to mix  
 on this old planet. BIX.

Dr. Frederick Finch Strong is a real  
enthusiast. His understanding of chemis-  
try and electricity, of all sorts of physi-  
cal forces, visible or otherwise, seems to  
be as complete as anybody's, and he has  
a happy faculty of making his thought  
very very close to the understanding of  
the people not so well versed in science as  
himself. All this we grant without an  
argument, but when the doctor goes in  
to establish sympathetic communication  
between the high vibrational entities of  
the astral hemisphere with the lower  
manifestations on this side the border,  
there is a deal of lost motion near the  
point of contact, and we have to take  
into account for granted that some of us  
do not take. In our short and somewhat  
transitory career, we have happened to meet  
a few individuals who had discovered per-  
fect motion, and in both cases the  
people were all but workable. There  
was not one thing lacking. They wouldn't  
be. By the time somebody has de-  
vised a mechanism that will never stop  
and never run down, maybe the  
inventor will have reached the goal to  
which he is struggling. But the  
fact is we will have to go forward as  
we can with faith enough in the Al-  
mighty to believe that whatever is to be  
done, enough for us if it is good  
for anybody.

Denver  
on  
May 14-21  
1918  
6 lectures

You are invited to bring your friends.

Public Lecture by

DR. FREDERICK FINCH STRONG  
Late Lecturer on Electricity at Tufts  
College, Boston.

Subject

"THE MESSENGER OF THE  
NEW AGE"

FRIDAY EVENING, JUNE 14

At 8 o'clock

In the Auditorium—Twelfth Floor  
Opening music by members of the Order

(A COLLECTION)

*JUNE, 1918*

**KROTONA INSTITUTE of THEOSOPHY**  
Mrs. Annie Besant, President

## THE TEMPLE

3:00 P. M.      2130 North Vista Del Mar Ave.,  
Hollywood, Cal.

A. P. WARRINGTON, Vice-President

Sunday, June 2, at 3 P. M.

DR. FREDERICK FINCH STRONG

Author, Lecturer for the Theosophical Society  
and late Lecturer on Electricity in Tufts  
Medical College, Boston  
Topic: "Service and Theosophy"

Sunday, August 4, at 3 P.M.

DR. FREDERICK FINCH STRONG

Author, Lecturer for the Theosophical Society  
and late Lecturer on Electricity in Tufts  
Medical College, Boston  
Topic: "Personal Experiences in Psychical  
Research."

Sunday, September 1, at 3 P.M.

DR. FREDERICK FINCH STRONG

National Lecturer for the Theosophical Society  
Topic: "Modern Alchemy; the Story of Radium,  
with Experiments"

Santa Monica Lodge  
Sept. 1918







2



Public. Fourteen-minute lectures, Blanchard Hall, Los Angeles, on "The War as Seen by Theosophists." Mrs. Marie Russak Hotchener, "After-Death Experiences of Soldiers Killed in Battle." William A. S. Collier, "The After-War Democracy." Dr. F. F. Strong, "Occult Science and the War."

July 26-18. Convention

Los Angeles Examiner

#### s' Bargains

ose who wish to own their will find some attractive sified Columns—the Want morning under the heading on Sale

RDAY July 27, 18

## PROCESS TO PHOTOGRAPH THOUGHT IS DISCOVERED

Brain Forms Pictured in Laboratory Experiments, Declares Dr. Frederick Finch Strong

Images Produced by Concentration of Mind Classified; Prof. W. Scott Lewis Explains Method

The photography of thought form is the latest discovery made at the Krotona Research Laboratory by Dr. Frederick Finch Strong, M. D., D. Sc. former professor of electrical science at Tufts Medical College, Boston. He is now working in collaboration with Professor W. Scott Lewis on a series of psycho-physical experiments in his laboratory at the Krotona Institute of Theosophy, which have already been productive of epoch-making results to occult science.

The nature of these discoveries is detailed in the following statement written for the "Examiner" by Dr. Strong, whose invention of apparatus for the generation of Tesla current for X-ray and medical use, together with that of the "vacuum electrode" or "violet ray"—for therapeutic treatments, has given him a leading place among modern scientists:

#### Force in Concentration

"We have found that concentration of thought directed toward a black screen, crystal, or other simple object, acts as a real force, emanating from the brain just as vibration emanates from a wireless telegraph instrument. There are wireless instruments that can send messages around the world, while others will scarcely carry six feet.

"Similarly there are brains trained by concentration, that can send out powerful directed forces impossible of production by the ordinary man.

"Under certain circumstances these forces have been found to act as focal points—or 'condensation nuclei'—in and around which subtle matter collects, forming a sphere or other image which may be photographed.

"This does not always take the form of the thought as pictured on the brain, but there is reason to believe that we shall soon develop a technique which will show not merely its nucleus but the thought-form itself.

"Different thoughts will of course produce different images, and many of these have already been classified by scientists who are also trained occultists into what will doubtless become a universal language of symbols."

#### Prof. Lewis Explains Method

Professor W. Scott Lewis, who has made this department of research work peculiarly his own and is a recognized expert in laboratory technique, told the "Examiner" how these photographs are taken:

"These photographs of thought forms," said Professor Lewis, "are taken in a diffused light against a background of black broadcloth. The sitter concentrates his thought upon one thing, endeavoring that a definite thought form may be developed during the exposure of the plates. Special precautions are taken in exposing and developing the plates to ensure scientific accuracy, and 'check exposures' are made with identical conditions of the same subjects when not concentrating. In every instance, images have been produced only when the sitter is concentrating. Nothing can possibly appear under the conditions in which Dr. Strong and I make these photographs, except of an actual objective entity. These thought forms usually focus near the head of the sitter, but are apt to move within a radius of a few feet from him. The same experiment has been tried a number of times with identical results, which show that each thought has a distinct objective form of its own."

#### DR. FINCH STRONG ON UNSEEN FORCES

At the Church of the People, Dr. Frederick Finch Strong, speaking on "Force and Matter in the Unseen," said in part:

A FEW decades ago science recognized only those phenomena which affect the senses. Recently a change has taken place through modern research and discovery, and science now recognizes matter and force in the unseen realms.

Some of the latest discoveries have made modern science idealistic rather than materialistic. They reduce everything to life and electricity. Vibration is the interaction between these two. We have studied sixty octaves of vibrations, although only fifteen are perceptible to the senses. In addition to sound, light and heat we have measured the invisible intangible vibrations, which include the wireless waves, the ultra-violet rays and the X-ray.

Man has almost reached the limit of sensitiveness of laboratory instruments and is now beginning to use the higher faculties as a means of investigating the unseen. Through these studies we have learned much about the nature of life. Psychic and occult research is daily giving evidence of new and wonderful realms hitherto unknown to science.

Their investigation will greatly amplify and enlarge our vision and will pave the way for wonderful discoveries in the future.

#### Member of The Associated Press

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VOL. 49, NO. 106

## SOLDIERS' SPIRITS SEND MESSAGES, SAYS PSYCHIC

Will Reveal in Lecture How Men Killed in Battle Have Related Their Last Experiences in Life

That the spirits of soldiers who have perished in recent engagements in France have relayed to her messages telling of their after-death experiences is the assertion of Marie Russak Hotchener, international psychic and lecturer, who will speak tonight before the Theosophical Society convention at Blanchard hall at 8 o'clock.

Mrs. Hotchener's subject will be "After-Death Experiences of Soldiers Killed in Battle." She claims that she will be able to provide indisputable evidence concerning the soldier dead which will be of great interest to the kin of men in service.

"There are many instances where the dead of the battlefield have returned," declared Mrs. Hotchener today. "Sir Oliver Lodge's son Raymond communicated with him after death in battle in France."

#### Scientist's Claim

"Prof. Sir William Cooke, scientist, whose corroborations of spirit communication have placed this subject within the realm of definite scientific knowledge, claims this to be true that soldiers may be communicated with after death.

"How it feels to die on the battlefield has been told to me by soldiers who have passed out of this physical life. In the great realm of the unseen above the battlefield are many wandering astral bodies of men who have given their physical lives in the service of their country and whose astral life and future evolution have been advanced hundreds of years through their unselfish sacrifice.

"When Germany sprang at the throat of Europe she catapulted many souls into what the world calls eternity, but she also threw them far along in the world of evolution. In one stroke these soldiers of the French battlefield have been lifted through a number of lives on to a higher spiritual realization and to higher spiritual vibrations.

#### Increases Vibrations

"What war has done for the living. Throughout the world the vibrations of thought of unselfishness have increased through personal and national sacrifice.

"War has lifted thousands of persons out of their petty parochial self-centered lives into worldwide sympathy. When that happens the national spirituality receives a tremendous impetus.

"I am not a spiritualist, but a trained psychic, who has made these scientific investigations, and I have visited astrally the scene of the great carnage in France and have obtained my indisputable data there."

Another speaker of much interest will be Dr. Frederick Finch Strong, who will speak on Occult Science and the War. He says: "German autocrats are like the drone bees in a great hive. They must be removed from the hive for the good of the hive, although it may cost the lives of many fine working bee soldiers to accomplish it."

## SAYS OCCULT FORCES CAUSED GREAT WAR

Declaring that the real cause of the war was occult and brought about by occult forces, Dr. Frederick Finch Strong will appear before the Theosophists' convention at Blanchard hall this evening in a lecture on "Occult Science in the War."

Autocracy is in disharmony with the great occult forces of the world, according to Dr. Strong's theories, so that in the process of occult development its elimination became absolutely essential.

On the same program Mrs. Marie Russak Hotchener will deliver an address on occultism and the war, dealing with the subject of how it feels to die on the battlefields. This, she declares, has been demonstrated time and again, one of the chief cases which she cites being that of Raymond Lodge (son of Sir Oliver Lodge), the great occult scientist.

The development of thought photography at Krotona institute formed an interesting feature of the convention yesterday, when demonstrations were given on the pictures which occultists claim they have made of thought forms. These photographic experiments have been made in the laboratories at Krotona, and also, it is claimed, in the French academies of science.

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# SOLDIER SPIRIT SEEN IN TRENCH

Remarkable Occult Experiences  
Related by Theosophists at  
Blanchard Hall Meeting

"After-Death Experiences of Soldiers Killed in Battle," as seen, heard and told by Mrs. Marie Russak Hotchener, international lecturer of the Theosophical Society, thrilled an audience last night which packed the big Blanchard Hall.

Scarcely less remarkable and equally engrossing, was an address on "Occult Science and the War" by the Boston scientist, Dr. Frederick Finch Strong, acting Dean of Krotana Institute and formerly professor of electrical science in Tufts Medical College, Boston.

T. W. Holland presided over the meeting, which was held under the auspices of the National Theosophical Convention, now in session at Krotana, the American headquarters of the Theosophical Society.

Some of the most circumstantial of the instances related by Mrs. Hotchener, which went to demonstrate that death was in reality only a portal of passing to a life of higher consciousness, but of equal reality, follow:

## Meets Dead Friend in Trench

Lieutenant S., a personal friend of Mrs. Hotchener, who was an avowed agnostic until this experience, affirmed that on moving up to take possession of a front line trench, he was surprised to see one of his men, a Private Rex, fall to the rear to walk by him. Noting the strangely pallid appearance of the man, he asked him if he was cold. "No sir," replied Private Rex, who, in reply to another question, admitted he was hungry. The lieutenant put some food pellets in the man's hand, and a moment after saw Private Rex had disappeared. Asking one of his non-commissioned officers who he had gone, the lieutenant was informed the private had been killed and buried three days before.

## Relative Tells of His End

"Vice Admiral Moore, commanding a battle-squadron of the British Navy, testified to many extraordinary psychic experiences, of which one of the most remarkable was that of the astral appearance of a relative, whom it turned out—unknown to Admiral Moore at that time—had been killed in battle.

This "dead" relative appeared and told the admiral, he said, of the manner of his death, saying also to him:

"I did not know I was dead, until I saw them cutting a lock of hair behind my right ear."

Subsequently Admiral Moore found that his relative had been killed under the exact circumstances which he had described, and that a lock of his hair had been cut to send home to his family before the body was buried. Many scriptural witnesses were alleged to have confirmed this, and many other psychic phenomena Admiral Moore had personally investigated regarding after death communications relating to their experiences after being killed in battle.

## Foretells Death of General

Another amazing case was told by Mrs. Hotchener of the famous French commander, General Foxe, killed in battle April 24, last. Three weeks prior to his death, in his home in Paris, General Foxe had a vision of General Rochest, commanding the French troops at the Yser, who told his old comrade that he (General Foxe) would be killed April 24.

General Foxe told the French press representatives, who interviewed him, the next day that he noticed that General Rochest was wounded badly in the head, as he said to him "We shall meet soon, comrade." The news of General Rochest's death from a wound in the forehead came to the papers the following day, the time of his death being simultaneous with the death of General Foxe.



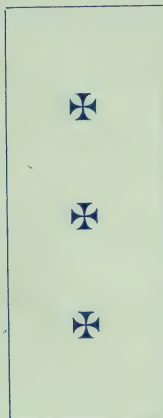
# Krotana Institute of Theosophy

MRS. ANNIE BESANT, President  
2130 Vista del Mar Avenue, Hollywood, California

A. P. WARRINGTON  
Vice-President

FREDERICK FINCH STRONG  
Acting Dean

A. F. KNUDSEN  
Dean



Take any Hollywood car to Gower St. or take Franklin Avenue car to Vista del Mar Avenue and go North.

SUMMER SESSION  
1918

Five Weeks, July 29 to September 1.

TUITION

Admission to all twenty-two courses \$10.00. Single Course, \$1.00 Single Lecture, 25 cents

## THEOSOPHISTS OPEN INSTITUTE

THE summer school at the Krotana Institute of Theosophy was formerly opened yesterday for a five-weeks course of philosophy, occultism, astrology, art and comparative religion.

In his opening address, Dr. Frederick Finch Strong, acting dean of the Institute, gave an interesting forecast of the progress of science through the recent use of occult methods. Addresses were made also by President A. P. Warrington and Mrs. Russak Hotchener.

Among the faculty of the summer school are Dr. Strong, Prof. Scott Lewis, Dr. Marie Beale Kramer, Will Levington Comfort, Mrs. Hotchener and Dr. Frank Riley.

Members of the theosophical colony at Krotana were amazed yesterday at what they termed the "ridiculous" report published yesterday morning in the Los Angeles Times that Annie Besant, international head of theosophy, had taken up her residence at Krotana to live in seclusion during the war.

"The report that Mrs. Besant is at Krotana, or anywhere in America, has been woven out of whole cloth," said A. P. Warrington, president of the American section of the Theosophical Society, and head of Krotana Institute, yesterday. "There is not a word of truth nor an iota of justification in the whole story."

He says he is therefore working on two planes which in the world's history have never met on a common ground of belief, but have tended to diverge in their viewpoint of phenomena.

Scientists have arrived at their conclusions by material laws and philosophers have arrived at theirs by spiritual laws, according to Dr. Strong, who is the first man to be admitted to a university to give a lecture on the occult before a group of student scientists. The University of Chicago was the first educational institution to open its doors to occult demonstrations.

"The laboratory of the future will deal with forces and phenomena entirely beyond the present range of human consciousness and the scientist will become the ally of all true teachers and preachers of religion," said Dr. Strong.

### Realm of Mystery

"We are instilling spirituality into the former materialistic realm of science. Beyond the realm of science, and beyond the visible, lies a great realm of mystery."

Dr. Strong has received into his laboratory 100 volts of the electrical current from this Tesla transformer without injury. This was possible, he explained, because of the fact that the great frequency of alteration of the current, it being a rapid electrical vibration rather than a true current.

Our secretary is quite distressed because, in some unaccountable way, what she said about Dr. Strong's lectures was omitted in her report in the July supplement of "The Messenger." We, too, are sorry, because Dr. Strong's lectures were the most important item of our year's programme.

Feb. 8. Dr. Frederick Finch Strong.

Subject: "Extension of Consciousness"

Vocal selections by Marguerite Fiske.

Accompanist: Mrs. Ruth Jameson.

## STRONG

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### Scientist

is inventor of the  
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is both a scientist and philosopher.

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## 16. Conversational French. (10 Lessons)

Tuesdays and Thursdays, 9:30  
Mrs. Betty Carmichael Hampton

To equip and prepare war-workers.

## 17. The New Democracy. (5 Lectures)

Thursdays, 4:45  
Mr. Will Levington Comfort

These lectures will be in conversational form, in Mr. Comfort's original distinctive style. They represent the results of years of thought and experience.

## 18. The Open Forum. (5 Periods)

Tuesdays, 4:45  
Conducted by Dr. Frederick Finch Strong

For free discussion and interchange of opinion on Theosophical subjects. Visiting Lodge-members especially invited to take part. Free course.

## SPECIAL EVENING LECTURES

### 19. Comparative Religion. (5 Lectures)

Mondays, 7:00  
Dr. Frank L. Riley

A study of the Sacred Books of the world, revealing that Truth, like a golden thread, runs through all of them. This will be traced in the Sacred Books of China, the Upanishads, the Zendavesta, the Corpus Hermeticum and the Bible.

### 20. Vital Occult Problems. (4 Lectures)

Tuesdays, 8:15  
Mrs. Russak Hotchener

International Lecturer of the Theosophical Society England. Detailed description of some of the latest scientific discoveries in France to Occultism. The scientific progress made in the subject of Healing in the last years has been marked, and it is most necessary that students of Theosophy should acquaint themselves with these latest developments.

### 21. The Work of Social Reconstruction. (1 Lecture)

August 27, 8:15 p.m.  
Mr. Robert Walton

## ORDER OF THE STAR IN THE EAST

Mondays, 7:00 p.m.

22. Special course for training lecturers and field-workers. Signs and methods of preparation for the Coming of the World-Teacher.

1. The Return of Occultism to the Churches.—Rev. Charles Hampton.  
2. Ways of the World-Teacher.—Miss Marjorie Tuttle.

3. Humanitarianism in Relation to the Coming.—Miss Marguerite Agnew.  
4. The Work of Preparation of the Individual.—Mrs. Alice Evans.

5. The War as a Preparation.—Mrs. M. C. Thomas.

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During the recent visit of Dr. way, of the Karma & Reincarnation Legion, the July No. 27 met with him and discussed Strong. It was decided that Mrs. Liela Clough should continue in charge.

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Vocal selections by Marguerite Fiske.

Accompanist: Mrs. Ruth Jameson.

HEAT COULD  
EXECUTES  
ANIMAGES

## SAYS STRONG

Scientist-Philosopher Gives  
Reason for Belief That  
Invisible Listeners in  
Astral Form at Meeting

That invisible listeners in astral form attended his lecture last night at Krotona Institute on The Use of Occult Methods in the Scientific Laboratory, was the declaration made today by Dr. Frederick Finch Strong, scientist-philosopher.

The cause for this he attributes to two reasons, the first being that through the operation of his million-volt coil he increased the ozone of the air and therefore produced great quantities of ether. This tends to attract these invisible visitors, he claims.

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# SOLDIER SPIRIT SEEN IN TRENCH

Remarkable Occult Experiences  
Related by Theosophists at  
Blanchard Hall Meeting

"After-Death Experiences of Soldiers Killed in Battle," as seen, heard and told by Mrs. Marie Russak Hotchener, international lecturer of the Theosophical Society, thrilled an audience last night which packed the big Blanchard Hall.

Scarcely less remarkable and equally engrossing, was an address on "Occult Science and the War" by the Boston scientist, Dr. Frederick Finch Strong, acting Dean of Krotona Institute and formerly professor of electrical science in Tufts Medical College, Boston.

T. W. Holland presided over the meeting, which was held under the auspices of the National Theosophical Convention, now in session at Krotona, the American headquarters of the Theosophical Society.

Some of the most circumstantial of the instances related by Mrs. Hotchener, which went to demonstrate that death was in reality only a portal of passing to a life of higher consciousness, but of equal reality, follow:

## Meets Dead Friend in Trench

Lieutenant S., a personal friend of Mrs. Hotchener, who was an avowed agnostic until this experience, affirmed that on moving up to take possession of a front line trench, he was surprised to see one of his men, a Private Rex, fall to the rear to walk by him. Noting the strangely pallid appearance of the man, he asked him if he was cold. "No sir," replied Private Rex, who, in reply to another question, admitted he was hungry. The lieutenant put some food pellets in the man's hand, and a moment after saw Private Rex had disappeared. Asking one of his non-commissioned officers where he had gone, the lieutenant was informed the private had been killed and buried three days before.

## Relative Tells of His End

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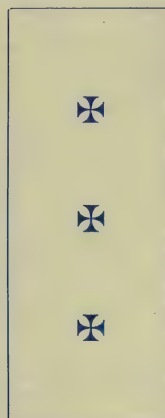
# Krotona Institute of Theosophy

MRS. ANNIE BESANT, President  
2130 Vista del Mar Avenue, Hollywood, California

A. P. WARRINGTON  
Vice-President

FREDERICK FINCH STRONG  
Acting Dean

A. F. KNUDSEN  
Dean



Take any Hollywood car to Gower St. or take Franklin Avenue car to Vista del Mar Avenue and go North.

SUMMER SESSION  
1918

Five Weeks, July 29 to September 1.

TUITION

Admission to all twenty-two courses \$10.00. Single Course, \$1.00 Single Lecture, 25 cents

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Krotona Institute is a school in which Philosophy, Science, Art and Religion are presented from the Theosophical viewpoint. While of value to all students, the courses are especially arranged for the training of those who wish to teach, lecture or do other public work for Theosophy.

Summer and Winter Sessions have been held since 1912. The present session has been somewhat condensed in order to enable Theosophists attending the T. S. Convention to attend the Institute Courses and finish by September first.

### PHILOSOPHY

1. Philosophy of Expression. (5 Lessons) - - Thursdays, 2:15 p.m.  
Mrs. Charlotte L. Robertson

The World-drama. The Science, Art and Ethic of Expression. The essentials of Public Speaking. The triple aspect of Physical Training. The essence and power of thought in its manifestation.

2. Theosophy I. (5 Lessons) - - Thursdays, 10:45 p.m.  
Miss Jetta Clay

This course will present the fundamental principles of Theosophy from the teacher's point of view. It will follow, in main plan, Mrs. Besant's treatment of these great teachings in her book, *A Study in Consciousness*.

3. Theosophy II. (10 Lessons) - - Mondays and Fridays, 3:30 p.m.  
Miss Marie Poutz

A resumé of Theosophy. This course will be based upon *The Ancient Wisdom* and *The Hidden Side of Things*. Its purpose is to show the practical value of Theosophy as applied in daily life.

4. Theosophy III. (5 Lessons) - - Wednesdays, 3:30 p.m.  
Mr. Olaf Folden

Advanced Theosophy. Teachings of *The Secret Doctrine* on Man, his physical, psychic and spiritual nature, and relation to the universe.

### SCIENCE

5. Science I. (5 Lessons) - - Wednesdays, 2:15 p.m.  
Prof. W. Scott Lewis

Science and Theosophy. This course correlates the latest discoveries of Modern Science with the teachings of Theosophy. The first part deals with the evolving life in the mineral and vegetable kingdoms, the last part with the evolution of worlds and recent astronomical discoveries. Illustrated with lantern and microscope slides.

6. Science II. (5 Lectures) - - Wednesdays, 10:45 p.m.  
Dr. Frederick Finch Strong

Electro-physics and Vibration, correlating the latest deductions of Modern Physics with the Physics of *The Secret Doctrine* and of later Theosophical works; illustrated with laboratory experiments.

7. Science III. (5 Lectures) - - Fridays, 10:45 p.m.  
Dr. Frederick Finch Strong

Chemistry. Brief review of the modern conceptions of matter. The genesis of the elements and the election theory, correlating Occult Chemistry with deductions from the latest laboratory research.

8. Astrology (10 Lessons) - - Mondays and Thursdays, 3:30 p.m.  
Dr. Marie Beall Kramer

This course will present the science and philosophy of Astrology; Signs, Symbols, calculations and correspondences.

### RELIGION

9. Religion I. (5 Lessons) - - Tuesdays, 2:15 p.m.  
Mrs. Ethel E. Patterson

Mystic Christianity. Meaning, characteristics and value of Mysticism. Transcendent or imminent. Mystical Christ. The Way of the Cross. Lessons from the Lives of Great Mystics.

10. Religion II. (5 Lessons) - - Fridays, 2:15 p.m.  
Mrs. Ethel E. Patterson

The Sacraments of the Church. An occult explanation of the Sacraments of the Church Catholic (Russian, Anglican and Old), correlating old traditions with clairvoyant investigations.

- II. Folklore and Symbolism. (5 Lessons) - - Wednesdays, 4:45 p.m.  
Mr. George Kramer

Myth and Symbol. This course will give the mystic interpretation and explain the truth-kernel from the various myths and traditions, and explain the universal symbols in the signs of the Zodiac.

12. Education. (5 Lessons) - - Mondays, 10:45 a.m.  
Mrs. Betty Carmichael Hampton

A course on home and school education, based upon personal experience. Special emphasis on home-training; the training of Parents. A logical plan of education.

13. Sociology. (5 Lectures) - - Tuesdays, 10:45 a.m.  
Mrs. Eleanor R. Broenniman

Occult History applied to Social Organization.  
1. Tracing it from a system of co-operation, through competition back to co-operation.  
2. Applying it to important social questions of the day.

14. History of Beauty. (5 Lessons) - - Mondays, 2:15 p.m.  
Mrs. Georgina Walton

An attempt will be made to show that the History of Beauty is the history of the development of man's consciousness. The different phases of beauty will be outlined.

15. Occultism in the Music-Drama. (5 Lectures)  
Fridays, 4:45 p.m., in the Temple  
Mrs. H. van Vliet

Richard Wagner's drama, *The Ring of the Nibelung*. Interpreted and correlated with *The Secret Doctrine*; bringing out the underlying purity of keys, colors, planets, planes and principles, as applied by Wagner in music and text. Musical selections.

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ESS (Los Angeles)  
Evening Express  
July 24, 1918  
48th YE

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- 16. Conversational French. (10 Lessons)  
Tuesdays and Thursdays, 9:30  
Mrs. Betty Carmichael Hampton  
To equip and prepare war-workers.
- 17. The New Democracy. (5 Lectures)  
Thursdays, 4:45  
Mr. Will Levington Comfort  
These lectures will be in conversational form, in Mr. Comfort's original distinctive style. They represent the results of years of thought and experiment.
- 18. The Open Forum. (5 Periods)  
Tuesdays, 4:45  
Conducted by Dr. Frederick Finch Strong  
For free discussion and interchange of opinion on Theosophical subjects. Visiting Lodge-members especially invited to take part. Free course.
- SPECIAL EVENING LECTURES**
- 19. Comparative Religion. (5 Lectures)  
Mondays, 7:00  
Dr. Frank L. Riley  
A study of the Sacred Books of the world, revealing that Truth, like a golden thread, runs through all of them. This will be traced in the Sacred Books of China, the Upanishads, the Zendavesta, the Corpus Hermeticum and the Bible.
- 20. Vital Occult Problems. (4 Lectures)  
Tuesdays, 8:15  
Mrs. Russak Hotchener  
International Lecturer of the Theosophical Society  
Detailed description of some of the latest scientific discoveries in France and England. Discussion of the place of Psychanalysis and Psychopathology in relation to Occultism. The scientific progress made in the subject of Healing in the last years has been marked, and it is most necessary that students of Theosophy should acquaint themselves with these latest developments.
- 21. The Work of Social Reconstruction. (1 Lecture)  
August 27, 8:15 p.m.  
Mr. Robert Walton
- ORDER OF THE STAR IN THE EAST**  
Mondays, 7:00 p.m.
- 22. Special course for training lecturers and field-workers. Signs and methods of preparation for the Coming of the World-Teacher.
  - 1. The Return of Occultism to the Churches.—Rev. Charles Hampton.
  - 2. Ways of the World-Teacher.—Miss Marjorie Tuttle.
  - 3. Humanitarianism in Relation to the Coming.—Miss Marguerite Agnew.
  - 4. The Work of Preparation of the Individual.—Mrs. Alice Evans.
  - 5. The War as a Preparation.—Mrs. M. C. Thomas.

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Emerson New Thought Church.  
Los Angeles. 1918

Frederick Finch Strong

Oct. 6th . . . . . New Conceptions in Science  
Oct. 15th . . . . . Modern Ethical Movements  
Oct. 22nd . . . . . Occultism and Pseudo Occultism  
Oct. 29th . . . . . Personal Experiences in Psychical Research

Los Angeles L. S. Oct 13/18.

October 13  
DR. FREDERICK FINCH STRONG  
National Lecturer for the Theosophical Society  
"Modern Alchemy or the Story of Radium"  
with experiments

Dec. 15. Dr. Frederick Finch Strong  
Science of the New Age  
(Experiments)

Hollywood L. S.

Sunday Public Service



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave  
Hollywood, Cal.

A. P. WARRINGTON, A. F. KNUDSEN  
Vice-President Dean

1919

Sunday, January 5, at 3:00 P.M.

DR. FREDERICK FINCH STRONG

National Lecturer for the Theosophical Society  
Topic: "Vital Problems of the Near Future"

## RECORDS OF NATURE'S MEMORY EMPHASIZED

Dr. Frederick Finch Strong in his address yesterday afternoon at Krotona Institute of Theosophy said in part:

"Science bases much of its knowledge on the records of the past; geology, paleontology, archeology—all throw light upon the processes of nature and evolution."

"Occultists know that everything that has ever happened has automatically recorded itself in what has been called 'The Memory of Nature.' Trained occultists are taught to read these records."

"Theosophical literature contains many interesting facts. Atlantis, the fabled Lost Continent, has been described in minute detail in this way and these statements have in part been confirmed by recent deep-sea findings and ethnological studies."

"When scientists come to recognize the value of reading the Memory of Nature and trained occultists become more numerous we will begin to lay the foundations for the true science of the new age, then also a new history of mankind will be written. Man's relation to his Creator will be improved, a more religious attitude will take the place of the present day cross materialism and likewise a better man."

DR. FREDERICK FINCH STRONG  
Address to Theosophical Society,  
Blanchard Hall

It is strange that among all the conflicting and fantastic statements of the ancient alchemists we always find a fixed belief in the spiritual origin of matter and its emergence or evolution from a single primitive state. While nineteenth century chemists ridiculed this idea, maintaining that the chemical elements were fixed and unalterable, modern twentieth century scientists have quite vindicated the fundamental claims of the alchemists; for in the laboratory of science we have proven that all material atoms are complex and seem to be formed of centers of positive and negative electricity.

In radium, uranium and thorium we find the alchemical process going on constantly in nature. We now believe that all the lead in the world was once either uranium or thorium. The self-transmuting principle seems to be inherent in the latter element, and Sir William Ramsay claimed to have actually used it to transmute other elements. Occult investigation has shown that the life force as expressed on this plane manifests through the action of the sun's rays on oxygen atoms at the sub-atomic level. This is drawn in through the body. It is interesting to note that the heart or center of the radium atom is one of these "vitality globules."

While not yet recognized by science it is probable that ultimately this principle may be so concentrated as to make possible the dreamers of the alchemists. Before this can happen, however, it is probable that man will have to make more progress along the lines of unselfishness and brotherhood. In his present state the great ones, who guide all discovery would scarcely consider it safe to allow this power to be used on physical plane.

DR. FREDERICK FINCH STRONG  
Krotona Institute of Theosophy,  
Hollywood

Practically all our knowledge of after-death conditions has been given to the world through the spiritualistic and theosophical movements. Psychological researchers and followers of the spiritualistic movement have devoted themselves mainly to the study of the phenomena produced by the spirits of the dead through the agency of psychics, sensitives and mediums. Theosophists, by endeavoring to develop the higher faculties of consciousness latent in man, study the occult or hidden laws and causes of these phenomena and endeavor to classify and systematize them according to the methods of modern science.

The importance of proving to the world the fact of the continuity of human life and of man's responsibility for his own progress here and hereafter should lead theosophists and spiritualists to join hands in their common endeavor to further the great divine plan of evolution and to help prepare mankind for the new era of universal brotherhood which we hope the world will enter in the not distant future.

Sunday Public Service



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

1918

THE TEMPLE

Sunday, December 29, at 3:00 P.M.

DR. FREDERICK FINCH STRONG

National Lecturer for the Theosophical Society

Topic:

Topic: "Theosophy and Spiritualism"

Emerson New Thought Church  
Los Angeles. 1919

Bulletin of Lectures

DR. FREDERICK FINCH STRONG

January 5th . . . . . Factors in Spiritual Progress  
January 12th . . . . . Discrimination in the Search for Truth  
January 19th . . . . . Tolerance  
January 26th . . . . . Cheerfulness

1919

Jan. 12—DR. FREDERICK FINCH STRONG  
"Physical Proofs of the Continuity of Life"

Los Angeles L. S. Jan. 12, 1919

## "The Science of the New Age"

A New Course of Four Lectures

—BY—

DR. FREDERICK FINCH STRONG

Thursday Evenings at 8 o'clock

Church of the People  
Blanchard Hall.

January 16. ORIGIN OF MATTER.  
January 23. ORGANIZATION AND EVOLUTION OF LIFE.  
January 30. MAN'S PLACE IN EVOLUTION.  
February 6. THE FINER FORCES OF NATURE.

These lectures will constitute a brief review of the most recent conceptions of matter, the genesis of the elements, and the electron theory, correlating Occult Chemistry with deduction from the most recent laboratory investigations. Illustrated with lantern slides and experimental demonstrations.

"Human evolution may be said to consist of the evolution of material organism, physical as well as superphysical; the unfoldment of the Spirit and its instruments and channels. A man passes through one projection after another of archetypal state, building factors, unfolding powers, and virtues. He does all this through the instrument of the grouping arrangement of the atoms."





*Symptoms  
Healing  
(Palmist's)*

## Electrical Oscillation and Radiation in the Treatment of Disease.

BY FREDERICK F. STRONG, M. D.,  
Instructor of Electro-Therapeutics, Tufts Medical College.

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Reprint from February, 1904, Practical Psychology.



## Electrical Oscillation and Radiation in the Treatment of Disease.

OCCULTISTS of both ancient and modern times have written and taught that vibration and vibratory law are the chief factors in the production of the phenomena of the material universe. The statement is made that every body of matter has its fundamental vibratory rate, and that all the manifestations of inorganic material as well as those of organized bodies are merely a collection of responses to vibratory stimuli. Were this theory correct, the treatment of disease would resolve itself into a question of supplying to the body the particular vibration which has been suppressed or destroyed by the disease. Health would be a condition equivalent to that of an orchestra, the instruments of which, while producing distinctive vibrations of their own, mutually combine and reinforce each other, producing a single composite chord or wave of harmonious vibrations. Disease would be likened to the same orchestra in which one instrument is either out of tune or producing discordant notes. One false note will destroy the harmony of an entire symphony orchestra, and in like manner a gouty toe will rapidly convert the most exalted idealist to an atheistic pessimist.

Modern science has heaped ridicule upon the claims and statements of so-called Occultists, but recent developments in the study of ether waves, atomic vibration, and the nature of the electrical discharge in gases, has opened a new realm of possibilities to the investigator, while such sacred dogmas as the stability of the atom and molecule, and

the fixed nature of the chemical elements, have been swept out of existence. Scientists are already talking learnedly of "electrons" and "corpuscles" thousands of times smaller than the hydrogen atom, while the hypothesis of spontaneous elementary dissociation has been seriously proposed in explanation of the phenomena of that most wonderful of recent discoveries, the Radio-active Radium.

The time seems ripe for the statement that the writer wishes to put on record, viz., that the old occult teachings of a vibratory universe will be rediscovered and brought forward as a new theory by scientific men, within the next five years; that within this time, several of the so-called chemical elements will have been decomposed or transmuted, and that the continuity of individual life after death and the reality of existence on other planes of matter, will be universally accepted as a proven fact of science. The writer is prepared to accept the title of a "false prophet," if all of the above predictions are not verified within the period mentioned. So much for speculative hypothesis, now for hard facts.

The writer has been for the past ten years investigating the physical and therapeutic possibilities of the "High Frequency" currents, discovered thirteen years ago by Nikola Tesla. After treating more than five hundred cases, embracing nearly all the varieties of disease, it has been demonstrated that in these currents we have a vitalizing force surpassing anything that has been used in the healing art up to the present time. We



seem to be almost able to produce artificial vital or nervous energy, with the perfected apparatus that has been evolved by the writer, for the generation and therapeutic application of High Frequency currents.

The remarkable effect produced by this current is due not so much to its intrinsic value as an electric force, but to the fact that it is a transmitted vibration of enormous frequency and great power. This fact causes it to act in an entirely different manner from electricity in its more familiar forms, the most startling illustration of this fact being the apparent ability of the High Frequency current to flow through glass and rubber with as much ease and readiness as an ordinary current would flow through a copper wire. Electrical resistance is practically of no importance in connection with High Frequency phenomena, these currents flowing through any substance that is capable of transmitting vibration, irrespective of its electrical conductivity. Incandescent lamps may be lighted between two persons, without any sensory effect on the latter, the frequency of vibration exceeding the range to which the nerves of sensation respond. Nevertheless, although the patient or subject feels no perceptible effect, the passage of a High Frequency current through the body gives rise to profound cellular and molecular changes. Electrons are caused to move from one set of atoms to another; the ions in the nerve cells are polarized, and energy stored up for future use; chemical action and oxidation of waste products is increased, congestion relieved, and the general tone of the system improved and invigorated.

Years of clinical experience have demonstrated the wonderful curative power of these currents in all diseases involving imperfect oxidation and metabolism, and in depleted conditions of the nervous system. Under the latter head may be grouped nearly all of the functional, and many of the organic diseases of the brain and nerves. These currents

are applied locally by means of vacuum electrodes, consisting of glass tubes or bulbs, from which all but one-thousandth part of the original air has been exhausted. The relatively small number of the remaining air particles allows of their moving or vibrating freely among themselves. This condition makes such a partial vacuum a conductor of High Frequency currents, and advantage is taken of this in adapting these currents to the treatment of local conditions. In this way, we may relieve pain, increase local nutrition, and disperse inflammation.

A series of blows with a hammer upon a bell or other resonant body causes it to vibrate, and, in so doing, it sets up transmitted or radiating waves in the surrounding air. Owing to their rate of vibration and wave length, these waves affect our sense organs as sound. Sound is transmitted only on a material substance like air, water, or iron. Science recognizes another medium, — the ether, which is the vibratory medium for the generation and propagation of still another long range of waves, a very few of which are apparent to our senses, as light and heat. Below the heat, we have the long, electro-magnetic waves of Hertz, which are the radiations employed in wireless telegraphy. Beyond the violet end of the light spectrum, we have many octaves of invisible waves, beginning with the ultra-violet, or the actinic rays, and ending (so far as objective science is concerned) in the short waves of the X-ray.

The perfected High Frequency apparatus, which is the visible result of eight years of exhaustive experiment on the part of the writer, is in many ways a remarkable machine. Its possibilities are practically limitless, for aside from its therapeutic value as a form of electrical energy, it may be employed to produce other forms of vibrating force, which, under proper circumstances, may be used to facilitate or contribute to conditions of mind and body, essential for the successful cure of certain diseases. By the



use of the writer's apparatus, ether waves of any frequency may be produced, ranging from the Hertz waves to the X-ray. Wonderful color effects result from the High Frequency discharges passing through glass tubes of varied degrees of vacuum. Tubes of this nature appear to be filled with soft, luminous clouds of various beautiful tints, each of which is a pure spectral tone produced by a single dominant vibration, which has a peculiar effect of fascination on the beholder. The writer has made use of this in inducing hypnosis and relaxation in refractory subjects.

The scientific study of color and other vibratory waves, from the standpoint of Psycho-therapeutics, has never been fully carried out, up to the present time, although the writer has had in mind such a series of clinical studies for several years, but has been unable to undertake the work on account of the stress of other duties. Recently, however, a suitable apartment has been fitted up, under the writer's direction, in which the most complete facilities have been provided for the study and use of vibration and radiation in connection with the treatment of disease by the methods of scientific suggestion.

The "Vibratorium," as it will be called, is to be used by ~~Mr. Wm. A. Barnes~~

~~the well-known specialist, in the scientific and therapeutic use of suggestion.~~ This apartment is fitted with one of the writer's perfected High Frequency apparatus, which is so arranged in relation to a series of vacuum tubes, mounted on the ceiling, that any or all of these tubes may be thrown into electrical vibration as desired. The walls and ceiling of the room are entirely covered with a soft black fabric, so that the mind of the subject will not be diverted from the particular vibratory centre toward which his attention has been directed. The subject reclines upon a specially designed electrical couch, in the centre of the apartment, which is so arranged that High Frequency currents of any voltage and of various "frequencies" may be passed through the organism without causing any unpleasant sensation of shock or otherwise disturbing the relaxation of the subject's mind.

It is the belief of the writer that this is the first attempt that has ever been made to combine the latest discoveries in physical and physiological science, with so-called psychic methods of treatment, and the results of actual clinical work under such conditions will be awaited with eager interest by all those who are working or studying along these advanced lines.

—A text-book on Electro-Therapeutics, by Dr. Frederick Finckh Strong, M. D., made in the scientific cure of malignant disease, and other recent discoveries composed of nothing else and nothing else, pose that by the use of the apparatus described in the book, diseased portions of the body may be cured. The book is clearly written and contains many illustrations. R. W. Way, New York mentioned.—D.

#### BOOK REVIEWS.

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HIGH FREQUENCY CURRENTS. By Dr. Frederick Finckh Strong, M. D., Instructor in Electro-Therapeutics, at Tufts College School, Boston. Rebman & Co. 182 illustrations in text. XIX, 289.

The review of this book has been difficult in the sense that a technical volume is difficult to bring before the reader. The subject of high-frequency currents is a science first of the minute speculation expressed in a co-efficient of concrete results, and, secondly, of a large scope in its practical value in therapeutics. Here we have a volume bringing new light and complete mastery and understandable interpretation to these currents. We all know that by many the author is considered one of the leading experts in America. He tells us that his work is pioneer study of high-frequency therapy, antedating even that of d'Arsonval, in Europe. Let it be also understood that Strong is an original investigator and a technical expert, who invented a large number of original instruments, and this knowledge gives his utterances the final stamp of authority. Only, therefore, is his book original, but it is also thoroughly modern. He gives also the whole Electron Therapy, which has so largely revolutionized the science of electricity, and here we have one of the strongest features.

In his preface the author acknowledges his indebtedness, among others, to Dr. H. G. Piffard, and we are glad to note, to Dr. Sutherland, of Boston.

To all who employ electricity, general practitioner or surgeon or specialist, this is an indispensable book, wherein the electron therapy is brought into their grasp. And in this volume the reader will certainly find in the chapters dealing with the science of electricity a very concise and original presentation; not only this, but he will also derive in the chapters on technique and methods of treatment a large fund of authoritative information. Throughout, the style is clean and the presentation of facts pleasing, and we have the highest praise for the illustrations and for the general get-up of the volume.



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*Journal of the*

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—A text-book entitled "Essentials of Modern Electro-Therapeutics" by Frederick Finch Strong, M. D., shows the wonderful progress made in the scientific use of electricity for the cure of malignant growths, cancer, tuberculosis, and other diseases. According to the recent discovery that all forms of matter are composed of negative and positive electricity and nothing else, it seems reasonable to suppose that by pouring fresh currents into diseased portions they could be healed. The book is clearly written, and contains ninety-eight illustrations. Rebman Company, 1123 Broadway, New York. 112 pages, cloth, price mentioned.—D. E. N.



Emerson New Thought Church.  
Los Angeles. 1918

Frederick Finch Strong

Oct. 6th . . . . . New Conceptions in Science  
Oct. 15th . . . . . Modern Ethical Movements  
Oct. 22nd . . . . . Occultism and Pseudo Occultism  
Oct. 29th . . . . . Personal Experiences in Psychical Research

Los Angeles L. S. Oct 13/18.

October 13

DR. FREDERICK FINCH STRONG

National Lecturer for the Theosophical Society  
"Modern Alchemy or the Story of Radium"  
with experiments

Dec. 15. Dr. Frederick Finch Strong  
Science of the New Age  
(Experiments)

Hollywood L. S.

Sunday Public Service



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave  
Hollywood, Cal.  
A. P. WARRINGTON, A. F. KNUDSEN  
Vice-President Dean

1919

Sunday, January 5, at 3:00 P.M.

DR. FREDERICK FINCH STRONG

National Lecturer for the Theosophical Society  
Topic: "Vital Problems of the Near Future"

RECORDS OF NATURE'S  
MEMORY EMPHASIZED

Dr. Frederick Finch Strong in his address yesterday afternoon at Krotona Institute of Theosophy said in part:

"Science bases much of its knowledge on the records of the past; geology, paleontology, archeology—all throw light upon the processes of nature and evolution."

"Occultists know that everything that has ever happened has automatically recorded itself in what has been called 'The Memory of Nature.' Trained occultists are taught to read these records."

"Theosophical literature contains many interesting facts. Atlantis, the fabled Lost Continent, has been described in minute detail in this way and these statements have in part been confirmed by recent deep-sea findings and ethnological studies."

"When scientists come to recognize the value of reading the Memory of Nature and trained occultists become more numerous we will begin to lay the foundations for the true science of the new age, then also a new history of mankind will be written. Man's relation to his Creator will be improved, a more religious attitude will take the place of the present day cross materialism and likewise a better man."

Los Angeles Examiner Daily  
Modern Alchemy 1/8

DR. FREDERICK FINCH STRONG  
Address to Theosophical Society,  
Blanchard Hall

It is strange that among all the conflicting and fantastic statements of the ancient alchemists we always find a fixed belief in the spiritual origin of matter and its emergence or evolution from a single primitive state. While nineteenth century chemists ridiculed this idea, maintaining that the chemical elements were fixed and unalterable, modern twentieth century scientists have quite vindicated the fundamental claims of the alchemists; for in the laboratory of science we have proven that all material atoms are complex and seem to be formed of centers of positive and negative electricity.

In radium, uranium and thorium we find the alchemical process going on constantly in nature. We now believe that all the lead in the world was once either uranium or thorium. The self-transmuting principle seems to be inherent in the latter element, and Sir William Ramsay claimed to have actually used it to transmute other elements. Occult investigation has shown that the life force as expressed on this plane manifests through the action of the sun's rays on oxygen atoms at the sub-atomic level. This is drawn in through the body. It is interesting to note that the heart or center of the radium atom is one of these "vitality globules."

While not yet recognized by science it is probable that ultimately this principle may be so concentrated as to make possible the dreamers of the alchemists. Before this can happen, however, it is probable that man will have to make more progress along the lines of unselfishness and brotherhood. In his present state the great ones, who guide all discovery would scarcely consider it safe to allow this power to be used on physical plane.

DR. FREDERICK FINCH STRONG  
Krotona Institute of Theosophy,  
Hollywood

Practically all our knowledge of after-death conditions has been given to the world through the spiritualistic and theosophical movements. Psychical researchers and followers of the spiritualistic movement have devoted themselves mainly to the study of the phenomena produced by the spirits of the dead through the agency of psychics, sensitives and mediums. Theosophists, by endeavoring to develop the higher faculties of consciousness latent in man, study the occult or hidden laws and causes of these phenomena and endeavor to classify and systematize them according to the methods of modern science.

The importance of proving to the world the fact of the continuity of human life and of man's responsibility for his own progress here and hereafter should lead theosophists and spiritualists to join hands in their common endeavor to further the great divine plan of evolution and to help prepare mankind for the new era of universal brotherhood which we hope the world will enter in the not distant future.

Sunday Public Service



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

1918

THE TEMPLE

Sunday, December 29, at 3:00 P.M.

DR. FREDERICK FINCH STRONG

National Lecturer for the Theosophical Society

Topic:

Topic: "Theosophy and Spiritualism"

Emerson New Thought Church  
Los Angeles. 1919

Bulletin of Lectures

DR. FREDERICK FINCH STRONG

January 5th . . . . . Factors in Spiritual Progress  
January 12th . . . . . Discrimination in the Search for Truth  
January 19th . . . . . Tolerance  
January 26th . . . . . Cheerfulness

1919

Jan. 12—DR. FREDERICK FINCH STRONG  
"Physical Proofs of the Continuity of Life"

Los Angeles L. S. Jan. 12, 1919

"The Science of the New Age"

A New Course of Four Lectures

—BY—

DR. FREDERICK FINCH STRONG

Thursday Evenings at 8 o'clock

Church of the People  
Blanchard Hall.

January 16. ORIGIN OF MATTER.  
January 23. ORGANIZATION AND EVOLUTION OF LIFE.  
January 30. MAN'S PLACE IN EVOLUTION.  
February 6. THE FINER FORCES OF NATURE.

These lectures will constitute a brief review of the modern conceptions of matter, the genesis of the elements, and electron theory, correlating Occult Chemistry with deductions from the most recent laboratory investigations. Illustrated with lantern slides and experimental demonstrations.

"Human evolution may be said to consist of the evolution of material organism, physical as well as superphysical the unfoldment of the Spirit and its instruments and channels. A man passes through one perfection after another of archetypal state, building factors, unfolding powers, and ing virtues. He does all this through the instruments of the grouping arrangement of the elements."



# WINTER SESSION 1919

Eight Weeks, January 13 to March 8

## Krotona Institute of Theosophy

2130 Vista Del Mar Avenue, Hollywood, Los Angeles, California

MRS. ANNIE BESANT, President.

A. P. Warrington  
Vice-President

Dr. Frederick Finch Strong  
Acting Dean

A. F. Knudsen  
Dean

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Krotona Institute is a school in which Philosophy, Science, Art and Religion are presented from a broad Theosophical viewpoint.

While of value to all students, the courses are especially arranged for the training of those who wish to teach, lecture or do other public work in the Theosophical Field.

Summer and Winter Sessions have been held since 1912. The present Session will include many new features. Experimental demonstrations will be made possible in many of the courses by the use of the equipment of the recently established Scientific Research Laboratory.

Tuition fee admitting to all regular courses, \$15.00; single courses, \$2.00; evening lectures and single lectures, 25 cents.

Students should register and obtain their receipts at the Registrar's Office in the Krotona Science Hall before attending the classes. The office is open on week days between 9:00 and 12:00 A. M.

For further information apply to  
W. SCOTT LEWIS  
Registrar

*Los Angeles T. S.*

Feb. 9—DR. FREDERICK FINCH STRONG  
"Etheric Matter—the Next Step in  
Science," with Illustrations

*Emerson New Thought Church.  
Los Angeles, California  
Bulletin of Lectures*

DR. FREDERICK FINCH STRONG

|             |                              |
|-------------|------------------------------|
| February 2  | Is Physical Death Necessary? |
| February 9  | Sleep and Dreams             |
| February 16 | Thought-transference         |
| February 23 | Superstition                 |

### Church of the People

HEADQUARTERS:  
435 BLANCHARD BUILDING  
233 SOUTH BROADWAY

### LECTURE CLASSES

THURSDAY EVENINGS AT EIGHT O'CLOCK

DR. FREDERICK FINCH STRONG

"THE COMPOSITE MAN"

February 13—His Physical Equipment  
February 20—His Emotional Equipment  
February 27—His Mental Equipment



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.

A. P. WARRINGTON,  
Vice-President

A. F. KNUDSEN,  
Dean

Sunday, Feb. 2, at 3 P.M.  
DR. FREDERICK FINCH STRONG

National Lecturer for the Theosophical Society  
Topic: "Direct Communication With the Dead  
by Wireless Methods: A Scientific Possibility  
of the Future." With experiments showing  
the action of Vibratory Transformers.

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## TALK TO DEAD BY WIRELESS MAY BE EASY

Krotona Institute Experiments  
Promise to Solve Mysteries of  
After Life, Says Dr. Strong

Transformer Process Being  
Worked Out to Sharpen Dull  
Human Senses Toward Spiritland

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That communication with the dead may be made as commonplace a matter as is wireless communication with a person in Europe at the present time, was the remarkable statement made by Dr. Frederick Finch Strong, of the Krotona Institute of Theosophy at Hollywood, yesterday.

Experiments have been made there it was announced, demonstrating the methods which, when further extended it is argued, will accomplish this amazing result.

Is the human eye too dull to observe shapes and forms which people the world; do the dead of the past and present stalk around us in our everyday existence, and will the human mind prove acute enough to extend the functions of the limited senses of the body so that these things will be detected?

### MAY REVEAL NEW HUMAN FORCES

The Krotona experiments give rise to the hope that a technique, whereby new forces and kinds of matter may be revealed and even the spirits of the departed communicated with, will be perfected.

A sort of transformer process for the dull senses is being worked out in the hope of proving by means of actual communication with the dead the theory held concerning the continuity of life after death.

Dr. Strong lectured yesterday on the subject, "Direct Communication With the Dead by Wireless Methods: A Scientific Possibility of the Future." W. Scott Lewis, registrar of Krotona Institute and secretary of the Bureau of Science, has worked on many of these experiments.

### WHAT LIGHTS DO WE NOT SEE?

One experiment which leads to the belief that any number of things may be camouflaged under a kind of color which makes it impossible for the eye to detect is with ultra-violet rays. Rare minerals, which respond to certain wave lengths, take up and transform them so that they become visible.

This presents the question: "How many kinds of light are there that the human eye does not register—what resides beneath the surfaces at which humans gaze as though blind?"

But one more step in such reasoning brings forth the theory that there is a hidden world of vibrations, for the detection of which the body is not provided with organs, and that man may be as ignorant of his everyday environment as he is of the life of beings or creatures which may inhabit the uttermost stretches of the planetary system.



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## CURRICULUM

1. THEOSOPHY. (16 Lessons) - - - - - Marie Poutz  
Mondays and Thursdays at 3:00 p. m.  
A resume of Theosophy based upon Mrs. Besant's "The Ancient Wisdom" and Mr. Leadbeater's "The Hidden Side of Things." Its purpose is to show the practical value of Theosophy as applied in daily life.
2. PRACTICAL OCCULTISM. (8 Lessons) - - - - - Mary Gray  
Fridays at 3:00 p. m.  
The practice and application of occult law to daily life.
3. MENTAL EFFICIENCY IN SERVICE. (4 Lectures) - - - - - Alice A. Evans  
Mondays at 1:30 p. m.  
How to teach oneself to teach. Helps in lecture-building and class-leading. Tact and Psychology in handling individuals. The value of definition and the capacity to think synthetically.
4. A STUDY IN CONSCIOUSNESS. (8 Lessons) - - - - - Emily Pelton-Shutts, M. A.  
Fridays at 10:00 a. m.  
An effort to trace the growth and development of Consciousness through the planes of nature.
5. ASTROLOGY. (16 Lessons) - - - - - Marie Beal Kramer, M. D.  
Tuesdays at 10:30 a. m. and 1:30 p. m.  
This course will present the science and philosophy of Astrology; Signs, Symbols, calculations and correspondences
6. PSYCHOTHERAPY. (8 Lessons) - - - - - Frank L. Riley, M. D.  
Fridays at 4:15 p. m.  
1. Karma and reincarnation—their relation to Psychotherapy. 2. "Know Thyself." 3. Mental Diagnosis. 4. The law of Correspondences. 5. Concentration. 6. The Silence, Meditation and Prayer. 7. Treatment; special cases. 8. "The Music of the Spheres."
7. PHILOSOPHY OF EXPRESSION. (8 Lessons) - - - - - Charlotte C. Robertson  
Wednesdays at 3:00 p. m.  
1. Delsarte's philosophy correlated with Theosophy. 2. Oratory. 3. Speech. 4. Gesture. 5. Silence. 6. Color. 7. Trinity of Being. 8. Physical Culture. (Practical platform practice with each lesson for those who wish it.)

8. MYSTIC CHRISTIANITY. (8 Lessons) - - - - - Ethel E. Patterson  
Thursdays at 9:15 a. m.  
Meaning, characteristics and value of Mysticism. God, transcendent or immanent. Mystical Christ. The Way of the Cross. Lessons from the lives of great Mystics.
9. CHRISTIAN SACRAMENTS. (8 Lessons) - - - - - Rev. Charles Hampton  
Thursdays at 10:30 a. m.  
A course under the Third Object of the Theosophical Society. A study of the Occultism in the Seven Sacraments, and in the Sacramentals.
10. THE HISTORY OF BEAUTY. (8 Lessons) - - - - - Georgina Jones Walton  
Mondays 10-30 A.M.  
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An attempt will be made to show that the History of Beauty is the history of the development of man's consciousness. The different phases of beauty will be outlined.
11. MASONIC SYMBOLISM. (Special lectures to be announced later.)
12. FOLK LORE, MYTH AND SYMBOL. (8 Lessons) - - - - - George Kramer  
Tuesdays at 3:00 p. m.  
This course will give the mystic interpretation and extract the truth kernel from the various myths and traditions, and explain the universal symbols in the Signs of the Zodiac.
13. THOUGHT POWER, ITS CONTROL AND CULTURE. (8 Lessons) - - - - - Maude F. Galigher  
Wednesdays at 4:15 p. m.  
Intended to help the student to study his own nature, so far as its intellectual part is concerned. Practical application of the Power of Thought in daily life.
14. ~~PHYSICAL~~ RESEARCH. (8 Special Lectures) - - - - - Frederick Finch Strong, M. D.  
Tuesday evenings at 8:15 (following Krotona Lodge Meetings).  
Given in narrative form, drawn from the lecturer's twenty-five years' personal experience in the scientific investigation of the physical and psychical phenomena of Spiritualism.
15. SCIENCE AND THEOSOPHY. (8 Lectures) - - - - - W. Scott Lewis  
Wednesdays at 1:30 p. m.  
Historical geology and evolution, correlating the latest teachings of science with Theosophy. A general history of the world, emphasizing modern proofs of the age-old occult teachings.
16. OCCULT CHEMISTRY. (8 Lectures) - - - - - Frederick Finch Strong, M. D.  
Wednesdays at 10:30 a. m.  
The structure of the Atoms of the Chemical Elements on the Etheric and denser sub-levels according to the investigations of trained Occultists. Fully illustrated with lantern slides and models.

*Friday night Etheric Class*

*Emerson New Thought Church.  
Los Angeles, California  
Bulletin of Lectures*

DR. FREDERICK FINCH STRONG

|             |                              |
|-------------|------------------------------|
| February 2  | Is Physical Death Necessary? |
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**Church of the People**

HEADQUARTERS:  
435 BLANCHARD BUILDING  
233 SOUTH BROADWAY

**LECTURE CLASSES**

THURSDAY EVENINGS AT EIGHT O'CLOCK

DR. FREDERICK FINCH STRONG



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

1919  
THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.

A. P. WARRINGTON, A. F. KNUDSEN,  
Vice-President Dean

Sunday, Feb. 2, at 3 P.M.

**TALK TO DEAD  
BY WIRELESS  
MAY BE EASY**

Krotona Institute Experiments  
Promise to Solve Mysteries of  
After Life, Says Dr. Strong

Transformer Process Being  
Worked Out to Sharpen Dull  
Human Senses Toward Spiritland

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Experiments have been made there it was announced, demonstrating the methods which, when further extended it is argued, will accomplish this amazing result.

Is the human eye too dull to observe shapes and forms which people the world; do the dead of the past and present stalk around us in our everyday existence, and will the human mind prove acute enough to extend the functions of the limited senses of the body so that these things will be detected?

**MAY REVEAL NEW HUMAN FORCES**

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**WHAT LIGHTS DO WE NOT SEE?**

One experiment which leads to the belief that any number of things may be camouflaged under a kind of color which makes it impossible for the eye to detect is with ultra-violet rays. Rare minerals, which respond to certain wave lengths, take up and transform them so that they become visible.

This presents the question: "How many kinds of light are there that the human eye does not register—what reposes beneath the surfaces at which humans gaze?"



17. ELECTRONIC CHEMISTRY. (8 Lectures)  
Fridays at 1:30 p. m. Frederick Finch Strong, M. D.  
The basis of modern chemistry and physics as deduced from the most recent laboratory investigations. The positive and negative Electron; Ether Vibrations and their use in atomic analysis. Radium and Modern Alchemy. Illustrated with lantern slides and experimental demonstrations.

ORDER OF THE STAR IN THE EAST  
Star Room in Krotona Court open every afternoon from 2 until 5.  
Meetings open to students and visitors Monday evenings at 7:00.  
Study topics include—  
Comparative Religions.  
Science of Character Building.  
Ideals of the Order of the Star in the East.

Students attending the Institute Courses may avail themselves of the Krotona Library, one of the finest Occult Libraries in America; books used in the courses and theosophical reference works may be purchased if desired, from the Theosophical Publishing House, at Krotona.  
There is a Vegetarian Cafeteria in the Court for the convenience of Institute Students and the visiting public.  
Attention of the students is called to the Bulletin Board in the Hall of Krotona Court, for information regarding Sunday Lectures and Special Activities.

## Church of the People

Music-Art Auditorium 233 South Broadway  
Sunday Mornings at Eleven

ADDRESSES BY  
Reginald E. Blight

### SUBJECTS FOR DECEMBER

Dec. 11: Would the World be Better or Worse if Everybody told the Truth?  
Dec. 18: Was Jesus Christ Self-Deceived and Did He Deceive Mankind?  
Dec. 25: The Esoteric Meaning of Christmas.

HEADQUARTERS ROOM 432 MUSIC-ART STUDIO BUILDING  
Tuesday, December 13th, 8 P. M.

Brain card-index man to give unique entertainment of educational value.

C. W. Hamley

Known as the Human Dictograph who records all things of interest that he sees and hears.  
The only memory expert used by the army in France.

SILVER OFFERING

## PREDICTS WIRELESS POWER TRANSMISSION. SCIENTIST LOOKS FOR APPEAR- ANCE SOON OF A NEW ETHERIC FORCE.

"Wireless transmission of power whereby all water power could be utilized, and which will result in wide-reaching commercial readjustments," is the condition which Dr. Frederick Finch Strong declared yesterday he looks for soon.

This scientist, in an address at Krotona Institute, illustrated with a 1,000,000-volt high-frequency machine, declared that he looks for the appearance soon of a new etheric force caused by the disruption of chemical atoms, and that great advance in scientific discoveries is certain to come speedily.

The lecturer explained that the study of the so-called higher planes of nature led to a revolutionizing of the natural sciences, mainly physics and chemistry. "With the actual photographic pictures of living beings from the planes of man's finer bodies constituting his aura the doubts of scientists had been greatly overcome," said the speaker.

"Electricity has been an essential factor," he said, "in establishing the true composition of many chemical substances, and was the means of phenomena produced by Prof. Nipher, during which the gravitation of the earth can be neutralized. Likewise can the discovery of a source of light be safely predicted, which will give light without heat."

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## Emerson New Thought Church. Los Angeles, California Bulletin of Lectures

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## Church of the People

HEADQUARTERS:  
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## LECTURE CLASSES

THURSDAY EVENINGS AT EIGHT O'CLOCK



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.

A. P. WARRINGTON, A. F. KNUDSEN,  
Vice-President Dean



erick Finch Strong, M. D.  
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on; Ether Vibrations and  
Illustrated with lantern

of the Krotona Library,  
urses and theosophical  
Publishing House, at  
of Institute Students  
of Krotona Court, for

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*P.A. Express*  
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This presents the question: "How many kinds of light are there that the human eye does not register—what responses beneath the surfaces at which humans gaze as though blind?"  
But one more step in such reasoning brings forth the theory that there is a hidden world of vibrations, for the detection of which the body is not provided with organs, and that man may be ignorant of his everyday environment. He is of the life of beings or creatures which may inhabit the uttermost stretch of the planetary system.

*Emerson New Thought Church.*  
*Los Angeles, California*  
**Bulletin of Lectures**

**DR. FREDERICK FINCH STRONG**

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**LECTURE CLASSES**

THURSDAY EVENINGS AT EIGHT O'CLOCK

**DR. FREDERICK FINCH STRONG**

"THE COMPOSITE MAN"

- |                                     |
|-------------------------------------|
| February 13—His Physical Equipment  |
| February 20—His Emotional Equipment |
| February 27—His Mental Equipment    |



**KROTONA INSTITUTE of THEOSOPHY**  
Mrs. Annie Besant, President

**THE TEMPLE**

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.  
**A. P. WARRINGTON,** Vice-President  
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Sunday, Feb. 2, at 3 P.M.  
**DR. FREDERICK FINCH STRONG**

National Lecturer for the Theosophical Society  
Topic: "Direct Communication With the Dead by Wireless Methods: A Scientific Possibility of the Future." With experiments showing the action of Vibratory Transformers.







## EXPLORES INTO HIDDEN WORLD.

*Los Angeles Times*  
June 20, 1919  
Electrical Authority Talks of  
Science's Marvels.

Declares Five Senses Lock Out  
Much of Universe.

Tests with High-Frequency  
Currents Please Crowd.

The five senses through which humanity is accustomed to contact the world about it are the limitations that keep it from a fuller realization of the nature and full scope of the universe in which it lives. But the limitations are not final, and potentially the race is capable of greater expansion, which is now being furthered by discoveries in modern laboratories.

This is the gist of the address given last night by Dr. Frederick Finch Strong, lecturer on electricity, Tufts College, Boston, electrical authority, and for fifteen years lecturer and student of psychic phenomena, theosophy and comparative religion. He talked to an audience of more than 500 at Blanchard Hall. The lecture was given under the auspices of the Church of the People, and was the first of the series of three. Tonight Dr. Strong will speak on "Life and Intelligence in the Unseen," and Sunday night on the "Science of the New Age."

Reinforcing his contentions with a number of interesting experiments with an alternating, high-frequency current, with which he demonstrated the existence of force and matter ordinarily undiscernable to the senses, Dr. Strong declared science today is fast approaching the stand that there is no death in matter, and that the electrons that go to make up atoms are living centers of force and intelligence.

### ALL VIBRATIONS.

"The discoveries in various scientific laboratories in the last fifty years have given us data and instruments by which we now can prove there are some forty-six octaves of vibrations of which our senses tell us absolutely nothing. Yet they exist, and we now know the things we see and hear and feel are matters of vibrations," he declared.

"In other words, there are invisible worlds all around us—invisible because our senses are not able to register them, and yet, we are able to give proof of their existence by laboratory methods."

The science of today is proving the universality of life. Dr. Strong declared. Today biology, chemistry, physics, all dovetail. All chemistry now is physical and all physics is chemical, he said. The same science that fifty years ago turned its attention toward tearing down essentials in religion, is now working to prove these same essentials, he added.

"We can hear only a little more than ten octaves of sound vibrations, and sense two octaves of heat, and only one octave of light, and yet the laboratory gives us forty-six others," he said.

### INTERESTING TESTS.

In his experiments Dr. Strong used a number of vibratory transformers through which the various electrical currents were "stepped down" or "stepped up" to where they were seen or heard by his audience.

## The Realms Beyond the Senses

### The Reality of the Unseen

A SERIES OF THREE LECTURES BY

Dr. FREDERICK FINCH STRONG

LECTURER ON ELECTRICITY  
TUFTS MEDICAL COLLEGE, BOSTON

Thursday, Friday and Sunday Evenings

JUNE 26, 27 and 29, at Eight o'clock 1919

BLANCHARD HALL, 233 SOUTH BROADWAY

AUSPICES CHURCH OF THE PEOPLE

The general purpose of Dr. Strong's Lectures is to prove that the "Occult" Science of to-day will be the "Orthodox" Science of to-morrow, and to indicate by brilliant and spectacular experiments some of the ways through which this change is being brought about.

Today science accepts the belief that all matter finally resolves itself into electrons, which are living centers of positive and negative force and that the atom in its construction is modeled after the great universe of which the earth is but a small planet. Dr. Strong declared "Science has de-materialized matter. Within the next two decades orthodox science will acknowledge there is no dead matter and that life is continuous. The world has rested too long on the opinions of others. The times have changed. Today it is perfectly respectable to discuss these things and to assert there is no death and that life is continuous and intelligent," he said. One of the features of the experiments performed was the taking into his body of a current of 500,000 vibrations a second, with which he lighted a lamp in his hand. The experiments in which vacuum tubes picked up currents otherwise unnoticeable, were enthusiastically received.

## POPULAR LECTURE SERIES TO CLOSE SUNDAY NIGHT

Dr. Frederick Finch Strong, widely known as a scientist and interesting lecturer, has been giving a series of popular lectures during the week under the auspices of the Church of the People, which have been largely attended. He will give the closing lecture of the series tomorrow evening in Blanchard hall, when he will speak on The Science of the New Age.

Dr. Strong will illustrate his lectures with a series of electrical experiments demonstrating the existence of unseen forces. He is widely known as a scientist and as the author of several text books.

Is the United States Headed for a Revolution? will be the subject of the address by Reynold E. Blight before the Church of the People on Sunday morning in Blanchard hall. In a prelude he will discuss the question, Will Germany Treat the Peace Terms as a Scrap of Paper? A musical program will be rendered by Miss Ruth Snow, pianist, and Mrs. Paula Dohrmann, soprano.

At the Lyceum, meeting at 9:30 under the leadership of C. G. Holland. A question box will be opened.

Dr. F. F. Strong, Who  
Talks on Science



Civil War Veterans



## Lecture 1

THURSDAY, JUNE 26

### "FORCE AND MATTER IN THE UNSEEN"

This lecture is designed to show how far our present laboratory science has carried us into the realms beyond the senses. The subject of "Vibration" will be considered, and Dr. Strong will show by experiment how science has demonstrated the existence of some forty-six octaves of vibrations of which our senses tell us absolutely nothing. In this connection he will use his Million-volt High-frequency coil, one of the largest ever shown on the lecture platform; it produces a marvelous discharge resembling a branching tree of electrical flame nearly four feet in height.

## Lecture 2

FRIDAY, JUNE 27

### "LIFE AND INTELLIGENCE IN THE UNSEEN"

Eminent scientific men have stated, after years of patient investigation, that "There is no Death!"—that the so-called "Dead" still live on different planes of consciousness and can, under suitable conditions, give us proof of this fact. Occult Science has taught this for ages. Dr. Strong will show experimentally how matter and force too fine for the physical senses can be made perceptible by laboratory means. The phenomena of Spiritualism will be considered both from the standpoint of Physical and Occult Science. Beautiful experiments with the ultra-violet rays will be shown, also the method by which science has made the Human Aura visible.

## Lecture 3

SUNDAY, JUNE 29

### "THE SCIENCE OF THE NEW AGE"

In this lecture Dr. Strong will discuss the process, long known to Occultists, but just beginning to be recognized by Science, whereby man may obtain direct knowledge of higher planes of life through the development of supernormal powers latent in the human organism. These faculties have already been used in founding the new science in "Occult Chemistry." Brilliant experiments will be shown demonstrating the existence of etheric and super-gaseous matter. The lecture will conclude with a description of an imaginary visit to a Scientific Laboratory of the future.

Tickets for the Lectures may be procured from Mrs. Galigher, 435 Blanchard Building, Telephones 10082, Pico 3279, Mondays, Thursdays, Fridays, and Sundays, after service, Church of the People.

Single Lecture, 35 cents; Three Lectures, 75 cents.

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#### ALL VIBRATIONS.

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Dr. F. F. Strong  
Talks



Civil War Ve



## Church of the People

BLANCHARD HALL

233 SOUTH BROADWAY

Next Sunday Morning, June 22, at 11 o'clock

REYNOLD E. BLIGHT

will speak on

### *Pilate's Cynical Question. What Is Truth?*

Mrs. Paula Dohrmann, Soloist

Miss Ruth Snow, at the Piano

Sunday, June 29th:

*"Is the United States Headed for a Revolution?"*

Come and bring your friends

WOMEN'S FELLOWSHIP CLUB will meet Thursday, June 11, 1:00 p. m. Election of New Officers. Musical Program. Reception. This meeting will be held at the residence of Mrs. Maud F. Galigher, 7092 Hawthorne Street, Hollywood.

Mr. T. Hasedacawa will speak on Japanese Arts.—There will be a Whistling Duet by Misses Mildred Galbreath and Lillian Estlin. Walter Hastings Olney, Baritone, Miss Grace A. Ralph, Contralto, Mrs. Eva Trew, Pianist.

A cordial invitation is extended to the friends of members of the Fellowship Club and the Church of the People.

"FORCE"  
This lecture  
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In his experiments Dr. Strong used a number of vibratory transformers through which the various electrical currents were "stepped down" or "stepped up" to where they were seen or heard by his audience.

Today science accepts the belief that all matter finally resolves itself into electrons, which are living centers of positive and negative force, and that the atom in its construction is modeled after the great universe of which the earth is but a small planet. Dr. Strong declared "Science has de-materialized matter. Within the next two decades orthodox science will acknowledge there is no dead matter and that life is continuous. The world has rested too long on the opinions of others. The times have changed. Today it is perfectly respectable to discuss these things and to assert there is no death and that life is continuous and intelligent," he said.

One of the features of the experiments performed was the taking into his body of a current of 500,000 vibrations a second, with which he lighted a lamp in his hand. The experiments in which vacuum tubes picked up currents otherwise unnoticeable, were enthusiastically received.

## POPULAR LECTURE SERIES TO CLOSE SUNDAY NIGHT

Dr. Frederick Finch Strong, widely known as a scientist and interesting lecturer, has been giving a series of popular lectures during the week under the auspices of the Church of the People, which have been largely attended. He will give the closing lecture of the series tomorrow evening in Blanchard hall, when he will speak on *The Science of the New Age*.

Dr. Strong will illustrate his lectures with a series of electrical experiments demonstrating the existence of unseen forces. He is widely known as a scientist and as the author of several text books.

Is the United States Headed for a Revolution? will be the subject of the address by Reynold E. Blight before the Church of the People on Sunday morning in Blanchard hall. In a prelude he will discuss the question, Will Germany Treat the Peace Terms as a Scrap of Paper? A musical program will be rendered by Miss Ruth Snow, pianist, and Mrs. Paula Dohrmann, soprano.

At the Lyceum, meeting at 9:30 under the leadership of C. G. Holman, a question box will be opened.

Dr. F. F. Strong  
Talks



Civil War V



## EXPLORES INTO HIDDEN WORLD.

30.1919  
Electrical Authority Talks of  
Science's Marvels.

Declares Five Senses Lock Out  
Much of Universe.

Tests with High-Frequency  
Currents Please Crowd.

The five senses through which humanity is accustomed to contact the world about it are the limitations that keep it from a fuller realization of the nature and full scope of the universe in which it lives. But the limitations are not final, and potentially the race is capable of greater expansion, which is now being furthered by discoveries in modern laboratories.

This is the gist of the address given last night by Dr. Frederick Finch Strong, lecturer on electricity, Tufts College, Boston, electrical authority, and for fifteen years lecturer and student of psychic phenomena, theosophy and comparative religion. He talked to an audience of more than 500 at Blanchard Hall. The lecture was given under the auspices of the Church of the People, and was the first of the series of three. Tonight Dr. Strong will speak on "Life and Intelligence in the Unseen," and Sunday night on the "Science of the New Age."

Reinforcing his contentions with a number of interesting experiments with an alternating, high-frequency current, with which he demonstrated the existence of force and matter ordinarily undiscernable to the senses, Dr. Strong declared science today is fast approaching the stand that there is no death in matter, and that the electrons that go to make up atoms are living centers of force and intelligence.

### ALL VIBRATIONS.

"The discoveries in various scientific laboratories in the last fifty years have given us data and instruments by which we now can prove there are some forty-six octaves of vibrations of which our senses tell us absolutely nothing. Yet they exist, and we now know the things we see and hear and feel are matters of vibrations," he declared.

"In other words, there are invisible worlds all around us—invisible because our senses are not able to register them, and yet, we are able to give proof of their existence by laboratory methods."

The science of today is proving the universality of life, Dr. Strong declared. Today biology, chemistry, physics, all dovetail. All chemistry now is physical and all physics is chemical, he said. The same science that fifty years ago turned its attention toward tearing down essentials in religion, is now working to prove these same essentials, he added.

"We can hear only a little more than ten octaves of sound vibrations, and sense two octaves of heat, and only one octave of light, and yet the laboratory gives us forty-six others," he said.

### INTERESTING TESTS.

In his experiments Dr. Strong used a number of vibratory transformers through which the various electrical currents were "stepped down" or "stepped up" to where they were seen or heard by his audience.

## The Realms Beyond the Senses

### The Reality of the Unseen

A SERIES OF THREE LECTURES BY

Dr. FREDERICK FINCH STRONG

LECTURER ON ELECTRICITY  
TUFTS MEDICAL COLLEGE, BOSTON

Thursday, Friday and Sunday Evenings

JUNE 26, 27 and 29, at Eight o'clock 1919

BLANCHARD HALL, 233 SOUTH BROADWAY

AUSPICES CHURCH OF THE PEOPLE

The general purpose of Dr. Strong's Lectures is to prove that the "Occult" Science of to-day will be the "Orthodox" Science of to-morrow, and to indicate by brilliant and spectacular experiments some of the ways through which this change is being brought about.

Today science accepts the belief that all matter finally resolves itself into electrons, which are living centers of positive and negative force and that the atom in its construction is modeled after the great universe of which the earth is but a small planet. Dr. Strong declared "Science has de-materialized matter. Within the next two decades orthodox science will acknowledge there is no dead matter and that life is continuous. The world has rested too long on the opinions of others. The times have changed. Today it is perfectly respectable to discuss these things and to assert there is no death and that life is continuous and intelligent," he said.

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Dr. F. F. Strong, Who  
Talks on Science



Civil War Veterans



# Public Opening of the New Star Community Center

July 3, 1919  
8 p. m.

1717 Garfield Place (near Hollywood Blvd. and Western Ave.)

Residents of Hollywood especially invited

□ □ □

## PROGRAM

- (a) Selection by a Popular Trio
- (b) Lecture by Dr. Frederick Finch Strong. Subject: "The Keynote of the New Age."

JULY, 1919

## Sunday Public Services



KROTONA INSTITUTE of THEOSOPIY  
Mrs. Annie Besant, President

### THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.  
A. P. WARRINGTON, Vice-President A. F. KNUDSEN, Dean  
Phone 57552

Sunday Afternoon, July 6, at 3 o'Clock  
DR. FREDERICK FINCH STRONG  
National Lecturer for the Theosophical Society  
Topic: "THE PSYCHOLOGY OF LAZINESS"  
The principle of Inertia, from the standpoint of physics and of occultism—with experiments.

BUE

## TALKING TO DEAD BE WIRELESS POSSIBLE

Experiment With Transformer Process Being Worked Out to Solve Mysteries.

That communication with the dead may be made as commonplace a matter as is wireless communication with a person in Europe at the present time, was the remarkable statement made by Dr. Frederick Finch Strong, of the Krotina Institute of Theosophy at Hollywood, yesterday. Experiments have been made there, it was announced, demonstrating methods which, when further extended, it is argued, will accomplish this amazing result.

Is the human eye too dull to observe shapes and forms which people the world; do the dead of the past and present stalk around us in our everyday existence, and will the human mind prove acute enough to extend the functions of the limited senses of the body so that these things will be detected?

May Reveal New Human Forces. The Krotina experiments give rise to the hope that a technique, whereby new forces and kinds of matter may be revealed and even the spirits of the departed communicated with, will be perfected.

A sort of transformer process for the dull senses is being worked out in the hope of proving by means of actual communication with the dead the theory held concerning the continuity of life after death.

Dr. Strong lectured yesterday on the subject. "Direct Communication With the Dead by Wireless Methods: A Scientific Possibility of the Future." W. Scott Lewis, registrar of Krotina Institute and secretary of the Bureau of Science, has worked on many of these experiments.

### What Lights Do We Not See?

One experiment which leads to the belief that any number of things may be camouflaged under a kind of color which makes it impossible for the eye to detect is with ultra-violet rays. Rare minerals, which respond to certain wave lengths, take up and transform them so that they become visible.

This presents the question: "How many kinds of light are there that the human eye does not register—what reposes beneath the surfaces at which humans gaze as though blind?"



# SCIENTISTS IN SEARCH FOR OUR ASTRAL DOUBLES

## Believers in Theosophy Plan Sanitarium for Study of Etheric Problems

To demonstrate the actual existence of man's etheric double and to establish a sanitarium for the metaphysical diagnosis and treatment of disease is the task which Dr. Frederick Finch Strong, national lecturer of the Krotina Institute of Theosophy, has undertaken, according to announcement today.

That every visible body has its aura, or etheric double, is the opinion of Dr. Strong. It is conceived as a faintly luminous bluish-grey mist, ordinarily unperceptible to the human eye. But Dr. Strong believes he will be able to demonstrate its existence beyond any question.

"Occultism has long maintained that every visible object has its duplicate in grades of matter too fine for ordinary human perception," declared Dr. Strong.

### SEES DOUBLE

"A few years ago Dr. Kilner of London discovered a screen that operated as a medium for making visible the etheric double of man. The screen proved effective with about 60 per cent of the persons using it and in our classes at Krotina we have succeeded to an even greater extent."

"Many of my students see colors as well as the steel grey of the etheric double," continued the doctor. "And when they have attained this, who knows but they will be enabled to sense even finer matter than the etheric?"

When the philosophers have so progressed they are clairvoyant and astral matter is within their grasp, says the doctor.

### IN CLOUD OF LIGHT

That every human, every animal even every tree, is surrounded by a cloud of light, has already been proved to the satisfaction of the Theosophists, while manifestations of the vital force in the human is conspicuous as a constant stream of particles of a pale-rose color which flows over and through the body along the nerves even as the blood corpuscles flow along the arteries.

This luminous cloud extends 18 inches from the body in all directions and is therefore approximately oval in shape, being called the auric egg.

And within the auric egg are seven inter-astras. Thus say the Theosophists who today are eagerly watching for the shadows of their etheric doubles on the ghostly screen of Dr. Strong.

The health aura, the magnetic flame aura, the emotional mirror aura, the aura of the lower mind, the aura of the reincarnating soul, and—mystery of mysteries—the sixth and seventh auras! For beyond the fifth aura hangs a veil beyond which even the scholars have as yet dared not penetrate.

### PLAN SANITARIUM

Meanwhile, that none may accuse the Krotina colonists of being impractical, Dr. Strong announces that it is the present plan of the Institute to found a sanitarium in which proven methods of metaphysical diagnosis and treatment as well as proved methods of practices of the "regular schools" will be employed.

"The value of clairvoyant vision for purposes of diagnosis in medicine has been established," said Dr. Strong. "One Los Angeles physician has already become famous for his color system of diagnosis."

"The screen for the showing of the etheric double should be in use among the physicians. The technic of the invention is such as to make it available for any physician to use, for it absolutely does not depend upon the finer vision of the operator."

### FINDER OF DISEASE

"The presence of a disease may be determined by the patient's reaction to color beyond a doubt and his recovery hastened if not completely accomplished by the application of complementary colors."

Thus while the more advanced students and philosophers are beholding their etheric doubles, novices at the institute are lounging by the lotus-pool, immersed in the bizarre text-books regarding the auric egg.

Thick black clouds in the aura usually indicate hatred and malice, say these books.

Deep red flashes on a black ground show anger, but noble indignation is differentiated by a brilliant scarlet flash. Lurid, flaming red indicates animal passions. Dull brown-red, almost rust color, shows avarice, while dull, hard brown-gray indicates selfishness.

Heavy leaden gray expresses deep depression, whereas livid gray—a most hideous and frightful hue—shows fear.

Gray-green shows deceit; brownish green, with occasional dull-red flashes, betokens jealousy; crimson—love. Rose color tinged with lilac shows the spiritual love for humanity.

Orange, if clear, shows ambition. If tinged with brown, pride. Yellow expresses intellectuality; bright green, ingenuity; dark, clear blue, religious feeling; and light blue, ultramarine or cobalt shows devotion to a noble spiritual ideal and gradually rises to a luminous lilac-blue which indicates the higher spirituality and is almost always accompanied by sparkling golden stars.

## ETHERIC DOUBLE OF MAN VISIBLE TO HUMANS, CLAIM

Have you ever seen your etheric double, or is it possible you did not know you had one? To demonstrate the existence of such a vehicle is the purpose of a class in etheric vision now being conducted by Dr. Frederick Finch Strong at Krotina Institute of Theosophy.



AUGUST, 1919

## Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

### THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.

A. P. WARRINGTON, A. F. KNUDSEN,  
Vice-President Dean  
Phone 57552

Sunday Afternoon, Aug. 3, at 3 o'clock  
DR. FREDERICK FINCH STRONG  
Topic: "THE POWER OF THE SPOKEN  
WORD," with Experiments Illustrating Forms  
Built by Sound Waves

"Occultism has long maintained that every visible object has its duplicate in grades of matter too fine for ordinary human perception," declared Dr. Strong. "A few years ago Dr. Kilner of London discovered a screen that operated as a medium for making visible the etheric double of a human being. The screen proved effective with about 60 per cent of the persons using it, and in our classes at Krotona we have succeeded to an even greater extent."

#### Etheric Colors Seen

Many of Dr. Strong's pupils see colors as well as the steel gray of the etheric double, the doctor said, and these colors he believes to evidence their ability to sense even finer matter than the etheric. He calls that grade astral matter, and the people who can see it, he says, are clairvoyants, who are seeing the astral body.

The practical value of having clairvoyant vision for purposes of diagnosis in medicine has been proven, the doctor maintains, in the cases of numerous members of the medical profession. Basing his experiments on clairvoyant vision a Los Angeles doctor, who has since become famous for his color system of diagnosis, has been able to perfect what has so far proven to be, it is claimed, an infallible method for diagnosing disease.

#### Available For Practice

Dr. Strong stated the technic of the invention was such as to be available for anyone in the practice of medicine and that it did not depend on the "finer vision" of an operator for its success. According to this man's idea not only the presence of a disease may be discovered by a patient's reaction to colors, but his recovery from the trouble may be hastened, if not completely accomplished by the application of complementary colors.

Dr. Strong says it is the present plan of Krotona Institute to found a sanitarium in which proven methods of metaphysical diagnosis and treatment as well as the demonstrated practices of the "regular schools" will be employed.

Dr. F. F. Strong, of Palmetto, and his assistant, Chas. Haley, arrived Friday, and the Dr. contributed a rare evening's lecture in the entertainment section of the bazaar. Many have expressed regrets at not hearing the Dr., and hope he may be induced to come at some future time.

SEPTEMBER, 1919

## Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

### THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.

A. P. WARRINGTON, A. F. KNUDSEN,  
Vice-President Dean  
Phone 57552

Sunday, Sept. 14, at 3 P. M.

DR. FREDRICK FINCH STRONG  
National Lecturer Theosophical Society  
Topic: "THE MIDDLE PATH"

*California State Spiritualist Association*

SUNDAY, SEPTEMBER 7TH, 1919

Dr. Finch Strong, Scientist and Psycho-physicist—"The Technique of Psychic Phenomena as Explained by Occultism."

#### TO PERFECT TECHNIQUE.

"It is our aim in the Krotona laboratory to perfect a technique whereby some of these supersensory vibrations may be made demonstrable to any scientist who will use them. We have persons at the institute who claim to be able to see beyond the ordinary limits of vision, and we have succeeded in some smaller experiments in gaining physical proof of these things so that we feel much encouragement for the ultimate success of our efforts."

In the little laboratory at Krotona where Dr. Strong conducts most of his interesting investigations, are coils, transformers, screens and numerous other paraphernalia in great variety. The peculiar odor which one notices is not that of a few million escaped electrons hovering over the place but is due to ozone liberated by the million volt coil, the scientist says.

#### POWERFUL VOLT COIL.

It is by the use of this coil, said to be one of the most powerful ever used by a public lecturer on the stage, that Dr. Strong has demonstrated what he terms the "electrical aura" of a man. When taking the current from this huge coil into his body a photograph will show a projection of light extending a distance of several inches beyond the outline of his physical body.

Whether this is due to ordinary radiation or is the result of the vibrations in what the Theosophists call the aura being modified to a condition where they come within the octave of sight, the doctor did not give an opinion. He pointed out, however, that what was invisible became visible and any one who cares to undergo the experience of absorbing a million volts of electricity into his system can demonstrate the fact.

## WANT TO TAKE MILLION VOLTS?

*Aug 3 1919*  
*Can See the Invisible that Way, Says Dr. Strong.*  
*Since*  
*"Electrical Aura" Drawn Out by Huge Krotona Coil.*

### Theosophists Try to Locate Elusive Vibrations.

What becomes of forty-seven varieties, or more properly octaves, of vibrations? Any one who has seen them and will kindly report the same to members of the scientific fraternity will be doing humanity a great service, according to Dr. Frederick Finch Strong, former instructor of electricity at Tufts College and national lecturer of the Theosophical Society.

There are sixty-two octaves of vibrations recognized by science, Dr. Strong says, of which only fifteen are within sensory limits. Ultra violet rays vibrate at the rate of two thousand million million per second, and the only way it is possible for the human eye to distinguish such terrific vibratory rate is by "stepping them down" to a lower octave. Fluorescent and phosphorescent mineral have the power of transforming the two thousand million million rate to six hundred million million vibrations per second, which latter rate manifests as green light to the human eye, the scientist explained.

"While science has been able to verify the existence of these almost inconceivable vibratory ranges with the aid of a silvered plate containing twenty thousand parallel lines to the inch and which is known as diffraction grating, similar to one we have here at Krotona Institute, it has been unable to perfect instruments which would bring them within the sensory range of man," he added. "The only means of which we know at present is that suggested by students of occultism, the development and use of powers lying latent in every man."

*Metaphysical Association of So. Calif.*  
*Sept 15, 1919 at 7-30*  
*Colonial cafeteria*  
*Subject = "New Science of Healing"*



# THREE LECTURES

—BY—

DR. FREDERICK FINCH STRONG

Late Lecturer in Electricity Tufts Medical School, Boston

BLANCHARD HALL

233 SOUTH BROADWAY

**September 25**—WORLD FORCES OF THE FUTURE—A Scientific Forecast of the new forces now coming into manifestation and of their probable economic utilization. (Aviation in the future, and levitational force, Bachellet's experiments; the use and application of radioactivity, lighting systems of the future; the transmutation of metals as a commercial possibility.) (With lantern slides and experiments)

**September 26**—THE NEW SCIENCE OF HEALING—The methods which involve the study and augmentation of the forces of Life rather than the phenomena of Death. Natural methods of cure: (a) Those that apply to the physical body; (b) those that apply to the finer bodies of man.

Considering and comparing the older methods of treatment with modern physical therapeutics; the use of nature's finer forces, light, color and music in healing, mental and spiritual healing, occult healing. (With experiments and slides.)

**September 27**—A SCIENTIST'S EXPERIENCE IN PSYCHIC RESEARCH—Drawn from the Lecturer's twenty-five years experience in the scientific investigation of the physical and mental phenomena produced through the agency of physics and sensitives.

Tickets 35 Cents each,

Course of 3 Lectures 75 Cents

IN BLANCHARD HALL, Wednesdays and Thursdays  
at 8:00 P.M.

NOVEMBER 5th, 6th, 12th, 13th, 19th, and 20th.

## SIX LECTURES

—BY—

DR. FREDERICK FINCH STRONG

ROOM 200X BLANCHARD BUILDING  
HALL

1. A Brief History of the Art of Healing from the days of Hermes to those of Pythagoras, Hippocrates, Galen, Paracelsus, Hahnemann, Mesmer, and the founders of the modern schools.
2. The Laws of Health and Disease (a) from the materialistic viewpoint, (b) from the idealistic viewpoint; (c) from the occult viewpoint.
3. Physical Methods of Healing, showing how the medical profession is gradually working out of the older drastic methods of drugging into the use of the finer physical forces.
4. Healing Through Music, Color, Perfumes, etc. Methods of restoring health by working through man's emotional nature. The love of the beautiful in its relation to health.
5. Psychic Healing, treatment of obsessional insanity, mental healing, etc. The healing power of thought; technique of the psycho-analyst, of the metaphysical healer, of the Christian Scientist, of the occult healer.
6. Spiritual Healing. The attainment of perfect health. Man's divine birthright; the passing of the age of pain.

Price of Lecture Course, \$1.50

OCTOBER, 1919

## Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.

A. P. WARRINGTON, A. F. KNUDSEN,  
Vice-President Dean  
Phone 57552

Sunday Afternoon October 5, at 3 O'clock  
DR. FREDRICK FINCH STRONG  
National Lecturer Theosophical Society  
Topic: "SOME STUDIES IN VIBRATIONS,"  
With Experiments

LOS ANGELES LODGE

Rooms 405-407 Blanchard Building  
233 South Broadway

Oct. 12—DR. FREDERICK FINCH STRONG  
"Superphysical Physics: An Occult  
Paradox."

## Second Coming of World Leader

DR. FREDERICK FINCH STRONG,  
Krotona Institute of Theosophy.

While the coming of the World Teacher, or the second coming, has been heralded repeatedly during the last 1900 years, at no other period of the history during this span of time have conditions so warranted such an expectation.

Theosophy has to offer two arguments in favor of this wonderful "hope of the world" from a general viewpoint. These two arguments can be summoned up in the words, "Karma" and "Reincarnation." The "Karma" of the world, at large, or in other words, the general conditions of the world, allow the successful appearance of a great teacher. Science has taught men to realize that there are finer forces in nature than the materialistic teachings of the past have presumed, while the clash of nations during the last five years and friction between the various classes of societies have not only accentuated differences between men of different walks of life, but they also showed them the common meeting ground of brotherhood. The logic of reincarnation permits us to believe in the recurrence of great souls on earth for a definite purpose, namely, to lead men to a better understanding of the laws of evolution.

Men are beginning to recognize the great qualities in their fellow men, in their fellow nations, qualities which are divine in their potentialities. Hence their vision to recognize the Great Teacher when He walks again on this plane has become clearer. And this inner vision will come to many people as quickly as they will come to live a life of self-restraint, of patience towards their brothers.

NOVEMBER, 1919

## Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

Sunday Afternoon, November 2, at 3 O'clock  
DR. FREDERICK FINCH STRONG

National Lecturer Theosophical Society

Topic: "WORLD PROGRESS TOWARD UNITY,"  
A Study of Modern Systematic Tendencies.



2.a. I.S.  
Nov. 9—DR. FREDERICK FINCH STRONG  
"A Democratic Hierarchy." (A clue  
to an ideal government through  
an occult study of the human  
body.)

1919  
Dec. 21—DR. FREDERICK FINCH STRONG  
"The Psychology of the Christian  
Spirit."

DECEMBER, 1919

## Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.

Sunday, December 21, at 3 P. M.  
DR. FREDRICK FINCH STRONG  
National Lecturer Theosophical Society  
Topic: "THE LIFE OF MATTER."

Evidences of dawning consciousness in things which  
science calls "dead."

## Sunday Public Lectures

Lectures Commence Promptly at 3:00 P. M.

Nov. 27—MIRZA AHMAD SOHRAB  
"The Conquest of Prejudices."

Dec. 4—FREDERICK FINCH STRONG, M. D.  
"Outposts of Consciousness."

Church of the People

233 South Broadway

DR. F. F. STRONG Thursdays at 8.

Dec. 15. The Pineal Gland, the Eye of the Inner Vision.  
Dec. 22. The Sympathetic Nervous System, Man's Automatic Servant.  
Dec. 29. The Cerebro-Spinal Nervous System Occultly Considered.

## "The New Science of Healing"

SYNOPSIS OF A LECTURE

BY

FREDERICK FINCH STRONG, M. D.

*In Los Angeles Nov. 1919*

"Nothing useless is or low,  
Each thing in its place is best;  
And what seems but idle show  
Strengthens and supports the rest."  
—Longfellow.

The most stubborn fact in life is pain: disease, of which it is an indication, is a problem which we all have to face; hence everyone is personally, vitally interested in HEALING,—the Treatment and Cure of Disease.

Probably more study and investigation have been devoted to this subject than to all others combined, yet it is a fact that up to the present time we have no generally-accepted Science of Healing. All scientists agree as to the general laws of chemistry and electricity: we have learned them and can prove them experimentally in the laboratory; but we are still more or less ignorant of the laws and principles of Life and their manifestations in health and disease.

In no class or profession do we find more disagreement, dogmatism and intolerance than among the physicians and healers. The "orthodox" or regular physician scoffs at Christian Science and Mental Healing, while the various "drugless schools" deny and bitterly oppose the principles and practices of the "Allopaths"; the latter, even to-day ridicule the Homœopathists, who have risen to a respectable legal standing despite nearly a century of persecution from their brethren of the "Old School."

Even in the study of pathology we have many conflicting opinions: although this is naturally more of a laboratory subject so far as the study of the results of disease are concerned. But when we come to causation the conflict still rages; but every one is quite sure that his particular pet theory is the only correct one.

In such a chaos of conflicting opinions the truth-seeker has a rather difficult task; yet it is obvious that before Healing can really become a science much of the present

*Nov. 1919*

*Bradbury Bldg. - Los Angeles - 1919*

No. 1. Opening Address—What Is Electricity—A Little History—The Alpha and Omega of Electro-therapy—High Frequency Currents, How Produced—Types of Machines—High Frequency Physiology—Induction Currents—Desiccation—Fulguration, etc.

No. 2. Application of High Frequency Currents to Diseased Conditions—Electrodes—General Technique—Selection of Current—Auto-conduction—Auto-condensation—Contraindications—General Therapy.

No. 3. Blood Pressures—The Sphygmomanometer—Blood Pressure Technic—Etiology and Physiology of Hypertension—Hypotension—Cardio-Renal Disease May Be Prevented—Hyperpiesia—Hypertension Not a Phenomenon of Compensation—Importance of the Energy Index—Method of Treatment.

No. 4. Genito-Urinary Diseases—Electrical Method of Aborting Gonorrhoea—Chronic Gonorrhoea, Prostatitis, Vesiculitis—Growths in Bladder and Technic of Treatment by Desiccation and Fulguration—Diseases of Uterus and Adnexiae—Diseases of Skin—Ideal Treatment of Hemorrhoids—General Diseases with Technic of Treatment—Treatment of Goitre.

No. 5. Diathermy—When Indicated, How Applied—Physiology and Therapy—Pneumonia—Tuberculosis.

No. 6. Pain, Its Significance, Differential Diagnosis—Treatment of Neuralgia and Neuritis.



controversial matter must be done away with. To do this and to discriminate between the true and the false requires not only a tolerant, unbiased and receptive mind, but also an actual detailed and personal knowledge of the many conflicting systems of healing that are exploited at the present day.

The writer believes that the occult teachings regarding the nature of man and his bodies offers the best working hypothesis upon which to proceed in the study of the science and art of healing. This Ancient Wisdom of the East is appearing under many names in the modern Ethical Movements, and has already done much to synthesize, harmonize and reconcile the differences between conflicting religions, philosophies and creedal systems: it has done much to amplify and enlarge the scope of science, and is destined to have a similar synthesizing and unifying effect when applied to the study of the various phases of the art of healing.

Briefly outlined, it recognizes man as a spiritual entity unfolding and evolving through forms or bodies, learning by many mistakes to more fully realize his real spiritual nature and to live "more abundantly."

It teaches that man has a composite three-fold body,—a physical body through which he acts, an emotional apparatus through which he feels and desires, and a mental mechanism through which he thinks: this complex triple machine forms the whole body of man and determines his personality. Like any other machine it may get out of order and give trouble through the injury or misuse of any of its parts. The healer therefore, has to find out what and where the trouble is, repair the machine and prevent the recurrence of the trouble by the removal of its cause, (in medical parlance, diagnosis, treatment, and prophylaxis).

We believe that in the future the most successful healers will be trained Occultists who can see clairvoyantly and who can therefore diagnose disease in the emotional and mental bodies as well as in the physical vehicle. Even to-day we have psychic and mediumistic clairvoyants who have what is popularly called "X-Ray Vision" and can use it in diagnosis. They are regularly employed in some hospitals in France.

The study of the "Aura" of the patient also affords clear indications for diagnosis and treatment if we have Etheric Vision and can see it. Dr. Kilner of London made it possible for people who are not clairvoyant to see the coarser part of the aura and to diagnose therefrom. A most remarkable system has been devised and perfected by Dr. Geo. Starr White in which disease is diagnosed from its auric emanations by accurate and demonstrable methods of

a purely physical nature. Dr. White's discoveries have inaugurated a new era in the science of diagnosis. Only those scoff at his methods who have never personally tested them or mastered his technique.

One who wishes to heal intelligently will not neglect, of course, the purely physical methods of determining disease, such as the X Ray, chemical and microscopic examinations, etc.

Diagnosis of diseases which have their seat in the emotional and mental vehicles, (not diseases of the brain, for these are usually physical),—are being made possible with an ever-increasing degree of accuracy by the newer schools of Psychoanalysts and Psychopathologists. The methods of psycho-therapeutics which have grown out of their investigations are rapidly bridging the gap between the methods of the practitioners of medicine and those of the metaphysical and mental healers.

From the broad synthetic viewpoint it is possible to classify the more prominent healing systems as follows:

#### A.—THOSE WHICH ACT MAINLY UPON THE PHYSICAL BODY, which include

1. **Mechanical methods**, as Surgery, Massage, Osteopathy, Chiropractic.
2. **"Nature-cure" methods**, as Sun-baths, Hydrotherapy, Dietetics.
3. **Medical Treatment**, including,—
  - a. **Allopathy**, which uses drugs empirically for their chemical and physiological action.
  - b. **Homeopathy**, which uses attenuated drugs according to the "Law of Similars," (acting largely through the subtle Etheric Body, the vehicle of vitality).
4. **Radiotherapy**, including the various treatments by radiant energy or electromagnetic waves, such as, light treatment, Actino-therapy, (Ultra-violet treatment), High-frequency currents, color therapy, electrotherapy and X Ray therapy.

#### B.—THOSE WHICH TREAT MAINLY THRU THE EMOTIONAL BODY, such as

1. **Magnetic and mesmeric healing** (not hypnotic).
2. **Music-therapy**, (a new and most important field of healing).

## Church of the People

233 So

DR. F. F. STRONG Thursdays at 8.

Dec. 15. The Pineal Gland, the Eye of the

Dec. 22. The Sympathetic Nervous System

Dec. 29. The Cerebro-Spinal Nervous System

Bradbury Bldg. - Los Angeles -

1919

No. 1. Opening Address—What Is Electricity—A Little History—The Alpha and Omega of Electro-therapy—High Frequency Currents, How Produced—Types of Machines—High Frequency Physiology—Induction Currents—Desiccation—Fulguration, etc.

No. 2. Application of High Frequency Currents to Diseased Conditions—Electrodes—General Technique—Selection of Current—Auto-conduction—Auto-condensation—Contraindications—General Therapy.

No. 3. Blood Pressures—The Sphygmomanometer—Blood Pressure Technic—Etiology and Physiology of Hypertension—Hypotension—Cardio-Renal Disease May Be Prevented—Hyperpiesia—Hypertension Not a Phenomenon of Compensation—Importance of the Energy Index—Method of Treatment.

No. 4. Genito-Urinary Diseases—Electrical Method of Aborting Gonorrhoea—Chronic Gonorrhoea, Prostatitis, Vesiculitis—Growths in Bladder and Technic of Treatment by Desiccation and Fulguration—Diseases of Uterus and Adnexiae—Diseases of Skin—Ideal Treatment of Hemorrhoids—General Diseases with Technic of Treatment—Treatment of Goitre.

No. 5. Diathermy—When Indicated, How Applied—Physiology and Therapy—Pneumonia—Tuberculosis.

No. 6. Pain, Its Significance, Differential Diagnosis—Treatment of Neuralgia and Neuritis.



3. **New Thought Healing**, (especially those forms which use suggestions of Joy, Cheerfulness, Happiness, etc.).
4. **Artistic Healing**, by the use of beautiful surroundings, flowers, etc.
5. **Spiritualistic Healing**, or Healing Mediumship.

C.—TREATMENT DIRECTED TO THE MENTAL BODY OF MAN, including,—

1. **Christian Science**, (which regards all disease as "Errors of Mortal Mind.")
2. **Metaphysical and Spiritual Healing**; also healing by prayer.
3. **Suggestive Therapeutics**, (with and without Hypnosis).
4. **Occult Healing**, (by projected thought forms).

To heal as Christ healed,—as the Buddha healed,—one would have to have attained to the Exalted Station of the Master. Yet any one of us while still an humble pupil in the School of Life, wishing to help lift the burden of pain from his brothers, may anticipate in a measure something of the "New Science of Healing" of the future by carefully and impartially studying all the above methods,—learning something of value from each:—adopting that part of each system which seems most perfectly to accord with all the others:—avoiding and condemning only those agents which are obviously dangerous and harmful:—and making the love of service,—the desire to help,—the spirit of Brotherhood taught by the gentle Christ the motive and keynote of his life and work.

Such a study would help to promote a spirit of unity and coöperation among the various schools of healing, and would most truly fit one to benefit suffering humanity.

In the words of the great Persian philosopher, "Abdul Baha"—

"Beware of prejudice; Light is good in whatsoever Lamp it is burning. A Rose is beautiful in whatsoever Garden it may bloom. A star has the same radiance If it shines from the East or the West!"

Under the auspices Church of the People, Room 200 Blanchard Building, Wednesdays and Thursdays, at 8 p. m., the 5th, 6th, 12th, 13th, 19th and 20th of November, Dr. Strong will give six lectures on Healing, amplifying this syllabus, taking the following sub-topics:

1. A brief history of the art of Healing.
  2. The laws of Health and Disease.
  3. Physical methods of healing.
  4. Healing thru music, color, perfumes, etc.
  5. Psychic Healing, treatment of obsessional insanity, Mental Healing, etc.
  6. Spiritual Healing. The attainment of perfect health: man's Divine birthright; the passing away of the Age of Pain.
- Prices of Lecture Courses, \$1.50.

**Church of the People**

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**Pacific School of Electro Therapy**  
Suite 228-229 Bradbury Building  
Los Angeles, Cal.

*Dr. F. F. Strong*

*1827 Gower St.*

*Hollywood, Cal.*

*1920*

*A Course of Practical  
Instruction in  
Electro Therapy by  
Frederick Finch Strong, M.D.*

## "The Science of the New Age"

A New Course of Four Lectures

—BY—

DR. FREDERICK FINCH STRONG

Thursday Evenings at 8 o'clock

*1920*

January 16. ORIGIN OF MATTER.

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1920

April 2

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W. SCOTT LEWIS  
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Outlines and further information given

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in the selection and technique of application of the various forms of electricity and radiant energy to the treatment of disease.

Late Lecturer in Electro-therapeutics Tufts College Medical School, Boston, Mass. Author "High Frequency Currents," "Modern Electro-Therapeutics," etc. Inventor of the "Vacuum Electrode;" first to introduce Tesla Currents into therapeutics.

LECTURE NO. 1

LECTURE NO. 2

LECTURE NO. 3

LECTURE NO. 4

LECTURE NO. 5

(Continued on Page 3 of Cover)

LECTURE NO. 6

We hope to have some clinical material and students are asked to consult with Doctor Strong as to the time to bring special cases for treatment.

## TERMS

Fill out the blank and send it in as soon as possible to

FRANK H. HOOSE, *Secretary*,  
Room 228 Bradbury Bldg., Los Angeles.

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#### APPLICATION FOR REGISTRATION

I hereby make application for the Post-Graduate  
Course No. 2 to be given by

Frederick Finch Strong, M.D.,

Jan. 27th, 28th, 30th, Feb. 3rd,

4th and 6th, 1920,

For which I agree to pay \$25.00 and enclose my  
check for \$.....on account.

Name.....

Address.....

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## WINTER SESSION 1920

Twelve Weeks, January 1 to April 2

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#### APPLICATION FOR REGISTRATION

I hereby make application for registration

## CURRICULUM

1. FUNDAMENTAL THEOSOPHY. (12 Lessons) - - - Jetta Clay  
Tuesdays at 10:00 a. m.  
Treatment of the main tenets of the Theosophical System, as taught  
in standard works published by the Theosophical Society.
2. ADVANCED THEOSOPHY. (24 Lessons) - - - Marie Poutz  
Tuesdays and Fridays at 2:00 p. m.  
A resume of Theosophy based upon Mrs. Besant's The Ancient Wis-  
dom and Mr. Leadbeater's The Hidden Side of Things. Its purpose  
is to show the practical value of Theosophy as applied in daily life.
3. MAN'S RELATIONSHIP TO GOD. (24 Lessons) Emily Pelton-Shutts, M.A.  
Tuesdays and Fridays at 3:15 p. m.  
Based upon Mrs. Besant's book, a Study in Consciousness. An ef-  
fort to trace the growth and development of consciousness through  
the planes of nature.
4. PSYCHOLOGY AND SELF-ANALYSIS. (24 Lessons) A. F. Knudsen, Dean  
Tuesdays and Fridays at 11:00 a. m.  
The principles of Psychology and Logic as ordinarily taught, ampli-  
fied and explained in the light of Occult Knowledge. The making of  
the Self consciously.
5. ASTROLOGY. (12 Lessons) - - - Egypt L. Huyck  
Mondays at 11:15 a. m.  
This course will present the science and philosophy of Astrology;  
signs, symbols, calculations and correspondences.
6. FOLKLORE, MYTH AND SYMBOL. (12 Lessons) - - George Kramer  
Mondays at 10:00 a. m.  
This course will give the mystic interpretation and extract the  
truth kernel from the various myths and traditions, and explain the  
universal symbols in the signs of the Zodiac.
7. OCCULTISM AND THE BIBLE. (12 Lessons) - - Alice A. Evans  
Thursdays at 10:30 a. m.  
Showing how in the Bible the Divine Wisdom can be found, how  
the Occult Hierarchy, the Masters, Initiation and the Path can be seen  
there, and giving the true interpretation of the Atonement and other  
Christian fundamentals.

8. HOMILETICS. (6 Lessons) - - - Alice A. Evans  
Thursdays at 2:00 p. m.

How to teach oneself to teach. Helps in lecture-building and class-  
leading. Tact and Psychology in handling individuals. The value of  
definition and the capacity to think synthetically.

9. PHILOSOPHY OF EXPRESSION. (12 Lessons) Charlotte C. Robertson  
Wednesdays at 3:00 p. m.

Training of speakers. The dignity of English. Oratory and Stage  
Etiquette. Psychology of voice, color and sound. Psychology and elo-  
quence of silence. Science of gesture. Occultism in Shakespeare.  
Philosophy of Delsarte. The Cosmic man; the Microcosmic man. The  
mirror of the Soul; how it reflects. Physical culture. Eurythmics.

10. COMPARATIVE RELIGION. (6 Lectures) - Frank L. Riley, M. D.  
Weekly lectures during the first six weeks of the Winter Session.  
Thursdays at 3:15 p. m.

A study of the Sacred Books of the world, revealing that Truth,  
like a golden thread, runs through all of them. This will be traced in  
the Sacred Books of China, the Upanishads, Masnavi I'Ma Navi, the  
Corpus Hermeticum and the Bible.

11. PSYCHOTHERAPY. (6 Lectures) - - Frank L. Riley, M. D.  
Weekly lectures during the last six weeks of the Winter Session.  
Thursdays at 3:15 p. m.

Karma and Reincarnation—their relation to Psychotherapy. "Know  
thyself." Mental diagnosis. The law of Correspondence. Concentra-  
tion. The Silence. Meditation and Prayer. Treatment; special cases.  
"The Music of the Spheres."

12. TALKS ON THE NEW EDUCATION.  
By the Teachers of the School of the Open Gate.  
Hours to be announced.

13. SCIENCE AND THEOSOPHY. (12 Lectures) - - W. Scott Lewis  
Tuesdays at 8:15 p. m.

Historical geology and evolution, correlating the latest teachings of  
science with Theosophy. A general history of the world, emphasizing  
modern proofs of the age-old occult teachings.

14. HISTORY AND PRACTICE OF HEALING. (6 Lectures) - -  
Weekly during the first six weeks of the Winter Session.  
Thursdays at 4:30 p. m.

The study of the laws of Health: The Nature, causation and treat-  
ment of Disease from the Theosophical standpoint.

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15. THE CONSTITUTION OF MATTER. (6 Lectures) Frederick Finch Strong, M. D.

Weekly during the last six weeks of the Winter Session.  
Wednesdays at 4:15 p. m.

The study of the basis of Modern Chemistry and Physics as deduced from the most recent laboratory investigations compared and correlated with the results of clairvoyant investigation as given in Occult Chemistry.

Special lectures will be given from time to time during the Institute Session by Mrs. Marie Russak Hotchener (International Lecturer for the Theosophical Society), Mr. Henry Hotchener and other prominent lecturers in the Theosophical movement.

Students attending the Institute Courses may avail themselves of the Krotona Library, one of the finest Occult Libraries in America; books used in the courses and Theosophical reference works may be purchased, if desired, from the Theosophical Publishing House, at Krotona.

There is a Vegetarian Cafeteria in the Court for the convenience of Institute students and the visiting public.

Attention of the students is called to the Bulletin Board in the Hall of Krotona Court, for information regarding Sunday Lectures and Special Activities.

"The Science of the

A New Course of Four Lectures

—BY—

DR. FREDERICK FINCH STRONG

Thursday Evenings at 8 o'clock

1920

January 16. ORIGIN OF MATTER.

January 23. ORGANIZATION AND EVOLUTION.

January 30. MAN'S PLACE IN EVOLUTION.

February 6. THE FINER FORCES OF NATURE.

These lectures will constitute a brief review of the latest scientific conceptions of matter, the genesis of the electron theory, correlating Occult Chemistry from the most recent laboratory investigations with lantern slides and experimental demonstrations. "Human evolution may be said to consist in the evolution of material organism, physical as well as mental, and the unfoldment of the Spirit and its instruments. A man passes through one projection after another, from an archetypal state, building faculties, unfolding inner virtues. He does all this through the influence of the grouping arrangement of Nature."

2819

A Study Class in the Technique and Development of "Etheric Vision." By Dr. Frederick Finch Strong.

From those attending the series of lectures given in November and December there came a request for a class in "Etheric Vision," followed by the enrollment of seventy-five members. A number not having gained admission to that class have asked that a new class be formed. This will be done provided there are sufficient registrants for the course. This class also will consist of seventy-five, to allow for individual work. If more than seventy-five register, the class will begin Monday evening at 8 o'clock. The course will consist of ten lessons, one week, and will cover instruction along lines of the development of Etheric Vision, Telepathy, and other psychic faculties. Outlines and further information will be given to registrants.

CHURCH OF THE PEOPLE, 200 Blanchard Street

I wish to register for Dr. Strong's class in

Signed.....

Address.....

The fee for the course of ten lessons is \$10.00, including the meeting of the class.



city is not a  
t I believe it, in  
modalities, to  
valuable of all  
for assisting  
her efforts to  
e."—Frederick  
g, M.D.

# R REGISTRATION

(6 Lectures)  
Frederick Finch Strong, M. D.  
of the Winter Session.

Chemistry and Physics as deduced  
investigations compared and correlated  
investigation as given in Occult

to time during the Institute Session  
ational Lecturer for the Theosophical  
prominent lecturers in the Theoso-

urses may avail themselves of the  
lt Libraries in America; books used  
works may be purchased, if desired,  
at Krotona.

ne Court for the convenience of Insti-  
to the Bulletin Board in the Hall of  
Sunday Lectures and Special Activities.

## "The Science of the New Age"

A New Course of Four Lectures

—BY—

DR. FREDERICK FINCH STRONG

Thursday Evenings at 8 o'clock

1920

January 16. ORIGIN OF MATTER.

January 23. ORGANIZATION AND EVOLUTION OF LIFE.

January 30. MAN'S PLACE IN EVOLUTION.

February 6. THE FINER FORCES OF NATURE.

These lectures will constitute a brief review of the modern conceptions of matter, the genesis of the elements, and the electron theory, correlating Occult Chemistry with deductions from the most recent laboratory investigations. Illustrated with lantern slides and experimental demonstrations.

"Human evolution may be said to consist of the evolution of material organism, physical as well as superphysical, the unfoldment of the Spirit and its instruments and channels. A man passes through one projection after another of the archetypal state, building faculties, unfolding powers, acquiring virtues. He does all this through the instrumentality of the grouping arrangement of Nature."

23191

### A Study Class in the Technique and Development of Etheric Vision." By Dr. Frederick Finch Strong.

From those attending the series of lectures given by Dr. Strong in November and December there came a request for a class in "Etheric Vision," followed by the enrollment of a limited class of seventy-five members. A number not having been able to gain admission to that class have asked that a second one be formed. This will be done provided that at least fifty register for the course. This class also will be limited to seventy-five, to allow for individual work. If a sufficient number register, the class will begin Monday evening, January 19 at 8 o'clock. The course will consist of ten lectures, one each week, and will cover instruction along lines of recent investigations with experiments and demonstrations in the methods of the development of Etheric Vision, Telepathic and Psychometric faculties. Outlines and further information given registrants.

#### CHURCH OF THE PEOPLE, 200 Blanchard Building:

I wish to register for Dr. Strong's class in Etheric Vision.

Signed.....

Address.....

The fee for the course of ten lessons is \$10.00, payable at first meeting of the class.



1st class begins Jan 15, 1920  
 2nd " " " " Feb 18, 1920  
 3rd " " " " Feb 23, 1920

Outline of Lessons in Dr. Strong's Classes in

"Etheric Vision"

Auspices of The Church of the People

Beginning Thursday, Jan. 15 and Monday, Jan. 19, 8 P. M.  
 Room 200, Blanchard Building.

- I.—1. Varieties of Clairvoyance.  
 2. Methods of Developing Clairvoyance  
     a. Safe and Legitimate Methods.  
     b. Unsafe Methods and Their Dangers.
3. Etheric Sight, Its Scope and Value. (With Lantern Slides.)
- II.—1. The Eye and the Phenomena of Physical Vision.  
 2. Color-sense and How Produced.  
 3. Physical, Etheric, and Astral Colors, and How to Tell Which We are Seeing. (With Lantern Slides and Experiments.)
- III.—1. The Etheric Aura of the Human Body; its Divisions and Emanations. (With Lantern Slides and Experiments.)
- IV.—"Animal Magnetism,"—Reichenbach's Experiments, and Those of Mesmer. Polarity and Its Significance. (With Lantern Slides and Experiments.)
- V.—Kilner's Experiments: the "Human Atmosphere" in Health and Disease. (With Lantern Slides and Demonstrations.)
- VI.—Recent Experiments in Auric Diagnosis. Dr. Geo. Starr White's Methods. (With Demonstrations and Experiments.)
- VII.—How to diagnose by Colors and Irregularities in the Etheric Aura. (With Demonstrations and Experiments.)
- VIII.—1. Methods of developing Telepathic Faculty.  
 2. Methods of Developing Psychometric Faculty. (With Experiments.)
- IX.—1. "Nature Spirits" and how to see them.  
 2. Expansion of Etheric Sight Into More Extended Clairvoyance. (With Lantern Slides.)
- X.—The qualifications and Methods for Higher Occult Development. (With Lantern Slides.)

AN OPPORTUNITY FOR INDIVIDUAL PRACTICE  
 WILL BE GIVEN AT EACH CLASS  
 10 Lessons—10 Dollars

FEBRUARY, 1920

Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
 Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
 Hollywood, Cal.  
 A. P. WARRINGTON, A. F. KNUDSEN,  
 Vice-President Dean  
 Phone 57552

Sunday Afternoon, February 1, at 3 O'clock  
**FREDERICK FINCH STRONG, M.D.**  
 National Lecturer Theosophical Society  
 Topic: "THE ELECTRON AND THE  
 ULTIMATE ATOM"  
 Recent scientific confirmation of the Occult theory  
 of the nature of matter—with lantern slides.

MARCH, 1920

Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
 Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
 Hollywood, Cal.  
 A. P. WARRINGTON, A. F. KNUDSEN,  
 Vice-President Dean  
 Phone 57552

Sunday Afternoon, March 7, 3 O'clock  
**DR. FREDRICK FINCH STRONG**  
 National Lecturer Theosophical Society  
 Topic: "OCCULTISM AND MODERN  
 SCIENCE"  
 The need of Occult methods in the Scientific labor-  
 atory, and of Scientific methods in Occult investi-  
 gation.

Sunday Afternoon, April 4, at 3 O'clock  
**DR. FREDRICK FINCH STRONG**  
 National Lecturer Theosophical Society  
 Topic: "SOME STUDIES IN COLOR"  
 From the viewpoints of physics and of occultism.  
 With experiments.

1920

March 31, 1920

Our "Big Lecture" at Krotina  
 for B. P. Wadia

1920

Church of the People

HEADQUARTERS:  
 435 BLANCHARD BUILDING  
 233 SOUTH BROADWAY

LECTURE CLASSES

THURSDAY EVENINGS AT EIGHT O'CLOCK

DR. FREDERICK FINCH STRONG

"THE COMPOSITE MAN"

February 13—His Physical Equipment

February 20—His Emotional Equipment

February 27—His Mental Equipment

Series of "Towards Democracy" Lectures

To Be Given Under the Auspices of the

Theosophical "Towards Democracy" League

in the

KROTONA LECTURE HALL

2130 Vista Del Mar Ave.

Hollywood

MR. B. P. WADIA.....Friday, Feb. 27, 7:30 P. M.  
 Subject: "The Spiritual Basis of Democracy"

DR. FRED FINCH STRONG.....Friday, Mar. 5, 7:30 P. M.  
 Subject: "The Scientific Basis of Democracy"

7



# THREE FREE LECTURES

By

Dr. Fredrick Finch Strong

In

BLANCHARD HALL

233 South Broadway

March 3, 10 and 12, at 8 P. M.



## Wednesday, March 3rd—"Our Sleeping Selves"

The "Unconscious," "Subconscious" and "Super-conscious," from the viewpoints of Analytical Psychology, Physiology, Psychical Research and Occultism.

## Wednesday, March 10th—"Electricity and Life"

Modern Science says: "All is Electricity!"

Occultism says: "All is Life!"

This lecture will endeavor to show that these statements are merely expressions of one truth in different terms.

## Friday, March 12th—"The New American"

Is a new type of man developing in our midst? And if so, what are his characteristics, considered from the viewpoint of Ethnology, Anthropology and Occultism.

Come and Bring Your Friends

1920

## Dr. Strong's Third Class in "Etheric Vision"

Requested by those unable to enroll in the First and Second Classes

Auspices of

THE CHURCH OF THE PEOPLE

Beginning onday, February 23, at 4 o'clock P. M.

Room 200, Blanchard Building

Methods of Developing Psychic Faculty. (With Experiments.)

IX.—1. Other Forms of Etheric Matter.

2. Expansion of Etheric Sight Into More Extended Clairvoyance. (With Lantern Slides.)

X.—The Qualifications and Methods for Higher Occult Development. (With Lantern Slides.)

AN OPPORTUNITY FOR INDIVIDUAL PRACTICE

WILL BE GIVEN AT EACH CLASS

10 Lessons—10 Dollars

Wednesday, March 3rd—"Our Sleeping Selves"

MAY, 1920

## Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.

A. P. WARRINGTON, A. F. KNUDSEN,  
Vice-President Dean  
Phone 57552

Sunday Afternoon, May 2, at 3 o'clock

DR. FREDERICK FINCH STRONG

National Lecturer Theosophical Society

Topic: "That which Persists"

—A study in discrimination between the real and the unreal.

May 16—DR. F. FINCH STRONG

"Evidences of the Universal Life."

May 23—MRS. VIRGINIA BAVERSTOCK

"Some Practical Theosophy"

May 30—MR. A. P. MORAN

"Mind Development."

June 6—DR. F. FINCH STRONG

"Fundamentals of Theosophy."

9 Brief Address.....Dr. (Henry) Finch Strong

Theosophical National Lecturer and Dean  
Krotona Institute

"The Wider Vision"

Admission Fifty Cents

May 11 1920  
Metaphysicians May Festival

May 23, 1920

Crescent Bay Lodge

Santa Monica, Cal.

"The Finer Forces of Nature"

Apr. 4, 1920

Santa Monica C. B. Lodge

"Evidences of Life Universal."

May 12, 1920

Bo. Pasadena H. School

May 11, 1920

Christ Ch. Petaluma

"Human efficiency from an occult standpoint"

May 13, 1920

Church of People

Analysis of Sens. Perception

Physical & Etheric Senses



# THREE FREE LECTURES

By

Dr. Fredrick Finch Strong

In

BLANCHARD HALL

233 South Broadway

March 3, 10 and 12, at 8 P. M.



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Beginning onday, February 23, at 4 o'clock P. M.

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### OUTLINE OF LESSONS

- I.—1. Varieties of Clairvoyance.
2. Methods of Developing Clairvoyance.
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  - b. Unsafe Methods and Their Dangers.
3. Etheric Sight, Its Scope and Value. (With Lantern Slides.)
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- V.—Kilner's Experiments: the "Human Atmosphere" in Health and Disease. (With Lantern Slides and Demonstrations.)
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MAY, 1920

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Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.

A. P. WARRINGTON, A. F. KNUDSEN,  
Vice-President Dean

Phone 57552

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National Lecturer Theosophical Society

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Crescent Bay Lodge  
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"The Finer Forces of Nature"

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May 12. 1920  
Bo. Pasadena H. Schaefer

May 11. 1920  
Church of the People  
"Human efficiency from an  
scientific standpoint"

May 13. 1920  
Church of the People  
Analysis of Sens. Perception  
Physical & Etheric Senses



1st class begins Jan 15, 1920  
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## Church of the People

HEADQUARTERS:  
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## LECTURE CLASSES

THURSDAY EVENINGS AT EIGHT O'CLOCK

DR. FREDERICK FINCH STRONG

"THE COMPOSITE MAN"

February 13—His Physical Equipment

February 20—His Emotional Equipment

February 27—His Mental Equipment

FEBRUARY, 1920

## Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
 Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
 Hollywood, Cal.  
 A. P. WARRINGTON, A. F. KNUDSEN,  
 Vice-President Dean  
 Phone 57552

Sunday Afternoon, February 1, at 3 O'clock  
**FREDERICK FINCH STRONG, M.D.**  
 National Lecturer Theosophical Society  
 Topic: "THE ELECTRON AND THE  
 ULTIMATE ATOM"  
 Recent scientific confirmation of the Occult theory  
 of the nature of matter — with lantern slides.

MARCH, 1920

## Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
 Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
 Hollywood, Cal.  
 A. P. WARRINGTON, A. F. KNUDSEN,  
 Vice-President Dean  
 Phone 57552

Sunday Afternoon, March 7, 3 O'clock  
**DR. FREDRICK FINCH STRONG**  
 National Lecturer Theosophical Society  
 Topic: "OCCULTISM AND MODERN  
 SCIENCE"  
 The need of Occult methods in the Scientific labor-  
 atory, and of Scientific methods in Occult investi-  
 gation.

Sunday Afternoon, April 4, at 3 O'clock  
**DR. FREDRICK FINCH STRONG**  
 National Lecturer Theosophical Society  
 Topic: "SOME STUDIES IN COLOR"  
 From the viewpoints of physics and of occultism.  
 With experiments.

1920

March 31, 1920

Our "Big Lecture" at Krotona  
 for B. P. Wadia

1920

## Series of "Towards Democracy" Lectures

To Be Given Under the Auspices of the

Theosophical "Towards Democracy" League

in the

KROTONA LECTURE HALL

2130 Vista Del Mar Ave.

Hollywood

MR. B. P. WADIA.....Friday, Feb. 27, 7:30 P. M.  
 Subject: "The Spiritual Basis of Democracy"

DR. FRED FINCH STRONG.....Friday, Mar. 5, 7:30 P. M.  
 Subject: "The Scientific Basis of Democracy"

Wednesday, March 3rd—"Our Sleeping Selves"

The "Unconscious," "Subconscious" and "Super-  
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 Psychology, Physiology, Psychical Research  
 and Occultism.

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 Occultism says: "All is Life!"  
 This lecture will endeavor to show that these  
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 in different terms.

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Is a new type of man developing in our midst?  
 And if so, what are his characteristics, consid-  
 ered from the viewpoint of Ethnology, An-  
 thropology and Occultism.

Come and Bring Your Friends



May 16, 1920

P. A. Lodge.

May 20, 1920

Church of People

"Discrimination, attention  
and fixations"

May 21, 1920

Blanchard Hall Lecture

"Synthetic Art"

Showing how harmony is  
from sound & color and be  
blended in the art of the future

May 23, 1920

Church of People

"Concentration and its  
development"

June 3, 1920

Church of People

"Color Sense - Physical  
astral & ethereal"

JUNE, 1920

## Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.  
A. P. WARRINGTON, A. F. KNUDSEN,  
Vice-President Dean  
Phone 57552

Free Lectures Every Sunday Afternoon  
at 3 o'Clock

June 6—FREDERICK FINCH STRONG, M.D.  
National Lecturer Theosophical Society.  
Topic: "The Unconscious; the Sub-  
conscious, and the Superconscious."  
A Search for the Real Man.

June 6, 1920 - 8 P. M. P. A. Lodge

June 10, 1920

Church of People

"Visualization & Extension of  
mental pictures - telepathy"

June 17, 1920

Church of People

"Control of our Bodies - Physical  
Ethical, Emotional  
Mental"

JULY, 1920

## Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.  
A. P. WARRINGTON, A. F. KNUDSEN,  
Vice-President Dean  
Phone 57552

Free Lecture Every Sunday Afternoon  
at 3 o'Clock

July 4—FREDERICK FINCH STRONG, M.D.  
National Lecturer Theosophical Society.  
Topic: "Psychical Research as In-  
terpreted by Theosophy."

July 27, 1920

Santa Monica Lodge  
Class.

"Permanent Atom"

AUGUST, 1920

## Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President

THE TEMPLE

3:00 P. M. 2130 North Vista Del Mar Ave.,  
Hollywood, Cal.  
A. P. WARRINGTON, A. F. KNUDSEN,  
Vice-President Dean  
Phone 57552

Free Lecture Every Sunday Afternoon  
at 3 o'Clock

Aug. 1—FREDERICK FINCH STRONG, M.D.  
National Lecturer Theosophical Society.  
Topic: "The Human Body as a Source  
of Radiant Energy."  
—recent scientific discoveries regarding vibrations  
from living tissues.

Sept 19, 1920

Santa Monica P. A. Lodge  
"Human magnetism &  
its healing qualities"

1920

## SUMMER SUNDAY SERVICES

Blanchard Hall, 233 So. Broadway, at Eleven o'clock

### DR. FREDERICK FINCH STRONG

Sunday, August 8: "The Angel of the Shadow"

Sunday, August 15: "That Which Heals"

Musical Program by Paula Dohrmann, Soprano; Modesta Mortensen, Violinist;  
Ruth Snow, Pianist.

## CHURCH OF THE PEOPLE

Blanchard Hall, 233 S. Broadway, at Eleven o'clock

Sept. 5—Dr. Frederick Finch Strong will speak on "The Limitations  
of Science and How They May Be Transcended"

SEPTEMBER, 1920

## Sunday Public Lectures



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President  
Mr. A. P. Warrington, Vice-President

2130 North Vista del Mar Ave., Hollywood  
Phone 57552

Free Lecture Every Sunday Afternoon  
at 3 o'Clock

Sept. 5—DR. FREDERICK FINCH STRONG, M. D.  
National Lecturer Theosophical Society.  
Subject: "Human Magnetism."

OCTOBER, 1920

## Sunday Public Lectures



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President  
Mr. A. P. Warrington, Vice-President

2130 North Vista del Mar Ave., Hollywood  
Phone 57552

Free Lecture Every Sunday Afternoon  
at 3 o'Clock

Oct. 17—FREDERICK FINCH STRONG, M. D.  
National Lecturer Theosophical Society.  
Subject: "Health and Disease and  
Their Relation to Human Evolu-  
tion."



DR. FREDERICK FINCH STRONG  
SIX LECTURES

on "Truths Stranger Than Any Fiction"

Beginning Thursday Evening,

October 14th, 1920

at 8 o'clock

Course \$5.00 - Single \$1.00

Oct 14, 1920

Church of People

1. "Ethic Force (as used for commercial uses)"

Oct 21, 1920

2. "Philosophy - The Lertium Organism -"

Oct 28, 1920

3. "Physiology - miracle of the ductless glands"

Nov 4, 1920

4. "Chemistry - rose salme to medicine made of -"

Nov 11, 1920

5. "Psychics - scientific proof that the dead can return in physical form"

Nov 18, 1920

6. "Biology - how to overcome in plant & animal"

NOVEMBER, 1920

## Sunday Public Lectures



KROTONA INSTITUTE of THEOSOPHY

Mrs. Annie Besant, President

Mr. A. P. Warrington, Vice-President

2130 North Vista del Mar Ave., Hollywood

Phone 57552

Free Lecture Every Sunday Afternoon

Commences Promptly at 3 o'clock

Nov. 7—FREDERICK FINCH STRONG, M. D.

National Lecturer, Theosophical Society.

Subject: "Opportunities for the Children of the Future."

Nov 14, 1920

San Monica Lecture

"Lifting of the Veil"

Nov. 16, 1920

San Monica - Assent B. Lodge

"Mechanism of Consciousness in Building of the Nervous System"

Nov. 21, 1920

Los Angeles I. S. Lecture

"Invisible influences & how they affect us"

Nov 28, 1920

Pasadena I. S. Lodge.

"Health & Disease & Their relation to the Spiritual evolution of humanity"

Dec 5, 1920

Krotona I. S. Lecture

"Significance of modern Psychism"

### Public Lectures on Theosophy

Under the auspices of the  
Hollywood Theosophical Lodges  
of the

AMERICAN SECTION, THEOSOPHICAL  
SOCIETY

TOBERMAN HALL

6412 HOLLYWOOD BOULEVARD

(a few doors west of Cahuenga Ave.)

SUNDAY, 8 P. M.

Dec. 12th.

OCCULT SOLUTIONS OF PRESENT  
DAY PROBLEMS

By Frederick Finch Strong, M.D.

### Inertia in Life

DR. FREDERICK FINCH STRONG

Krotona Institute of Theosophy

There is a basic quality in matter which resists change. Science calls it "inertia"—or the tendency of a body to remain in the condition in which it is. It is the dominant factor in evolution, for only by having something to overcome can the will and power to achieve be developed. When this resistance manifests outside of us we speak of it as "trouble" or "difficulties." When it manifests in our bodies we call it "laziness," "sluggishness" or "ill-health."

The new race now being formed in our midst will be characterized by Balance or Poise. Fully sensing, yet unaffected by impacts from without, acting, feeling and thinking only as he will to do so, the life of one of that race will be one of harmony and self-control.

### Advises People To Stay Young

During the assembly hour at the High School Wednesday, Dr. Frederick Finch Strong of Hollywood gave a very interesting address to the students. Speaking of the advantages enjoyed by the present generation he said that those with the best education meet with the greatest success. He advised that everyone stay young and try to learn something new all the time.

So. Pasadena  
High School

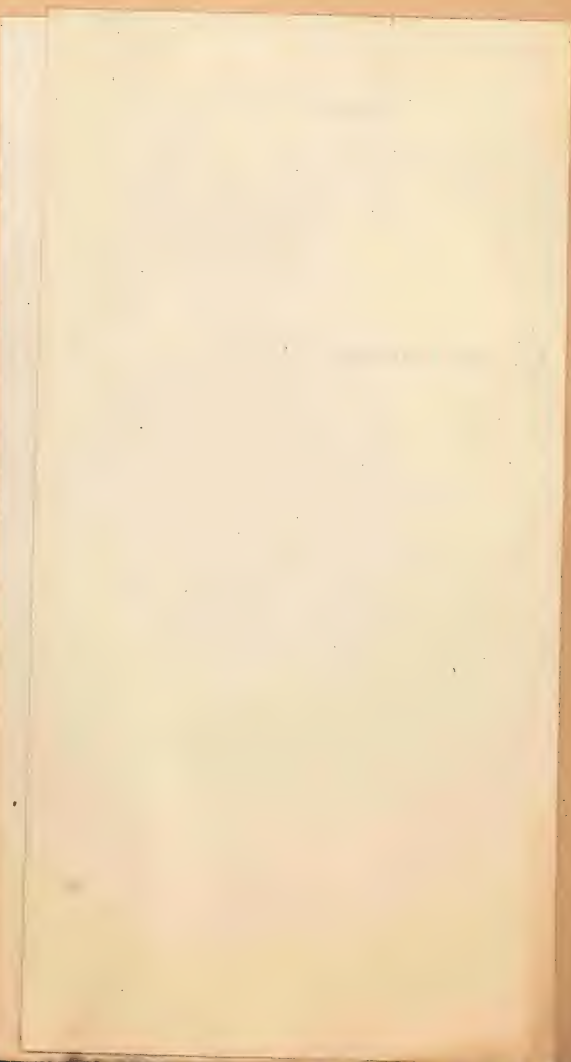
May 12, 1920



*Thursday Oct 8 P.M.*

PRESENT DAY UNREST IN THE LIGHT OF OCCULTISM

- Oct 6. The revolution in scientific thought. Lodge versus Einstein.
- Oct 13. Occult interpretations of some strange tendencies in Modern Art.
- Oct 20 The Dawning of a new Consciousness:-the reason for our present lack of Poise.
- Oct 27 Occult Forces at work in the Solution of modern Social and Economic Problems.



**CHURCH OF THE PEOPLE**  
BLANCHARD HALL

DR. FREDERICK FINCH STRONG  
SIX LECTURES

on "Truths Stranger Than Any Fiction"  
PHYSICS

First lecture "Etheric Force"—Recent discoveries which may realize the dreams of the Alchemists and release limitless force for commercial use.

Thursday Evening, October 14th  
at 8 o'clock

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HOUSE PHONE 304-R

FREDERICK FINCH STRONG, M. D.  
SPECIALIST

PRACTICE LIMITED TO THE TREATMENT OF NERVOUS AND CHRONIC DISEASES  
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RESIDENCE 827 MOFFETT AVE.

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1920

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First lecture "Et  
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# 1921 Announcement of

Lectures and Classes

— BY —

**Dr. Frederick Finch Strong**

Winter Season 1921

## Lectures Under Auspices of Church of the People

432 Blanchard Building; Thursdays at 8:00 P. M. thruout the winter. Admission twenty-five cents.

### GENERAL SUBJECT—

THE ONE LIFE OF THE UNIVERSE AND ITS MANIFESTATION IN FORM.

- Jan. 6. Physical and superphysical methods of study.
- Jan. 13. Origin and nature of Matter.
- Jan. 20. Origin and unfoldment of Life.
- Jan. 27. Evidences of life in the Mineral.
- Feb. 3. The life of the Cell.
- Feb. 10. The life of the Flowers.
- Feb. 17. Evolution of consciousness and form in Animals.
- Feb. 24. Pre-historic Man, from scientific and occult viewpoints.
- Mar. 3. Human Embryology considered scientifically.
- Mar. 10. The Occult Side of Human Embryology.
- Mar. 17. The development of Man's Physical Body.
- Mar. 24. The Human Etheric Double and its development.
- Mar. 31. The development of the Emotional Body.
- Apr. 7. The development of the Mental Mechanism.
- Apr. 14. The development of Man's Bodies considered in relation to Child Education.
- Apr. 21. The Human Aura.
- Apr. 28. Further Studies of the Human Aura.

### RESIDENCE

1827 Gower St., Hollywood; Evenings at 8.

## CLASS IN THE STUDY OF ETHERIC PHENOMENA AND THE DEVELOPMENT OF ETHERIC VISION.

Ten Classes, Wednesdays at 8 P. M. Fee \$10.00.

(Application for registrations should be mailed at once to Dr. Strong as the class will be limited in number.)

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- Apr. 13. Studies of the magnetic Auras and etheric emanations of plants and animals (with experiments).
- Apr. 20. Concentration, control of the bodies and preparation for developing the higher sense faculties.

## Emerson New Thought Church

940 South Figueroa Street (Friday Morning Club); Services Sunday Mornings at eleven o'clock.

### LECTURE TOPICS—

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- Feb. 27. Some thoughts on the Education of Children.
- Mar. 6. Things that are Worth While.

### PUBLIC LECTURES AT KROTONA INSTITUTE

2130 Vista Del Mar Ave., Hollywood; First Sunday in each month at 3:00 P. M.

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- Feb. 6. Photography of the Invisible.
- Mar. 9. The Mechanism of Memory.
- Apr. 3. The Lost Atlantis.

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- Apr. 18. Suggestions and warnings for the untrained investigator. The Ouija Board and Automatic Writing.
- Apr. 25. Scientific and Occult explanations of modern psychic phenomena. The influence of psychism on the world.

## Public Lecture Classes U of Crescent Bay Lodge

601 Santa Monica Boulevard, Santa Monica; at 8:00. Tickets for course.

### GENERAL SUBJECT—

"MAN'S BODIES, THEIR CARE AND DEVELOPMENT"

- Feb. 17. The Physical Body.
- Feb. 21. The Etheric Double.
- Feb. 28. The Emotional Body.
- Mar. 7. The Mental Body.

Lodge Talks at Krotona Lodge, T. S.; 7:00

- Feb. 1. Practical Theosophy applied.
- Feb. 8. Practical Theosophy applied.
- Mar. 15. Practical Theosophy applied.
- Mar. 22. Practical Theosophy applied.

PUBLIC LECTURES (Sunday evenings) Los Angeles Lodge, T. S.; 405 Broadway

- Feb. 20. Scientific Proofs of Reincarnation.
- Mar. 20. The Divine Unrest, or why

Crescent Bay Lodge, Santa Monica

- Feb. 27. The Dream Life and The

Hollywood Lodges, T. S. Toberman  
Jan. 16. News from the Beyond, or the

## THE PEOPLE

ASSOCIATE MINISTER, MAUD FLETCHER

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will give a series of popular lectures, illustrated with experiments and lantern slides, Thursday evenings at 8:00 thruout the winter.

"THE ONE LIFE OF THE UNIVERSE AND ITS MANIFESTATIONS IN FORM"—studied in relation to the points of both Physical and Occult.

Subjects for January

January 6: PHYSICAL AND SUPERPHYSICAL METHODS OF STUDY.

January 13: THE ORIGIN AND NATURE OF MATTER.

January 29: THE ORIGIN AND EVOLUTION OF LIFE.

January 27: EVIDENCES OF LIFE IN THE MINERAL.



## Emerson New Thought Church

940 South Figueroa Street (Friday Morning Club); Services  
Sunday Mornings at eleven o'clock.

### LECTURE TOPICS—

- Jan. 16. The Great Unifier.
- Jan. 23. Caste and Class, a study in the Aristocracy of Spirit.
- Jan. 30. The New Renaissance: Art and Music as factors in Spiritual Growth.
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- Feb. 20. The Divine Pattern; a study of Archetypes.
- Feb. 27. Some thoughts on the Education of Children.
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- Mar. 9. The Mechanism of Memory.
- Apr. 3. The Lost Atlantis.

## Private Lessons at Dr. Strong's Residence

1827 Gower St., Hollywood; Evenings at 8.

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Ten Classes, Wednesdays at 8 P. M. Fee \$10.00.

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2130 Vista Del Mar Ave., Hollywood; First Sunday in each  
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- Jan. 2. Scientific Proofs of Reincarnation.
- Feb. 6. Photography of the Invisible.
- Mar. 9. The Mechanism of Memory.
- Apr. 3. The Lost Atlantis.

## Lecture Class

1921

A training course for

Six lectures comprising  
studies by psychical research  
value as evidence of

At Dr. Strong's residence  
days, 8 P. M. Fee \$10.00.

#### OUTLINE—

- Mar. 21. The probable cause of death.
- Mar. 28. A review of the search.
- Apr. 4. Physical technique of Truth-seeking.
- Apr. 11. Supernatural materialization.
- Apr. 18. Suggestions for investigation.
- Apr. 25. Science of the psychic world.



## Emerson New Thought Church

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## Public Lecture Classes Under Auspices of Crescent Bay Lodge, T. S.

601 Santa Monica Boulevard, Santa Monica; Monday evenings at 8:00. Tickets for course, \$1.00.

### GENERAL SUBJECT—

"MAN'S BODIES, THEIR CARE AND DEVELOPMENT."

- Feb. 17. The Physical Body.
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- Feb. 28. The Emotional Body.
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Lodge Talks at Krotona Lodge, T. S.; 7:00 P. M. Public Invited.

- Feb. 1. Practical Theosophy applied to the Physical Plane.
- Feb. 8. Practical Theosophy applied to the Etheric Levels.
- Mar. 15. Practical Theosophy applied through the Emotions.
- Mar. 22. Practical Theosophy applied to the realm of Mind.

**PUBLIC LECTURES** (Sunday evenings at 8:00)  
Los Angeles Lodge, T. S.; 405 Blanchard Building.

- Feb. 20. Scientific Proofs of Reincarnation.
- Mar. 20. The Divine Unrest, or why we are never satisfied.

Crescent Bay Lodge, Santa Monica.  
Feb. 27. The Dream Life and The Real Life.

Hollywood Lodges, T. S. Toberman Hall, Hollywood.  
Jan. 16. News from the Beyond, or the Thinning of the veil.

## Private Classes; Auspices Church of the People

Course of ten lectures, Fridays at 8:00 P. M. Fee, \$10.00.  
Apply for registration to Mrs. Maude Galigher,  
432 Blanchard Bldg.

### THE AWAKENING AND DEVELOPMENT OF THE HIGHER MIND.

A course for those who wish to work toward the unfolding of Abstract Thought and Intuition.

(Ouspensky's "TERTIUM ORGANUM" will be used as a general reference work.)

### OUTLINE—

- Mar. 4. The nature of human knowledge; relation and laws of subject and object.
- Mar. 11. Sense perception, inductive logic and modern science.
- Mar. 18. Systems of speculative philosophy and their use in awakening the processes of abstract thought.
- Mar. 25. Space and time in modern physics; the Einstein theory of Relativity and its significance.
- Apr. 1. The nature and limitations of three-dimensional consciousness.
- Apr. 8. The theory of the fourth dimension and how it may reconcile many seeming contradictions in our present methods of thought.
- Apr. 15. What Occultists have said about the fourth dimension.
- Apr. 22. The Creative Force on all planes: discussion of Ouspensky's chapter on "Occultism and Love."
- Apr. 29. How shall the limited understand the limitless? The finite nature of the human mind and its limitations.
- May 6. The unfoldment of the Intuition. "Cosmic Consciousness."

## Residence

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Winter Season 1921

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## OUTLINE—

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- Mar. 28. A review of the field of modern Psychical Research.
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- Apr. 11. Supernormal pictures, slate writing, apports and

1921

## Public Lecture Classes Under Auspices of Crescent Bay Lodge, T. S.

601 Santa Monica Boulevard, Santa Monica; Monday evenings at 8:00. Tickets for course, \$1.00.

## GENERAL SUBJECT—

"MAN'S BODIES, THEIR CARE AND DEVELOPMENT."

- Feb. 17. The Physical Body.
- Feb. 21. The Etheric Double.
- Feb. 28. The Emotional Body.
- Mar. 7. The Mental Body.

Lodge Talks at Krotona Lodge, T. S.; 7:00 P. M. Public Invited.

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Crescent Bay Lodge, Santa Monica.

Feb. 27. The Dream Life and The Real Life.

Hollywood Lodges, T. S. Toberman Hall, Hollywood.  
Jan. 16. News from the Beyond, or the Thinning of the veil.

1921

## Private Classes; Auspices Church of the People

Course of ten lectures, Fridays at 8:00 P. M. Fee, \$10.00. Apply for registration to Mrs. Maude Galigher, 432 Blanchard Bldg.

THE AWAKENING AND DEVELOPMENT OF THE HIGHER MIND.

A course for those who wish to work toward the unfolding of Abstract Thought and Intuition.

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## SPECIAL

COURSE OF FOUR LECTURES by

DR. FREDERICK FINCH STRONG

MAN'S BODIES

How to Care for and Develop Them

MON., FEB. 14th—"The Physical Body."

MON., FEB. 21st—"The Etheric Body." (The Vital Vehicle).

MON., FEB. 28th—"The Apparatus of Emotions and Desire." (The Astral Body).

MON., MAR. 7th—"The Mental Mechanism."

1921

## THE PEOPLE

ASSOCIATE MINISTER, MAUD FLETCHER GALIGHER

, 233 South Broadway, Los Angeles

Telephone 10082

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"THE ONE LIFE OF THE UNIVERSE AND ITS MANIFESTATIONS IN FORM"—studied from the viewpoints of both Physical and Occult Science.

Subjects for January:

January 6: PHYSICAL AND SUPER-PHYSICAL METHODS OF STUDY.



Lectures and Classes  
— BY —  
**Dr. Frederick Finch Strong**  
Winter Season 1921

Lectures Under Auspices of Church of the People  
432 Blanchard Building; Thursdays at 8:00 P. M. thruout the winter. Admission twenty-five cents.

GENERAL SUBJECT—

THE ONE LIFE OF THE UNIVERSE AND ITS MANIFESTATION IN FORM.

- Jan. 6. Physical and superphysical methods of study.
- Jan. 13. Origin and nature of Matter.
- Jan. 20. Origin and unfoldment of Life.
- Jan. 27. Evidences of life in the Mineral.
- Feb. 3. The life of the Cell.
- Feb. 10. The life of the Flowers.
- Feb. 17. Evolution of consciousness and form in Animals.
- Feb. 24. Pre-historic Man, from scientific and occult viewpoints.
- Mar. 3. Human Embryology considered scientifically.
- Mar. 10. The Occult Side of Human Embryology.
- Mar. 17. The development of Man's Physical Body.
- Mar. 24. The Human Etheric Double and its development.
- Mar. 31. The development of the Emotional Body.
- Apr. 7. The development of the Mental Mechanism.
- Apr. 14. The development of Man's Bodies considered in relation to Child Education.
- Apr. 21. The Human Aura.
- Apr. 28. Further Studies of the Human Aura.

Residence

1827 Gower St., Hollywood; Evenings at 8.

CLASS IN THE STUDY OF ETHERIC PHENOMENA AND THE DEVELOPMENT OF ETHERIC VISION.

Ten Classes, Wednesdays at 8 P. M. Fee \$10.00.

(Application for registrations should be mailed at once to Dr. Strong as the class will be limited in number.)

OUTLINE—

- Feb. 16. Development of faculties latent in the Etheric Body; Analysis of sense perception (with experiments).
- Feb. 23. The Color Sense and its education (with experiments and lantern slides).
- Mar. 2. The Etheric Aura of the Human Body (with demonstrations and lantern slides).
- Mar. 9. "Physiological Magnetism"; Polarity and its significance (with lantern slides and experiments).
- Mar. 16. "Magnetic Healing," its scope and technique (with experiments and demonstrations).
- Mar. 23. The study of the Human Aura as an aid to Diagnosis (with lantern slides and experiments).
- Mar. 30. Psychometry or the Etheric Tactile sense (with experiments and demonstrations).
- Apr. 6. Telepathy, Visualization and the extension of mental pictures (with experiments).
- Apr. 13. Studies of the magnetic Auras and etheric emanations of plants and animals (with experiments).
- Apr. 20. Concentration, control of the bodies and preparation for developing the higher sense faculties.

Church

940 South Figueroa Street (Friday Morning Club); Services Sunday Mornings at eleven o'clock.

LECTURE TOPICS—

- Jan. 16. The Great Unifier.
- Jan. 23. Caste and Class, a study in the Aristocracy of Spirit.
- Jan. 30. The New Renaissance: Art and Music as factors in Spiritual Growth.
- Feb. 6. Contrasts; some aspects of the theory of Relativity.
- Feb. 13. The Other Man's Viewpoint; Adaptability as a quality in Spiritual Unfoldment.
- Feb. 20. The Divine Pattern; a study of Archetypes.
- Feb. 27. Some thoughts on the Education of Children.
- Mar. 6. Things that are Worth While.

PUBLIC LECTURES AT KROTONA INSTITUTE

2130 Vista Del Mar Ave., Hollywood; First Sunday in each month at 3:00 P. M.

- Jan. 2. Scientific Proofs of Reincarnation.
- Feb. 6. Photography of the Invisible.
- Mar. 9. The Mechanism of Memory.
- Apr. 3. The Lost Atlantis.

Lecture Classes on Modern Psychic  
1921 Phenomena

A training course for those who wish to do personal work in psychical research.

Six lectures comprising a resume of the results of investigations by psychical researchers, spiritualists and occultists; their value as evidence of human survival after death, and how to study and analyse them.

At Dr. Strong's residence, 1827 Gower St., Hollywood; Mondays, 8 P. M. Fee \$5.00. Mail applications to Dr. Strong.

Class number limited.

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- Apr. 11. Supernormal pictures, slate writing, apports and materialization.
- Apr. 18. Suggestions and warnings for the untrained investigator. The Ouija Board and Automatic Writing.
- Apr. 25. Scientific and Occult explanations of modern psychic phenomena. The influence of psychism on the world.

of Crescent Bay Lodge, T. S.

601 Santa Monica Boulevard, Santa Monica; Monday evenings at 8:00. Tickets for course, \$1.00.

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- January 6: PHYSICAL AND SUPER-PHYSICAL METHODS OF STUDY.
- January 13: THE ORIGIN AND NATURE OF MATTER.
- January 29: THE ORIGIN AND EVOLUTION OF LIFE.
- January 27: EVIDENCES OF LIFE IN THE MINERAL.



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MON., MAR. 7th—"The Mental Mechanism."

Lectures at 8 p. m.

601 Santa Monica Blvd.

\$1.50 for Course; Single Admission 50c



PRESENT DAY UNREST IN THE LIGHT OF OCCULTISM

- Oct 6. The revolution in scientific thought. Lodge versus Einstein.
- Oct 13. Occult interpretations of some strange tendencies in Modern Art.
- Oct 20 The Dawning of a new Consciousness:-the reason for our present lack of Poise.
- Oct 27 Occult Forces at work in the Solution of modern Social and Economic Problems.

CHURCH OF THE PEOPLE  
BLANCHARD HALL

DR. FREDERICK FINCH STRONG

SIX LECTURES

on "Truths Stranger Than Any Fiction"

PHYSICS



Bruce Gordon King

74917

1621 W Adams

From  
Bruce Gordon King  
1621 W Adams  
Chicago, Ill.  
To  
Mr. J. H. ...  
Chicago, Ill.  
Enclosed find ...  
Very truly yours,  
Bruce Gordon King

From  
Mr. J. H. ...  
Chicago, Ill.  
To  
Bruce Gordon King  
1621 W Adams  
Chicago, Ill.  
Very truly yours,  
J. H. ...

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BLANCHARD HALL

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SIX LECTURES

on "Truths Stranger Than Any Fiction"

PHYSICS



FEBRUARY, 1921

Sunday



KRC

M

2130 North Vista  
P

Free Lecture Dear Fellow

Feb. 6—FREDERICK  
National  
Subject:  
visible."

PF

Thursd Feb. 1st.  
8 Subject:

HENRY HO

Leila Feb. 8th.  
Gu Subject:

1—Address of W

2—Brief Address.

Edw. Feb. 15th  
Author, Le Lesson V

3—Brief Address.

"Th Feb. 22nd

4—Whistling Qu

Madge Becker, M Lesson V

No Mar. 1st

5—Brief Address:

Lecturer a

"1921

6—Brief Address:

"The Mys

Lesson I

7—Violin Solo....

8—Brief Address:

Official Inter

The

"The

9—Brief Address:

Editor Master

"Pr

Subject:

10—Brief Address:

"The

11—Whistling Quartet.....

Choral Hall, Philharmonic Auditori

6

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illustrated with experiments and  
Thursday evenings at 8:00 thru

"THE ONE LIFE OF THE UNIVERSE  
FECTIONS IN FORM"—studied  
points of both Physical and O

Subjects for February

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February 17: THE EVOLUTION OF C  
IN THE ANIMAL.

February 24: THE OCCULT HISTORY  
TORIC MAN.

General Admission 25 cents.

BE good, DO good, MAKE good!

January 16th, 1921

BEAUTY is God's Trademark.

January 23rd, 1921

CONSTRUCTION will expedite RE-CONSTRUCTION.

January 30th, 1921

Serving Man is Seeking God.

February 6th, 1921

### ORDER OF SERVICE

The musical number preceding service is to give opportunity  
for silent worship. All are asked to participate.

Prelude—Consolation No. 2.....Listz  
Abbie Norton Jamison

Responses of Aspiration:

O, God which art the source of all life;  
We extend our thoughts in consecration unto Thee.  
O, Angel of Love;  
We invoke Thy presence to guide and direct us.  
O, Angel of Truth;  
May Thy blessings fall upon us.  
O, Angel of Peace;  
Cleanse our hearts clean from all impurities.  
O, Angel of Charity;  
Give unto us Thy penetration,  
That we may see good in all.  
May angels draw near to guide and direct us.  
That we may walk in closer touch with Heaven's ways.  
Amen.

Responsive Devotional Service

(See opposite page)

Prayer

Hymn—Italian Hymn .....Congregation

### WORDS OF HYMN

Come, Thou Almighty King,  
Help us Thy name to sing;  
Help us to praise!  
Father all glorious,  
O'er all victorious,  
Come and reign over us,  
Ancient of Days.

Come and Thy people bless,  
And give Thy word success;  
Spirit of holiness,  
On us descend.

Come, Holy Comforter,  
Thy sacred witness bear,  
In this glad hour;  
Thou who almighty art,  
Now rule in every heart,  
And ne'er from us depart,  
Spirit of power.

Come Thou Incarnate Word,  
Gird on Thy mighty sword,  
Our prayer attend;

Announcements

Offertory

Solo—My Task .....Ashford  
Miss Jeanette Colwell

Reading of the Lesson

Topic—CONTRASTS: Some Popular and Practical Phases in  
the Theory of Relativity.

Dr. Frederick Finch Strong

Benediction

You are most cordially invited to be with us each Sunday and your friends.

You are Victory Organized. Manifest it!



FEBRUARY, 1921

## Sunday Public Lectures



KROTONA INSTITUTE of THEOSOPHY

Mrs. Annie Besant, President

Mr. A. P. Warrington, Vice-President

2130 North Vista del Mar Ave., Hollywood  
Phone 57552

Free Lecture Every Sunday Afternoon  
at 3 o'clock

Feb. 6—FREDERICK FINCH STRONG, M. D.  
National Lecturer Theosophical Society.  
Subject: "Photography of the In-  
visible."

### PROGRAMME

Thursday, January 13th 1921

8 to 10 P. M.

HENRY HOTCHNER, Chairman

Leila Simon Castberg

Guest of Honor

- 1—Address of Welcome.....Henry Hotchner
- 2—Brief Address.....  
Edward B. Warman, A.M., LL.D.  
Author, Lecturer and Psychologist  
"Demonstration vs Theory"
- 3—Brief Address.....Carl Bronson  
"The New Wireless"
- 4—Whistling Quartet.....Selected  
Madge Becker, Mildred Galbreath, Isabel Palm,  
Norma Beauchamp
- 5—Brief Address.....Virginia Osgood  
Lecturer and Teacher of Occultism  
"1921 or the Number 13"
- 6—Brief Address.....Leila Simon Castberg  
"The Mystic Law of Tranquility"
- 7—Violin Solo.....Bernardine Whalen  
Selected
- 8—Brief Address.....Marie Russac-Hotchner  
Official International Lecturer for the  
Theosophical Society  
"The Virtue of Intensity"
- 9—Brief Address.....Annie Rix Militz  
Editor Master Mind Magazine and Founder  
Homes of Truth  
"Prayer and Prayer"
- 10—Brief Address.....Dr. Frederic Finch Strong  
"The Signs of the Times"
- 11—Whistling Quartet.....Selected  
Choral Hall, Philharmonic Auditorium—Collection

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IN THE ANIMAL.

February 24: THE OCCULT HISTORY OF PREHIS-  
TORIC MAN.

General Admission 25 cents.



# Sunday I



2180 North Vista  
P

Krotana Lodge, Hollywood, Cal.,  
January 28th, 1921.

Free Lecture Dear Fellow Member:

Feb. 6—FREDERICK  
National  
Subject  
visible."

Krotana Lodge needs active egos!  
"Are you there?"  
Tuesday evenings at seven o'clock.  
Forum for discussion at every session.

## PROGRAM FOR FEBRUARY AND MARCH:

PF  
Thursd Feb. 1st. - Dr. Frederick Finch Strong.  
8 Subject: "Practical Theosophy as Applied to the  
Physical Body."

HENRY HC

Leila Feb. 8th. - Dr. Frederick Finch Strong.  
Gu Subject: "Practical Theosophy as Applied to the  
Ethereic Body."

1—Address of W  
2—Brief Address.

Edw Feb. 15th. - Continuation of Study of "Isis Unveiled".  
Author, Le Lesson VII - Miss Minna Kuntz - Leader.  
"Demon"

3—Brief Address.

"Th Feb. 22nd -Continuation of Study of "Isis Unveiled".  
Qu Lesson VIII- Miss Minna Kuntz - Leader.

4—Whistling Qu  
Madge Becker, M

No Mar. 1st. -Stereopticon Lecture on India Through the Ages  
by Mr. Hugh R. Gillespie.

5—Brief Address:  
Lecturer a:  
"1921"

6—Brief Address: Mar. 8th - Continuation of Study of "Isis Unveiled".  
"The Mys Lesson IX.

7—Violin Solo.

19  
8—Brief Address: Mar. 15th - Dr. Frederick Finch Strong.  
Official Inte Subject: "Practical Theosophy as Applied to the  
The Astral Body."

9—Brief Address: Mar. 22nd. - Dr. Frederick Finch Strong.  
Editor Master Subject: "Practical Theosophy as Applied to the  
"Pr Mental Body."

10—Brief Addre  
"The"

11—Whistling Quartet.....Selected  
Choral Hall, Philharmonic Auditorium—Collection  
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February 24: THE OCCULT HISTORY OF PREHIS-  
TORIC MAN.

General Admission 25 cents.

## First Emer

N. N. T.

MARGARET C. LA

We seek clearer vision; give  
We would have the under  
of Thy Wisdom.  
We would know Truth; let  
Give us the ear that hears  
and the gift of hands  
And of Thy Love, to keep,  
—give us the full and  
SO BE IT. SO IS IT  
Mary Ellen Ma

## SUNDAY SERVICES

Lyceum - - - - - 9:45 A. M.  
Lecture and Junior Church - 11 A. M.  
FRIDAY MORNING CLUB  
940 So. Figueroa St.

940 So. Figueroa St.



BE good, DO good, MAKE good!

FEBRUARY, 1921

## Sunday I



2130 North Vista  
P

Free Lecture Dear Fellow

Feb. 6—FREDERICK  
National  
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Madge Becker, M  
No

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Lecturer a  
"1921"

6—Brief Address. Mar. 8th  
"The Mys Lesson IX

7—Violin Solo....

8—Brief Address. Mar. 15th  
Official Inter Subject:  
The  
"The"

9—Brief Address. Mar. 22nd  
Editor Master Subject:  
"Pr"

10—Brief Address. "The"

11—Whistling Quartet.....  
Choral Hall, Philharmonic Auditorium—Collection  
6

January 16th, 1921

### ORDER OF SERVICE

The musical number preceding service is to give opportunity for silent worship. All are asked to participate.

Prelude—Melody in G..... Hunter  
Abbie Norton Jamison

#### Responses of Aspiration:

O, God which art the source of all life;  
We extend our thoughts in consecration unto Thee.  
O, Angel of Love;  
We invoke Thy presence to guide and direct us.  
O, Angel of Truth;  
May Thy blessings fall upon us.  
O, Angel of Peace;  
Cleanse our hearts clean from all impurities.  
O, Angel of Charity;  
Give unto us Thy penetration,  
That we may see good in all.  
May angels draw near to guide and direct us,  
That we may walk in closer touch with Heaven's ways.  
Amen.

Responsive Devotional Service

(See opposite page)

Prayer

Announcements

Offertory

Solo—"The King of Love My Shepherd Is".....Gonoud  
Miss Jeanette Colwell

Reading of the Lesson

Topic—"The Great Unifier—The Christ Spirit in All Religions,  
Cults and Ethical Movements."

Dr. Frederick Finch Strong

Benediction

You are most cordially invited to be with  
us each Sunday and bring your friends.

LIFT and you LIVE.

## First En

N.

MARGARET

MY

Infinite Father, like t  
that for which I ask. I  
smile and Thy fragranc  
ment; and like the Rose,  
me for comfort or counse  
everywhere as toward the

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General Admission 25 cents.



FEBRUARY, 1921

Sunday I



KRC

2130 North Vista

Free Lecture

Dear Fellow

Feb. 6—FREDERICK

National

Subject

visible.

PF

Thursd Feb. 1st.

Subject:

HENRY H

Leila Feb. 8th.

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Choral Hall, Philharmonic Auditorium

6

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January 16th, 1921

BEAUTY is God's Trademark.

January 23rd, 1921

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Prelude—Song Without Words.....Cadman

Abbie Norton Jamison

Responses of Aspiration:

O, God which art the source of all life;

We extend our thoughts in consecration unto Thee.

O, Angel of Love;

We invoke Thy presence to guide and direct us.

O, Angel of Truth;

May Thy blessings fall upon us.

O, Angel of Peace;

Cleanse our hearts clean from all impurities.

O, Angel of Charity;

Give unto us Thy penetration,

That we may see good in all.

May angels draw near to guide and direct us,

That we may walk in closer touch with Heaven's ways.

Amen.

Responsive Devotional Service

(See opposite page)

Prayer

Hymn—Holy, Holy, Holy, Lord God Almighty—Congregation

Holy, Holy, Holy! Lord God Almighty!

Early in the morning our song shall rise to Thee;

Holy, Holy, Holy! Merciful and Mighty!

God in three Persons, Blessed Trinity.

Holy, Holy, Holy. all the saints adore Thee,

Casting down their golden crowns around the glassy sea;

Cherubim and Seraphim falling down before Thee,

Which wert and art, and ever more shall be.

Holy, Holy, Holy! Lord God Almighty!

All Thy works shall praise Thy name in earth and sky and sea;

Holy, Holy, Holy! Merciful and Mighty!

God in three Persons, Blessed Trinity.

Announcements

Offertory

Solo—April Rain.....Oley Speakes

Miss Jeanette Colwell

Reading of the Lesson

Topic—"Caste and Class—A Study in the Aristocracy of Spirit"

Dr. Frederick Finch Strong

Benediction

You are most cordially invited to be with us each Sunday and your friends.

KNOW thyself; REVEAL thy Source.

First Emerg

N. N. T.

MARGARET C. LA

DR. FREDERICK FINCH

FREED

When I have raised my ev

When I can see with inner

That all Thou are is here

Then I am free.

When I above all sin and

And though with thee is

And trustingly my hand wi

Then I am free.

When I can see thy will is

And joyfully resign my wil

And seek no love but Thing

Life will prove indeed,

That I am free.

SUNDAY SERVICES

Lyceum - - - - - 9:45 A. M.

Lecture and Junior Church - 11 A. M.

FRIDAY MORNING CLUB

940 So. Figueroa St.



FEBRUARY, 1921

# Sunday I



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2130 North Vista

I

Free Lecture Dear Fellow

Feb. 6—FREDERICK  
National  
Subject  
visible.

PF

Thursd Feb. 1st.  
8 Subject:

HENRY H

Leila Feb. 8th.  
Gu Subject:

1—Address of W

2—Brief Address.

.....Edw. Feb. 15th  
Author, Le Lesson VI

3—Brief Address.

"Th Feb. 22nd

4—Whistling Qu Lesson V  
Madge Becker, M

5—Brief Address.

Lecturer at  
"1921

6—Brief Address: Mar. 8th

"The Mys Lesson I

7—Violin Solo....

8—Brief Address: Mar. 15th

Official Inter Subject:

"The

9—Brief Address: Mar. 22nd

Editor Master Subject:

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10—Brief Address:

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11—Whistling Quartet.....

Choral Hall, Philharmonic Auditorium

6

DR. FREDERICK FINCH

will give a series of popular elements  
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"THE ONE LIFE OF THE UNIVERSE"  
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Subjects for February

February 10: THE LIFE OF THE FLOWERS.

February 17: THE EVOLUTION OF CONSCIOUSNESS  
IN THE ANIMAL.

February 24: THE OCCULT HISTORY OF PREHISTORIC MAN.

General Admission 25 cents.

BE good, DO good, MAKE good!

January 16th, 1921

BEAUTY is God's Trademark.

January 23rd, 1921

CONSTRUCTION will expedite RE-CONSTRUCTION.

January 30th, 1921

## ORDER OF SERVICE

The musical number preceding service is to give opportunity  
for silent worship. All are asked to participate.

Prelude—Consolation No. 5.....Listz  
Abbie Norton Jamison

Responses of Aspiration:

O, God which art the source of all life;  
We extend our thoughts in consecration unto Thee.  
O, Angel of Love;  
We invoke Thy presence to guide and direct us.  
O, Angel of Truth;  
May Thy blessings fall upon us.  
O, Angel of Peace;  
Cleanse our hearts clean from all impurities.  
O, Angel of Charity;  
Give unto us Thy penetration,  
That we may see good in all.  
May angels draw near to guide and direct us,  
That we may walk in closer touch with Heaven's ways.  
Amen.

Responsive Devotional Service

(See opposite page)

Prayer

Hymn—Work for the Master—Congregation

## WORDS OF HYMN

Ever let thy hand be busy, Never heed the idlers round thee,  
Lay the threads out one by one; Watchful be with patient eye;  
Ever ply time's ceaseless shuttle, Mark thou well the noble pattern,  
Till life's work is nobly done. And thy life work beautify.

Chorus:

Chorus:

Work the for the blessed Master! Hand and eye must work together,  
He is with thee day by day; Standing 'neath a light divine;  
Be thou faithful to thy calling, Thou shalt bring a lasting service,  
Work away! Yes, work away! And the "Well done" shall be thine.

Announcements

Chorus:

Offertory

Solo—Hymn ..... McDowell

Miss Jeanette Colwell

Reading of the Lesson

Topic—The New Renaissance—The World's Need for Art  
and Music in Spiritual Growth

Dr. Frederick Finch Strong

Benediction

You are most cordially invited to be with us each Sunday and your friends.

It is the NECESSITIES OF EXISTENCE that produces MEN.

## First Emersonian

N. N. T. A., I

MARGARET C. LA GR

DR. FREDERICK FINCH ST

"The best preacher is the heart  
is time; the best book is the word  
is God."

## SUNDAY SERVICES

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January 30th, 1921

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Prelude—Consolation No. 5.....Listz  
Abbie Norton Jamison

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Responsive Devotional Service (See opposite page)

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Miss Jeanette Colwell

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MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer

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is time; the best book is the world; the best friend  
is God."

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FEBRUARY, 1921

# Sunday I



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January 30th, 1921

Serving Man is Seeking God.

February 6th, 1921

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Prelude—Consolation No. 2.....Listz

Abbie Norton Jamison

Responses of Aspiration:

O, God which art the source of all life;  
We extend our thoughts in consecration unto Thee.  
O, Angel of Love;  
We invoke Thy presence to guide and direct us.  
O, Angel of Truth;  
May Thy blessings fall upon us.  
O, Angel of Peace;  
Cleanse our hearts clean from all impurities.  
O, Angel of Charity;  
Give unto us Thy penetration,  
That we may see good in all.  
May angels draw near to guide and direct us,  
That we may walk in closer touch with Heaven's ways.  
Amen.

Responsive Devotional Service

(See opposite page)

Prayer

Hymn—Italian Hymn .....Congregation

## WORDS OF HYMN

Come, Thou Almighty King,  
Help us Thy name to sing;  
Help us to praise!  
Father all glorious,  
O'er all victorious,  
Come and reign over us,  
Ancient of Days.

Come and Thy people bless,  
And give Thy word success;  
Spirit of holiness,  
On us descend.

Come Thou Incarnate Word,  
Gird on Thy mighty sword,  
Our prayer attend;

Come, Holy Comforter,  
Thy sacred witness bear,  
In this glad hour;  
Thou who almighty art,  
Now rule in every heart.  
And ne'er from us depart,  
Spirit of power.

Announcements

Offertory

Solo—My Task .....Ashford

Miss Jeanette Colwell

Reading of the Lesson

Topic—CONTRASTS: Some Popular and Practical Phases in  
the Theory of Relativity.

Dr. Frederick Finch Strong

Benediction

You are most cordially invited to be with us each Sunday and your friends.

You are Victory Organized. Manifest it!



February 13th, 1921

Where? "TOWARD UNITY!"

February 20th, 1921

Quit thinking ABOUT yourself and think well OF yourself.

February 27th, 1921

See each STRANGER as a potential FRIEND.

March 6th, 1921

#### ORDER OF SERVICE

The musical number preceding service is to give opportunity for silent worship. All are asked to participate.

Prelude—Song of the Mesa.....Homer Grunn  
Abbie Norton Jamison

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Amen.

Responsive Devotional Service (See opposite page)

Prayer

Hymn—Jerusalem the Golden.....Congregation

#### WORDS OF HYMN

Lead on, O King Eternal,  
The day of march has come;  
Henceforth in fields of conquest  
Thy tents shall be our home;  
Through days of preparation  
Thy grace has made us strong,  
And now, O king Eternal,  
We lift our grateful song.

Lead on O, King, Eternal,  
We follow without fears;  
For gladness breaks like morning  
Where'er Thy face appears;  
Thy cross is lifted o'er us,  
We journey in its light;  
The crown awaits the conquest;  
Lead on, O God of might.

Announcements

Offertory

Solo—Thy Little One.....Jamison  
Mrs. W. M. Godsmark

Reading of the Lesson

Topic—Things that Are Worth While  
Dr. Frederick Finch Strong

Benediction

You are most cordially invited to be with us each Sunday and your friends.

You WILL be what you WILL to be.

March 13, 1921

## m Church

Inc.

PANGE, Pastor

TRONG, Lecturer

March 20, 1921

## t Church

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PANGE, Pastor

TRONG, Lecturer

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#### READING ROOMS

540 Merchants National  
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(Except Saturday and Sunday)



# First Emerson Church

N. N. T. A., Inc.

MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer



"However meager be my worldly wealth  
Let me give something that shall aid my kind,  
A word of courage, a thought of health,  
Dropped as I pass for troubled hearts to find  
Let me tonight look back across the span  
'Twixt dawn and dark, and to my conscience  
say—

Because of some good act to beast or man—  
'The world is better that I lived to-day.'"  
From "Morning Prayer," Ella Wheeler Wilcox.



## SUNDAY SERVICES

Lyceum - - - - - 9:45 A. M.  
Lecture and Junior Church - 11 A. M.  
FRIDAY MORNING CLUB  
940 So. Figueroa St.

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February 13th, 1921

Where? "TOWARD UNITY!"

February 20th, 1921

Quit thinking ABOUT yourself and think well OF yourself.

February 27th, 1921

## ORDER OF SERVICE

The musical number preceding service is to give opportunity for silent worship. All are asked to participate.

Prelude—Dreams ..... Julian Pascal  
Abbie Norton Jamison

### Responses of Aspiration:

O, God which art the source of all life;  
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O, Angel of Charity;  
Give unto us Thy penetration,  
That we may see good in all.  
May angels draw near to guide and direct us,  
That we may walk in closer touch with Heaven's ways.  
Amen.

Responsive Devotional Service (See opposite page)

Prayer

Hymn—Stand Up, Stand Up for Jesus ..... Congregation

### WORDS OF HYMN

|                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| he morning light is breaking<br>nd darkness disappears;<br>he sons of God are waking<br>o banish all our fears.<br>ach breeze that sweeps the ocean<br>rings tidings unto all,<br>hat Truth and Light are spreading<br>round this earthly ball. | Blest river of salvation<br>Pursue thy onward way,<br>Flow thou to every nation<br>Nor in thy richness stay.<br>Stay not till all the children<br>Triumphant reach their home,<br>Stay not till all the holy<br>Proclaim the Lord has come. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Announcements

Offertory

Solo—My Symphony.....Miss Colwell  
Miss Jeanette Colwell

Reading of the Lesson

Topic—"Some Thoughts On The Education of Children"  
Dr. Frederick Finch Strong

Benediction

You are most cordially invited to be with us each Sunday and your friends.

No man can AFFORD to hate.

940 So. Figueroa St.

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Abbie Norton Jamison

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That we may see good in all.  
May angels draw near to guide and direct us,  
That we may walk in closer touch with Heaven's ways.  
Amen.

Responsive Devotional Service (See opposite page)

Prayer

Hymn—Stand Up, Stand Up for Jesus Congregation

## WORDS OF HYMN

|                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                             |
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## Announcements

## Offertory

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Miss Jeanette Colwell

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940 So. Figueroa St.

# First Emerson Church

N. N. T. A., Inc.

MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer



"However meager be my worldly wealth  
Let me give something that shall aid my kind,  
A word of courage, a thought of health,  
Dropped as I pass for troubled hearts to find  
Let me tonight look back across the span  
'Twixt dawn and dark, and to my conscience  
say—

Because of some good act to beast or man—

"The world is better that I lived to-day."

From "Morning Prayer," Ella Wheeler Wilcox.



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# First Emerson Church

N. N. T. A., Inc.

MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer

## THE CHURCH OF THE FUTURE

The Church of the Future beckons  
To the Children of Today;  
With yours—with mine—she reckons,  
A greater game to play—  
To mould the clay of youth  
With sturdy hand, and deft,  
Into a replica of Truth,  
Of obstacles bereft.  
So build your church Today  
With the children you oft pass by,  
And mould the virgin clay  
Into an edifice high;  
Then from its towers ring out  
In clarion notes, and clear:  
"The Children of Yesterday win out;  
"The Church of the Future is here."  
—G. Ernest Hill.  
First Emerson Sunday School.

## SUNDAY SERVICES

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TOLERATION is ADORATION.

February 13th, 1921

Where? "TOWARD UNITY!"

February 20th, 1921

## ORDER OF SERVICE

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Prelude—Motormo ..... Ravinia  
Abbie Norton Jamison

Responses of Aspiration:  
O, God which art the source of all life;  
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O, Angel of Love;  
We invoke Thy presence to guide and direct us.  
O, Angel of Truth;  
May Thy blessings fall upon us.  
O, Angel of Peace;  
Cleanse our hearts clean from all impurities.  
O, Angel of Charity;  
Give unto us Thy penetration,  
That we may see good in all.  
May angels draw near to guide and direct us,  
That we may walk in closer touch with Heaven's ways.  
Amen.

Responsive Devotional Service

Prayer

Hymn—Song of My Soul.

(See opposite page)

## WORDS OF HYMN

Live thou thy life; nor take thou heed  
Of shadows, or shapes of threaten-  
ing ill,  
Walk thou where nature's footsteps  
lead,  
And work in lowliness her will.  
What tho' the skies are dark to see,  
The ways are dim before thy feet,  
If thine own soul be firm in thee,  
No harm there is that thou canst  
meet.  
Live thou thy life, and ere it end  
Some grace acquire, some good be-  
stow;  
When death shall come, thy final  
friend,  
Nor long to leave, nor fear to go.

Announcements

Offertory

Solo—I Sought the Lord..... Frederick Stevenson  
Miss Jeanette Colwell

Reading of the Lesson

Topic—THE DIVINE PATTERN—A Study in Archetypes.  
Dr. Frederick Finch Strong

Benediction

You are most cordially invited to be with us each Sunday and your friends.

TRUE GREATNESS always functions in COURTESY.

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# First Emerson Church

N. N. T. A., Inc.

MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer

## SUCCESS is YOURS NOW

"Success comes from working out what is within yourself. Work out your own ideas. You are valuable to the world in proportion as you express originality. Do not observe others and disparage yourself. Exalt your as-yet unmanifest self, dig for your own ideas and USE them."

Willard Battery Bulletin.

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TOLERATION is ADORATION.

February 13th, 1921

## ORDER OF SERVICE

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Prelude—The Recessional.....DeKoven  
Abbie Norton Jamison

### Responses of Aspiration:

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O, Angel of Love;  
We invoke Thy presence to guide and direct us.  
O, Angel of Truth;  
May Thy blessings fall upon us.  
O, Angel of Peace;  
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O, Angel of Charity;  
Give unto us Thy penetration,  
That we may see good in all.  
May angels draw near to guide and direct us.  
That we may walk in closer touch with Heaven's ways.  
• Amen.

### Responsive Devotional Service

(See opposite page)

### Prayer

Hymn—Tune: Blest Be The Tie That Binds.....Congregation

### WORDS OF HYMN

How gentle God's commands,  
How kind His precepts are!  
Come cast your burden on the Lord,  
And trust His constant care.  
Beneath His watchful eye  
His saints securely dwell  
That hand which holds creation up,  
Shall guard His children well.  
His goodness stands approved,  
Unchanged from day to day  
I'll drop my burden at His feet,  
And bear a song away.

### Announcements

### Offertory

Solo—Higher and Higher My Soul.....Homer Grunn  
Miss Jeanette Colwell

### Reading of the Lesson

Topic—THE OTHER MAN'S VIEWPOINT—Adaptability as  
as a Factor in Spiritual Progress.  
Dr. Frederick Finch Strong

### Benediction

You are most cordially invited to be with us each Sunday and your friends.

Make ORDER the plan of your life and HARMONY its rythm.

## SUNDAY SERVICES

Lyceum - - - - - 9:45 A. M.  
Lecture and Junior Church - 11 A. M.  
FRIDAY MORNING CLUB  
940 So. Figueroa St.

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## First Emerson Church

N. N. T. A., Inc.

MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer



O'er cast by a cloud, the earth seemed gray,  
So I sighed and sorrowed and pined away,  
When lo, as I drooped, with low-bowed head,  
The cloud dispersed and a light was shed  
'Round and about me.

A Voice spake clear  
And the words it uttered I still can hear:  
"Clouds are transient, they come and are done;  
You're beholding a cloud and forgetting the Sun!  
Oh, Seeker of Truth, read a lesson therein,  
God's Light ever shines—tho men cloud it with sin.  
Awake and be doing! Rend asunder the shroud!  
Be a dweller of Light and thou shalt transmute the  
cloud."



### SUNDAY SERVICES

Lyceum - - - - - 9:45 A. M.  
Lecture and Junior Church - 11 A. M.

### FRIDAY MORNING CLUB

940 So. Figueroa St.

### READING ROOMS

540 Merchants National  
Bank Building

Phone 64290—Daily 11 to 2  
(Except Saturday and Sunday)

## First Emerson Church

N. N. T. A., Inc.

MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer



## First Emerson Church

N. N. T. A., Inc.

MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer



### OUR INVITATION

"There is but One God, men name him variously." The Persians say: "Whatever path I take it leads to Him." This idea establishes the law of spiritual fellowship, and we receive it whole heartedly as enunciated by the Revelator "Whosoever WILL may come and take of the water of life freely." Thus it is that our door swings open in friendly invitation to whomsoever seeks us, asking only that he shall earnestly desire righteousness and sincerely attempt to follow the UNDERSTANDING of Truth, as he SEES and KNOWS it. Because of this, many diverse views are held by our communicants—and all, learning something from the differences of each other, unite their understandings in mutual service to humanity.



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# Emerson Church

N. T. A., Inc.

C. LA GRANGE, Pastor

K FINCH STRONG, Lecturer

the earth seemed gray,  
owed and pined away,  
d, with low-bowed head,  
nd a light was shed

ake clear  
ed I still can hear:  
they come and are done;  
ud and forgetting the Sun!  
ead a lesson therein,  
s—tho men cloud it with sin.  
Rend asunder the shroud!  
and thou shalt transmute the

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# First Emerson Church

N. N. T. A., Inc.

MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer

March 13, 1921

# First Emerson Church

N. N. T. A., Inc.

MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer

March 20, 1921

## OUR INVITATION

"There is but One God, men name him variously." The Persians say: "Whatever path I take it leads to Him." This idea establishes the law of spiritual fellowship, and we receive it whole heartedly as enunciated by the Revelator "Whosoever WILL may come and take of the water of life freely." Thus it is that our door swings open in friendly invitation to whomsoever seeks us, asking only that he shall earnestly desire righteousness and sincerely attempt to follow the UNDERSTANDING of Truth, as he SEES and KNOWS it. Because of this, many diverse views are held by our communicants—and all, learning something from the differences of each other, unite their understandings in mutual service to humanity.

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# First Emerson Church

N. N. T. A., Inc.

MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer



LOVE someone! Make it possible for someone to LOVE you!

March 20th, 1921

## ORDER OF SERVICE

The musical number preceding service is to give opportunity for silent worship. All are asked to participate.

Prelude—The Rainbow Spring.....Homer Grunn  
Abbie Norton Jamison

### Responses of Aspiration:

O, God which art the source of all life;  
We extend our thoughts in consecration unto Thee.  
O, Angel of Love;  
We invoke Thy presence to guide and direct us.  
O, Angel of Truth;  
May Thy blessings fall upon us.  
O, Angel of Peace;  
Cleanse our hearts clean from all impurities.  
O, Angel of Charity;  
Give unto us Thy penetration,  
That we may see good in all.  
May angels draw near to guide and direct us,  
That we may walk in closer touch with Heaven's ways.  
Amen.

Responsive Devotional Service (See opposite page)

### Prayer

Hymn—Oh Master, Let Me Walk with Thee Congregation

### WORDS OF HYMN

|                                       |                                     |
|---------------------------------------|-------------------------------------|
| O Master, let me walk with Thee       | Teach me Thy patience; still with   |
| In lowly paths of service free;       | Thee                                |
| Tell me Thy secret; help me bear      | In closer, dearer company,          |
| The strain of toil, the fret of care. | In work that keeps faith sweet and  |
|                                       | strong,                             |
|                                       | In trust that triumphs over wrong.  |
| Help me the slow of heart to move     | In hope that sends a shining ray    |
| By some clear winning word of love;   | Far down the future's broadening    |
| Teach me the wayward feet to stay     | Way;                                |
| And guide them on the homeward        | In peace that only Thou canst give, |
| way.                                  | With Thee, O Master, let me live.   |

Announcements

Offertory

Solo—The Palms .....Faure

Reading of the Lesson

Topic—The Education of Parents.

Dr. Frederick Finch Strong

Benediction

You are most cordially invited to be with us each Sunday and your friends.

Be FREE from COVETING what you DO NOT NEED

# First Emerson Church

N. N. T. A., Inc.

MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer



If keen enuf to SEE people's faults, be clever enuf NOT to SPEAK of t

## Responsive Devotional Service

**Leader:** Great is the life whose standard of values lifts high the verities of being—whose preferences lean toward the vast horizon of Eternal beauty! Wise is he who knows,—and by that knowledge governs his oft unruly self,—that all ugliness shall cease when vision is made perfect and man stands free.

**People:** The eyes that see, the ears that hear, the hands that reach and hold and lift, the hearts that let their comfort out, the lips that praise, the feet that walk onward, though wearied by the windings of the road, the faces radiant with the light that neither fear nor doubt can dim—all these are ours whenever we shall claim them. This we now do. With vision perfect, freed from all the claims of sense, we raise a standard that shall cause all forms of ugliness—sin—poverty—ignorance—and pain to cease forevermore.

**Leader:** Be not of that number who would be happy before becoming wise—for wise a man **must** be. Whether he is happy or not depends upon the way he takes to let the wisdom that is within him, out.

**People:** Since we live by the Spirit we are also to walk by the Spirit. Now the fruits of the Spirit are love, peace, longsuffering, kindness, goodness, faithfulness, meekness, temperance, self-control. The culture of these shall be the testimony that we bear that we are seekers after wisdom.

**Leader:** Know thou the hearts of men! Let appearances not disguise beyond the power of recognition the pilgrim pausing at your door—nor heed not over much the mutterings of his lips. Stretch out your hand to all nor let them go until you feel and understand the blessing of Life's brotherhood.

**People:** We know that all men mean better than they do; feel kinder than they speak; reach farther than they grasp and, at all times, are seeking for the true, the beautiful, the real—at no time more than when, with substitutes and glittering baubles, they seek to still the urge that drives them out to seek again. Henceforth we shall "know no man after the flesh" and service shall be directed, "not by appearances, but by righteous judgment."

**Leader:** The Spirit itself beareth witness with our Spirit that we are the children of God. "They that have erred shall come to understanding and they that murmured shall learn doctrine." "Ye shall know the truth and the truth shall make you free."

**All:** Mindful, oh God, of that which we are meant to be, we place our thoughts, our words, our acts, under the law of kindness, and by this law shall we be governed. Rectify our errors, O Wisdom which rules the Universe, correct our indiscretions and remove the hurt that may have been occasioned by our blunders. Fill us with light and let us in the coming hours shed the brightness of hope and faith and courage to those who pass us by—not alone by what we do, but because of what we know we are. We ask it in Thy Name. AMEN.

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When you PLAY, play hard; when you WORK, don't play at all.



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TOMORROW cheats us all; TODAY is ours.

## ANNOUNCEMENTS

We will "REJOICE" and "BE GLAD" indeed this Easter Sunday as it will find our dearly beloved Pastor, Margaret C. La Grange, with us again. Her topic is not yet known but it is sure to be appropriate to this season of joy. Let us all stand to welcome her.

To Dr. Frederick Finch Strong a hearty vote of appreciation is offered for his splendid efforts on our behalf during the past few weeks. May he KNOW the sincerity of this expression. We hope to carry with us some part of the illumination found in his lectures.

On the first page of this bulletin is an INVITATION. Read it and if you would then become one with us in the search after Truth, hand in your name and address to any member and it will reach the proper Bureau. Next Sunday new members will be received into fellowship.

Easter is also the occasion of a Christening Service. May we also have the names of those who are to share in this ceremony?

Sunday School meeting Tuesday evening at 7 P. M. in the Reading Rooms. Dinner at 6 at the Arbor. May there not be a good record of attendance to hand Mr. Hill on his return?

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Think, Feel, Talk and Act "I CAN"!

## GENERAL ITEMS

A letter from Miss Armstrong states that "all's well" so far. No news yet from the National Conference but there will be much next week.

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Remember the COSTUME PARTY on April 8th under the auspices of the Publicity Bureau!

## BOOKS TO READ

THE HYPHEN (Lida C. Schem) is pronounced a "colossal work" depicting "the flood of opinion and ideals" besetting one in whom flows the blood of more than one race. Vital to the present age.

PHENOMENA OF MATERIALIZATION, by Baron von Schrenck Notzing. A valuable contribution of the scientific side of this question with photographs to aid as proof.

CREATIVE CHEMISTRY—Edw. E. Slosson. Divides the conquest of nature into three stages: appropriate, adaptive and creative, with the present race entering upon this latter.

## CLIPPED

"It is a fact, vouched for by no less authority than Dr. E. B. Rosa, of the United States Bureau of Standards, in an official publication of that bureau that the tax levied on tobacco, cigars and cigarettes alone would pay all of the expenses of the Government were it not for wars and their aftermath. He states that 67.81 per cent of all money spent by the Government goes in payment of recent and previous wars, and that another 25.02 per cent is for the running expenses of the army and navy. Which leaves 7.17 per cent for all other functions of the Government." Current Opinion.

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# First Emerson Church

N. N. T. A., Inc.

MARGARET C. LA GRANGE, Pastor

DR. FREDERICK FINCH STRONG, Lecturer



WE BELIEVE: That Life is a privilege and a responsibility. Each day is an opportunity to do what has never been done before: To reveal Truth of which man has no knowledge until it stands revealed in brilliant acts of service. No times are bad times—no person is useless—no thing is without purpose and value; to articulate the whole of Life in its entire beauty requires the best of each, united in attainment of ideals worthy and acceptable to man's highest reason. To reach and lift, to grasp and bestow, to have and share, to be and so to live that others catch the harmonies of life—this is to accept the privileges and responsibilities of Life.

—National New Thought Assn., Inc.

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Stones must gravitate downward. They don't choose. DON'T BE A STONE.

March 13th, 1921

### ORDER OF SERVICE

The musical number preceding service is to give opportunity for silent worship. All are asked to participate.

Prelude—The Mysterious Story.....Homer Grunn  
Abbie Norton Jamison

#### Responses of Aspiration:

O, God which art the source of all life;  
We extend our thoughts in consecration unto Thee.  
O, Angel of Love;  
We invoke Thy presence to guide and direct us.  
O, Angel of Truth;  
May Thy blessings fall upon us.  
O, Angel of Peace;  
Cleanse our hearts clean from all impurities.  
O, Angel of Charity;  
Give unto us Thy penetration,  
That we may see good in all.  
May angels draw near to guide and direct us,  
That we may walk in closer touch with Heaven's ways.  
Amen.

Responsive Devotional Service (See opposite page)

#### Prayer

Hymn—Blest Be the Tie.....Congregation

#### WORDS OF HYMN

Blest be the tie that binds  
Our hearts in Christian love;  
The fellowship of kindred minds  
Is like to that above.

Our fears, our hopes, our aims are one,  
Our comforts and our cares.

Before our Father's throne  
We pour our ardent prayers;

When we asunder part,  
It gives us inward pain;  
But we shall still be joined in heart  
And hope to meet again.

#### Announcements

#### Offertory

Solo—There Is No Death.....Jeffrey O'Hara  
Harriet Story MacFarland

#### Reading of the Lesson

Topic—Invisible Influences and How They Affect Us.

#### Benediction

*A. F. Strong*  
You are most cordially invited to be with us each Sunday and your friends.

Measure your RICHES by your CONTENTMENT.

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FAITH is a LEADER, DOUBT is not even a FOLLOWER.



Stop "FOLLOWING A CALLING." Make the "CALLING" FOLLOW YOU!

### ANNOUNCEMENTS

Responding to numerous requests, Dr. Strong will continue the subject of education in relation to children by speaking next Sunday upon "The Education of Parents." This will prove popular as everyone is a "parent" at heart. Invite your friends.

Miss Helen Bovee invites you to play progressive Bridge or 500 at the Regent Apts., 2105 W. 6th St., on Thursday, March 17th. If you have friends you may secure a table for the afternoon. This is also the result of requests from those who recently enjoyed the card party at Mrs. Clark's. Single tickets 50c; playing begins at 2 p. m.

Remember the Sunday School meeting Tuesday. Dinner at the Arbor 6 p. m., meeting in the Reading Rooms 7 o'clock. All welcome who are interested in this department of our work.

This week Friday from 2 to 5 Tea will be served in the Reading Rooms, this offering an opportunity for social contact with one another and with Dr. Strong.

Noon meetings in the Reading Rooms daily from 12:15 to 1. Open to all who seek illumination upon our work or upon the subject of healing.

One has said she'd advertise "Palm Olive Soap," another "Perky Peggy" dresses, a kiddie is to be "Patsy Rompers," etc. What have you decided upon for your costume at the Publicity Party to be held in these rooms April 8th. Tickets are ready today and we have decided to have no less than 250 dancers on the floor. Price 75c. Dancing begins at 8:30, Grand March at 9:30 with prizes for the cleverest costumes. Judges announced later. Balcony open to spectators.

### GENERAL ITEMS

All delegates expect to attend services in Detroit this morning, thus opening the first National Conference which will continue through the 19th. This center is represented by seven well qualified members who ask that we support them with our thoughts of strength, love and consecration, and let us also hold vision for the National Association.

State Conference Friday evening at 7:45. As several of our Bureau heads are at the National Conference we urge ALL WORKERS to be present.

The Sunday School Revue is passed and great commendation is due Miss Freda Deacon and the children. We hope all of our readers saw it for there was a fund of illumination as well as of beauty in the production. It is certain that all who were present will be looking forward to the next event.

### PERSONALS

We have a real privilege in introducing Mrs. Harriet Story MacFarland. Mrs. MacFarland is a staunch disciple of this movement in the Detroit center and is often heard there. It is a rare treat to have her with us this morning.

Through an oversight, Miss Mildred Humphrey was not officially welcomed when she returned. We now do so and add to its original heartiness the accrued interest of the last two weeks.

A vote of thanks to Mrs. Gregory and Miss Eggeman for their loyal service on behalf of the Sunday School Revue.

Mrs. Minnie May Anderson, Mrs. Eleanor Brown, Miss Clara Armstrong, Mr. Clive E. Norman, Mr. S. M. Kent and Mr. G. Ernest Hill are in Detroit as the delegates to the National Conference. Mrs. Lou La Blonge Witcomb is our eighth representative and has been earnest in her endeavor to make this a vital landmark in the growth of our Association. May vision, accomplishment and service attend upon their activities.

### CLIPPED

"The failures of the peace are many and real but the gospel that President Wilson preached to the world still lives and will yet prove to be its salvation. The importance of that service should not be minimized. Unity in Europe, co-operation between the continents, and peace for the world is still a theory, but coming generations will make it a fact."—Saturday Evening Post.

By ACTIVE EFFORT we BECOME; by PASSIVE ENDURANCE we merely EXIST.

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"The only way the other fellow has is getting it away from him is by force." Columbia (S. C.) Record.

Think, Feel, Talk and Act "I CAN"!



February 13th, 1921

Where? "TOWARD UNITY!"

February 20th, 1921

Quit thinking ABOUT yourself and think well OF yourself.

February 27th, 1921

See each STRANGER as a potential FRIEND.

March 6th, 1921

### ORDER OF SERVICE

The musical number preceding service is to give opportunity for silent worship. All are asked to participate.

Prelude—Song of the Mesa.....Homer Grunn  
Abbie Norton Jamison

#### Responses of Aspiration:

O, God which art the source of all life;  
We extend our thoughts in consecration unto Thee.  
O, Angel of Love;  
We invoke Thy presence to guide and direct us.  
O, Angel of Truth;  
May Thy blessings fall upon us.  
O, Angel of Peace;  
Cleanse our hearts clean from all impurities.  
O, Angel of Charity;  
Give unto us Thy penetration,  
That we may see good in all.  
May angels draw near to guide and direct us,  
That we may walk in closer touch with Heaven's ways.  
Amen.

Responsive Devotional Service (See opposite page)

Prayer

Hymn—Jerusalem the Golden.....Congregation

#### WORDS OF HYMN

Lead on, O King Eternal,  
The day of march has come;  
Henceforth in fields of conquest  
Thy tents shall be our home;  
Through days of preparation  
Thy grace has made us strong,  
And now, O king Eternal,  
We lift our grateful song.

Lead on O, King, Eternal,  
We follow without fears;  
For gladness breaks like morning  
Where'er Thy face appears;  
Thy cross is lifted o'er us,  
We journey in its light;  
The crown awaits the conquest;  
Lead on, O God of might.

Announcements

Offertory

Solo—Thy Little One.....Jamison  
Mrs. W. M. Godsmark

Reading of the Lesson

Topic—Things that Are Worth While  
Dr. Frederick Finch Strong

Benediction

You are most cordially invited to be with us each Sunday and your friends.

You WILL be what you WILL to be.

March 13, 1921

## n Church

Inc.

PANGE, Pastor

TRONG, Lecturer

March 20, 1921

## t Church

nc.

PANGE, Pastor

TRONG, Lecturer

ON

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humanity.

### READING ROOMS

540 Merchants National  
Bank Building  
Phone 64290—Daily 11 to 2  
(Except Saturday and Sunday)



MARCH, 1921

## Sunday Public Lectures



KROTONA INSTITUTE of THEOSOPHY  
Mrs. Annie Besant, President  
Mr. A. P. Warrington, Vice-President

2130 North Vista del Mar Ave., Hollywood  
Phone 57552

Free Lecture Every Sunday Afternoon  
at 3 o'clock

March 6—FREDERICK FINCH STRONG, M. D.  
National Lecturer Theosophical Society.  
Subject: "The Mechanism of Memory."  
A Study of the Records of the Past in the Light of Occultism and Modern Psychology.

APRIL, 1921

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Subject: "The Lost Atlantis."

1921  
Beginning Saturday,  
Mar. 26, 8 p. m.

DR. STRONG'S  
NEW LECTURE CLASS ON  
MODERN PSYCHIC  
PHENOMENA

A training course for those  
who wish to do personal work  
in psychical research.

Six lectures comprising a re-  
sume of the results of investi-  
gations by psychical research-  
ers, spiritualists and occult-  
ists; their value as evidence  
of human survival after death,  
and how to study and analyse  
them.

Fee \$5.00

## LECTURE CLASSES

by  
DR. FREDERICK FINCH STRONG  
under the auspices of

The Church of the People

A CLASS IN THE STUDY OF THE ETHERIC FACULTIES AND  
THE DEVELOPMENT OF ETHERIC VISION

One year ago Dr. Strong organized a class of this kind by  
special request. So many registered that a second and third class  
had to be formed. Of those who attended these classes many  
learned to see the etheric or magnetic auras and emanations of  
human beings, animals and flowers. Others developed psychometric  
and telepathic faculty, or learned methods of practical value in  
diagnosis and healing. The present course will introduce much new  
material and methods of practice.

Eleven Lecture-classes, Tuesdays at 8:00 P. M., beginning *May 17*  
ROOM 432 BLANCHARD BUILDING  
FEE FOR COURSE TEN DOLLARS *1921*

1921  
Popular Lecture  
BLANCHARD HALL

Friday, June 10, at 8  
DR. FREDERICK FINCH  
STRONG

SUBJECT:

WHO IS THIS MAN  
EINSTEIN

and how are his teachings  
affecting the world?

Admission 25 cents

Church  
of the  
People

Los Angeles

BLANCHARD HALL  
233 S. Broadway

REYNOLD E. BLIGHT  
Minister

Maud Fletcher Galigher  
Associate Minister

Hdqtrs.: Room 432  
Phone 10082

Hours: 10 to 1 except  
Tuesdays

1921  
Tuesdays and Thurs-  
days at 8

DR. STRONG  
Tuesday's Class in Etheric  
Vision.

Thursday evenings during June  
—Four popular lectures on a  
subject of vital and practical  
importance:

IS MAN A RESPONSIBLE  
CREATURE—AND IF SO,  
TO WHAT EXTENT?

Determinism, or the Effect on  
Man of Physical Heredity  
and Environment.  
Planetary Influences—the Basis  
of Astrology.

Spiritual Heredity; Karma, or  
the Reaction on Man of His  
Own Past Lives.

When Man becomes the Master  
of His Being. Free Will in  
the Higher Sense and How  
We May Hasten the Enfold-  
ment.

Admission 25 cents.

Fridays at 8

DR. STRONG

Beginning Friday, June 17,  
and continuing each Friday for  
six weeks, there will be a pop-  
ular lecture class on—

THE THEORIES OF RELA-  
TIVITY, THEIR EXTENSION  
AND APPLICATION

June 17.—Einstein's proof that  
things as they seem to us  
are illusions.

(Reference: Slossons Easy  
Lessons on Einstein)

June 24.—The two and three  
dimensional worlds.

(Reference: "Flatland," by  
A. Square)

Admission 25 cents.

DQUARTERS, ROOM 432

*Church of People lectures*  
*May 19, 1921*  
*"The Astral Light"*  
*May 26, 1921*  
*"The Purpose of Life"*  
*May 29, 1921*  
*Monica J. S. lectures*  
*"Our friends, the Dead"*  
*June 12, 1921*  
*"The 4th Dimension - some simple*  
*points of the Einstein theory"*



MARCH, 1921

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Subject: "The Lost Atlantis."

## Outline of Lessons

- I.—1. Varieties of Clairvoyance.
2. Methods of Developing Clairvoyance.
  - a. Safe and Legitimate Methods.
  - b. Unsafe Methods and Their Dangers.
3. Etheric Sight, Its Scope and Value. (With Lantern Slides.)
- II.—1. The Eye and the Phenomena of Physical Vision.
2. Color-sense and How Produced.
3. Physical, Etheric and Astral Colors, and How to Tell which We are Seeing. (With Lantern Slides and Experiments.)
- III.—1. The Etheric Aura of the Human Body; its Divisions and Emanations. (With Lantern Slides and Experiments.)
- IV.—"Animal Magnetism,"—Richenbach's Experiments, and Those of Mesmer. Polarity and Its Significance. (With Lantern Slides and Experiments.)
- V.—Kilner's Experiments: the "Human Atmosphere" in Health and Disease. (With Lantern Slides and Demonstrations.)
- VI.—Magnetic Healing, Use of the Hands in Relieving Pain and Imparting Vitality. Theory and Use of Colors in Healing. (With demonstrations.)

VII.—How to Diagnose Disease by the Colors and Irregularities of the Aura. (Experiments and demonstrations.)

VIII.—Methods of Developing Telepathic Faculty: Etheric Thought-transference; Direct Thought-transference; Psychometry, or the Etheric Tactile Sense. (With Experiments.)

IX.—"Nature Spirits and Fairies": Do They Really Exist? Discussion of the Photographs of the Fairies Published in the Strand Magazine. (With Lantern Slides.)

X.—Flower Auras, and the Magnetic and Healing Properties of the Etheric Emanations of Flower and Plants. (With Experiments.)

XI.—Incense, and Perfumes; the Etheric Sense of Smell. Occult Effects of Odors and Their Use in Healing.

Register for Course at Headquarters, Church of the People,  
Room 432 Blanchard Building.

### Popular Lecture

BLANCHARD HALL

Friday, June 10, at 8  
DR. FREDERICK FINCH STRONG

SUBJECT:

WHO IS THIS MAN  
EINSTEIN

and how are his teachings  
affecting the world?

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When Man becomes the Master  
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NEW LECTURE COURSE  
MODERN PSYCHIC  
PHENOMENA

A training course  
who wish to do personal  
in psychical research

Six lectures comprising  
some of the results of  
investigations by psychics  
ers, spiritualists and  
ists; their value as  
of human survival after  
and how to study and  
them.

Fee \$5.00

Headquarters Church of the People—Room 432  
Music-Arts Studio Building

### A Series of Lectures by Eva Trew

Well known lecturer, concert pianiste of international reputation  
and originator of

#### COLOR MUSIC NOTATION

or the practical use of Color, Music and the Arts in relation to  
life's problems.

Monday at 8, April 18.—SUBJECT: "The Ethics and Religion of the  
Great Hindu Poet, Tagore."

Interpreted with Chopin's Music. Poetry and Music embody the  
same ethics taught by all the Great Saviors of the World. Master  
pieces from Chopin's music played and their esoteric meaning  
explained.

Monday at 8, April 25.—"Music of the Bible."

Monday at 8, May 2.—"Resources of the New Woman" (for women  
only).

Monday at 8, May 9.—SUBJECT: "The Law of Evolution as Seen  
in Music."

Illustrated with stereopticon views showing the development  
of the instrument and the means of recording music from the time  
of Pythagoras, 500 years B. C. to the present time. Composition  
from the various epochs played and explained.

Silver Offering

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SUBJECT:

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Admission 25 cents.

1921  
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THE THEORIES OF RATIONALITY,  
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June 12, 1921

"The 4th Dimension—some simple  
points of the Einstein theory"

7th  
9th  
16th  
20th



# WHO IS THIS EINSTEIN? TO BE SUBJECT OF LECTURE

By FLORENCE PIERCE REED

The local pot-pourri of scientists, mathematicians and philosophers who are studying life in the light of recently propounded "Theory of Relativity" and have had their school work on "time," "space," "force," "matter," "geometry" and "physics" knocked to philosophical smithereens, will hear a lecture by Frederick Finch Strong, philosopher, dealing with Einstein, founder, next Friday evening at Blanchard hall.

"Who Is This Man Einstein?" will be his topic, and he will discuss at length many phases of the philosophy and its discoverer or creator, as well as giving a bird's-eye view of his character. Dr. Strong, who perfected the violet ray, which has been such a blessing to thousands, is not only a medical doctor and a widely known authority on orthodox science, but is also a leader among occult scientists. He is one of the few scientists in the world whose occult demonstrations have been made before orthodox scientists in the great universities and have been accepted as possible. As a speaker he is unusually interesting, and already the theosophists and many others in the city who are keeping up with contemporary thought and religion, have signified their intention of being present.

## MAKES PEOPLE THINK

"Whatever the name Einstein means, or is," says Dr. Strong, "he makes people think. Many who have been content to have their thinking done for them are aiding in the regeneration of the world by thinking independently."

"Einstein is a thought provoker. He is still more a thought compeller. Whether or not we prove or disprove Einstein's theories, it is true that educators and clergy and public speakers are compelled to study the 'theory of relativity' either for the purpose of refuting it if it is hostile to their accepted dogma or religion, or accepting it; or at least being able to know something of the subject which now has an important place in conversation of drawing-room, lecture hall, schools and places of worship."

It has been jocosely stated in various mediums that Einstein is a celebrated Hebrew banker who rose from a pawnbroker to a leader of world finance through the purely "relative value" such as the American dollar. Some called him a "bolshvist," "anarchist," "international food distributor," "a Jew who has been persecuted by Henry Ford," a "psychoanalyst," a "prize fighter who knocked out an English guy, Ike Newton," and "Zionist."

What's this world coming to? is an important question. Where has this world been? is also important.

## Einstein to Synthesize the Obvious and Occult

Prof. Frederick F. Strong in a talk at Blanchard Hall last night on "Who is This Man Einstein?" stated that Einstein is the force that is to synthesize the obvious and the occult, the physical and the metaphysical, and is laying the foundation for revelations that the world has been waiting for.

JUNE 11, 1921

# SCIENTIST IN TALK TELLS 'EINSTEIN THEORY'

By FLORENCE PIERCE REED

Einstein and his theory of relativity should be taken in homeopathic doses, sugar-coated, according to Dr. Frederick Finch Strong, philosopher and scientist, who gave a lecture on "Who Is This Man Einstein?" last night in Music-Arts hall.

"If he isn't taken that way by the average person who gets a headache when he thinks, Einstein is likely to cause mental spasms, brainstorms, and, it might be, insanity," remarked the sage doctor, who has given three years of intensive study to the celebrated propounder of this new theory which has knocked the underpinnings out from under a lot of dogmas and theories.

But Dr. Strong hastened to explain that Einstein was not dangerous; that the danger lies in people getting his conclusions without having followed his processes of deductions whereby he arrives at his conclusions.

"He proved his theory of relativity through mathematics," said Dr. Strong. "He performed the greatest feat of involved mathematics which has ever been known to man. So involved were these formulae that not more than 12 men in the world can fully comprehend and follow his procedure. But that does not mean that only 12 men in the world can grasp his theory, as has been incorrectly stated."

## BEGIN TO GRASP IT

"Students of comparative religions, occultists, material scientists, philosophers and laymen are beginning to grasp this thought of relativity, which it is believed will be a great unifying process, a bridge over the gap between physics and metaphysics, and between the physical and super-physical."

"Einstein has made people wonder what there is left of reality. Space is emptiness filled by something or space is something filled by emptiness. Time is our imperfect sense of."

"Most of the people in the world are from ten years to ten centuries behind their contemporaries who are doing things. This Swiss Jew who occupied a chair at the University of Berlin has brought about the latest revolution in the scientific world."

## MATTER ONLY RELATIVE

Einstein's theories have proved through mathematical formula that "time," "space" and "matter" are true only "relatively." One of his paradoxical conclusions as recited by Dr. Strong is as follows:

"If some person could move with the speed of light from one point in the great unmeasured universe, live through it, and be brought back again, the world would be 200 years older when he returned. This he proves by mathematics."

And Einstein is considered quite a respectable gentleman and it is declared that the world scientists are not so cocksure about many things which they thought had been proved true, but which now, according to Einstein, are true only relatively.

"The greatest thing Einstein has done is to dematerialize matter," said the lecturer. "Any physical energy which travels with the speed of light ceases to be, and he has proved it thematically."

## 'STAKE OF IGNORANCE'

Like all pioneers of revolutionary thought, Einstein has been burned at the stake of popular ignorance. He suffers through his discriminations between things as they seem and things as they are. He believes the objective world would continue to be if all humanity were suddenly swept out of existence.

Science has dogmatized "time," "space" and "matter." But Einstein proves that yardsticks are not absolute as standards, but only relative. And his strange paradoxes in lines of thoughts have been accepted by most scientists because he has proved the unreality of reality and the reality of unreality.

## THEOSOPHY

Krotona Institute—An exceptionally fine program is offered for tomorrow afternoon at 3 o'clock, when Dr. Frederick Finch Strong will deliver a lecture entitled "H. P. Blavatsky—the Original Propounder of the Theory of Relativity." Mr. and Mrs. J. Spenser-Kelly, concert vocalists of international reputation, will render a brief musical program before and after the lecture. There is no admission charge to these Sunday afternoon lectures.

Saturday, July 9, 1921

## AT KROTONA INSTITUTE

Dr. Strong Speaks on Madam Blavatsky And Relativity. Dr. Riley Speaks Tomorrow. Institute News

The two dimensional space of the Krotona lecture hall was tested to its utmost capacity Sunday afternoon by an audience eager to listen to Dr. Frederick Finch Strong on the subject "H. P. Blavatsky the Original Propounder of the Theory of Relativity." Dr. Strong stated that H. P. B. did not anticipate the work of Einstein but the theory on which his work is based. The "Secret Doctrine" written in 1888 contains "hidden gold" which may not be entirely unearthed for centuries to come. During her lifetime she was persecuted and her theories were ridiculed yet in over five hundred instances confirmation has been given to her theories. Theosophy and occultism recognize the existence of Elder Brothers and Great Teachers who stand ready to give this knowledge to the world for the benefit of humanity. The time is near at hand when the world will begin to think more and more in fourth dimensional terms and enter upon an entirely different view of life. We should read and familiarize ourselves with relativity and the fourth dimension or we shall be back numbers.





## FREE LECTURES —FOR—

MONTH OF SEPTEMBER  
THEOSOPHICAL SOCIETY  
601 Santa Monica Blvd.

SEPTEMBER 4—"Is Man a Responsible Being? If so, to what extent?"

Dr. Frederick Finch Strong  
National Lecturer

SEPTEMBER 11—"A Little Journey Outside."

Helen M. Stark

SEPTEMBER 18—"The Divine Adventure."

Dr. Alymer Harding

SEPTEMBER 25—"Music and Mysticism."

Mrs. Eva Trew

ALL WELCOME

1921

## School of Esoteric Science

Premier opening,

Tuesday evening, September thirteenth, at 8 o'clock

A Most Cordial Welcome

Among the Speakers of the evening will be

Dr. Frank L. Riley

James E. Dodds

Dr. Frederick Finch Strong

3001 Van Buren Place

West Jefferson car to Van Buren Pl.

1 Block North to 3001.

Phone West 5532

### To Speak on Fourth Dimension

Dr. and Mrs. Frederick Finch Strong have just returned from a month's vacation at Coronado. The doctor will resume his medical practice at 1827 Gower street. His first public lecture for this season, "The Fourth Dimension," will be given at Krotona Sunday afternoon.

### THEOSOPHY

Krotona Institute.—Dr. Frederick Finch Strong will deliver another of his popular Theosophical lectures at Krotona Institute in Hollywood tomorrow afternoon at 3 o'clock on the subject "The Fourth Dimension." Refreshments will be served to visitors in the Court Building before the lecture, and a special vegetarian dinner in the open air cafeteria both at noon and

Oct 2 →

Krotona Institute — Frederick Finch Strong, M. D., will continue his discussion along the lines of the Fourth Dimension and the Einstein Theory of Relativity in his lecture tomorrow afternoon, which will be entitled "The Nature of Space." Dr. Strong has peculiar ability to make these abstruse subjects easily understood by the average audience. The lecture will commence at 3 o'clock. There will be no

### UNDENOMINATIONAL

Beginning Thursday evening, Dr. Strong will deliver a series of lectures on the general topic, "Present Unrest in the Light of Occultism." Thursday's subject will be "Scientific Unrest: Lodge vs. Einstein." These lectures will be held in Room 432 and are open to the public.

### UNDENOMINATIONAL

## THE AWAKENING OF THE WORLD SOUL BY

DR. FREDERICK FINCH STRONG

11 A. M., Church of the People, Music Arts Auditorium, 233 S. Broadway. Tenor Solo by B. F. McLaughlin.

### UNDENOMINATIONAL

## QUALITIES OF CONSCIOUSNESS

Dr. Frederick Finch Strong

10 a. m. Church of the People, Music Arts Auditorium, 233 S. Broadway. Musical Program by B. F. McLaughlin, tenor.

### UNDENOMINATIONAL

## Yogi Methods for the Western World

BY

Dr. Frederick Finch Strong

11 a. m., Church of the People, Music Arts Auditorium, 233 South Broadway. Musical program by B. F. McLaughlin.

### UNDENOMINATIONAL

## GETTING THE OTHER MAN'S VIEWPOINT—THE GREAT PROBLEM OF THE MODERN WORLD

BY

Dr. Frederick Finch Strong

11 a. m., Church of the People, Music Arts Auditorium, 233 South Broadway. Baritone Solo by Martin Best

## THE DELUGE—AND TODAY

by

Dr. Frederick Finch Strong

11 a. m.—Church of the People, Music Arts Auditorium, 233 South Broadway. Thursday evening Dr. Strong will begin a series of lectures on "Present-Day Unrest in the Light of Occultism." Next Thursday, "Lodge vs. Einstein." Room 432.

## CHURCH of THE PEOPLE

233 South Broadway

Sundays at 11 A. M.

Music-Art Hall

REYNOLD E. BLIGHT

will speak on

October 9th—"Psycho-Analysis, the New Science That Explains Us to Ourselves."

Prelude—"Censorship: Un-American, Un-Christian and Futile."

October 16th—"Does a Strait-Jacket Pinion Your Wings?"

Dr. Frederick Finch Strong THURSDAY EVENINGS at 8:00 O'CLOCK  
Headquarters Church of the People - Room 432

"PRESENT DAY UNREST IN THE LIGHT OF OCCULTISM"

October 13th—"The Revelation of Scientific Thought. Lodge versus Einstein."

October 20th—"Occult Interpretations of Some Strange Tendencies in Modern Art."



... PROGRAM ...

# Metaphysician's Fall Festival

October 17 to 21, Inclusive  
1921

## Music-Art Hall

(Formerly known as Blanchard Hall)  
233 S. Broadway.

V

Auspices

## Metaphysical Library

Eleanor M. Reesberg Founder  
8 to 10 P. M.

Oct 20, 1921 JAMES E. DODDS, Chairman

- 1—Greetings..... Mr. Dodds
- 2—Address..... "Knowing My Abundant Good"  
Emma H. Luke  
Los Angeles Unity Center of Christianity
- 3—Piano Solo..... Valse, E Flat—Duran  
Miss Jean Emerson
- 4—Address..... "The Power of Prayer"  
Eleanor Elizabeth Weaver  
Los Angeles Unity Center of Christianity
- 5—"Awake"..... A. Campbell  
Reading by Ian Hamilton Campbell  
Of the University of Christ
- 6—Address..... "Balanced Thinking"  
Dr. Frederick Finch Strong
- 7—Vocal Quartette—Romeo and Juliet Consecration Scene  
Birdie Tingle, Soprano  
Francis Young, Alto  
Emanuel Molino, Tenor  
E. Floyd Kennedy, Basso  
Direction MR. BRONSON



## KROTONA INSTITUTE of THEOSOPHY

Mrs. Annie Besant, President  
Mr. A. P. Warrington, Vice-President

2130 North Vista del Mar Ave., Hollywood  
Phone Hollywood 5752

Nov. 6—FREDERICK FINCH STRONG, M. D.  
Subject: "The New Era of Thought."

## Church

of the

## People

Los Angeles

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## DR. FREDERICK FINCH STRONG

"Present Day Unrest in  
the Light of Occultism."

Oct. 27—"The Dawning of a  
New Consciousness: the Reason  
for Our Present Lack  
of Poise."

Nov. 3—"Occult Forces at  
Work in the Solution of  
Modern Social and Economic  
Problems."

Nov. 10—"The Search for the  
Real; a Review of Ancient  
and Modern Thought."

Admission 25 cents

Thursdays at 8

## DR. FREDERICK FINCH STRONG

"Present Day Unrest in  
the Light of Occultism."

Nov. 17—"The Over-Stuffed  
Brain. Some Thoughts on  
Mental Indigestion."

Dec. 1—"What is the Force be-  
hind the Ductless Glands?"

DR. FREDERICK FINCH STRONG.  
-Season of 1921-22  
Lectures under auspices of the Church of the People.  
Room 432 Music-Arts Building.

GENERAL SUBJECT,—"The Search for the Real; a Review of ancient and modern Thought."

October, -The constitution of matter.

Oct 6, The Atom of Thales and Democritus.

Oct 13, The Atom of Dalton.

Oct 20 The Atom of Crookes and Mendelejeff.

Oct 27 The Electron, Ion, and the atom of "Occult Chemistry".

November, -Cosmic theories.

Nov. 3. The Universe of Ptolemy.

Nov 10. The Universe of Copernicus.

Nov. 17. The Universe of Galileo.

Nov 24. The Universe of Newton.

December, -The Work of Einstein.

Dec. 1 Simple illustrations of Relativity.

Dec 8. The Special Relativity Theory.

Dec 15 The General Relativity Theory.

Dec 22 Physical Proofs of Einsteins Theories.

Dec 29 The Einsteinian Universe.



January, - Systems of Philosophy,

Jan 5 Early Schools of Grecian Philosophy  
Jan 12 Pythagoras, Plato, Socrates, Plotinus.  
Jan 19 From Aristotle to Bacon; development of Logic.  
Jan 26 From Kant to Bergson; Modern Schools of Realism and Idealism

February, - The Bridge between the phenomenal world and the subjective world

Feb 2 Relativity applied to Metaphysics and Occultism.  
Feb 9. The "Tertium Organum" of Ouspensky.  
Feb 16. The nature of Time and Space.  
Feb 23. The Fourth Dimension.

March, - Consciousness as related to Space and Time.

March 2. Analysis of Sense perception and the nature of Dimensionality.  
March 9. Consciousness in Animals.  
March 16 Consciousness in Primitive Man  
March 23 Consciousness in the Highly evolved Man.  
March 30 Consciousness in the "Super-man" ("Cosmic Consciousness")

April, - Testimony of some who have attained the Higher Consciousness.

Apr. 6. Gautama the Buddha.  
Apr. 13. Jesus the Christ.  
Apr. 20 Emerson.  
Apr. 27 Whitman.

May, - Eastern Occult Philosophy.

May 4 The Wisdom Religion of India.  
May 11 Comparative Religion and Modern Theosophy.  
May 18 Cosmogogenesis of the "Secret Doctrine".  
May 25. The Origin and Destiny of Man as deduced from a  
comparison of Ancient and Modern Thought

6. THE METAPHYSICS OF TIME AND SPACE.

Frederick Finch Strong, M.D.  
Tuesday, 4:30 to 5:30 p.m.  
Eight lectures, commencing Jan. 31.

Sunday Lectures

- Feb. 5—FREDERICK FINCH STRONG, M.D.  
National Lecturer Theosophical Society.  
"Polarity, or the Law of Opposites."  
Feb. 12—FRANK L. RILEY, M.D.  
"A League of Religions."  
Feb. 19—HENRY HOTCHENER  
International Lecturer and Psychologist.  
"New Scientific Proofs of Superphysical Phenomena."  
Feb. 26—MARIE RUSSAK HOTCHENER  
Official International Lecturer Theosophical Society.  
"Healing, Ancient and Modern."  
Mar. 5—FREDERICK FINCH STRONG, M.D.  
National Lecturer Theosophical Society.  
"The New Science of Healing"  
(Music in Relation to Health and Disease)

THEOSOPHY

Krotona Institute—Dr. Frederick Finch Strong will lecture at this Institute in Hollywood tomorrow afternoon at 3 o'clock on the subject, "The New Science of Healing." Dr. Strong has just returned from San Francisco, where he spent several weeks in study with Dr. Abrams, and will explain about the new methods



FREE LECTURES

-FOR-

MONTH OF MARCH

THEOSOPHICAL SOCIETY  
601 Santa Monica Blvd.

MARCH 5—The Power of Conduct.  
Mrs. Virginia Baverstock

MARCH 12—Dante's Inferno  
Manley Hall

MARCH 19—New Bodies for a New Race  
Dr. Frederick Finch Strong

MARCH 26—The Power of the Spoken Word  
Mrs. Julia K. Sommer, B. Sc.

New Study Class in First Principles of Theosophy by Jinarajadasa on FRIDAY EVENINGS, conducted by Mrs. Helen M. Stark

Library open Monday, Wednesday and Friday afternoons.

ALL WELCOME.





## FREE LECTURES

—FOR—

### MONTH OF APRIL

THEOSOPHICAL SOCIETY  
601 Santa Monica Blvd.

APRIL 2—Keys to the Ancient Wisdom.  
Mr. Manley Hall

APRIL 9—Man and His Bodus.  
Mrs. Marie McLuman of Australia

APRIL 16—Man's Place in the Universe.  
Mrs. Grace S. Hall

APRIL 23—The Principles of Electronic Diagnoses and Healing.  
Dr. Frederick F. Strong

APRIL 30—The Power of Conduct.  
Mrs. Virginia Baverstock

New Study Class in First Principles of Theosophy by Jinarajadasa on ~~FRIDAY~~ *THURSDAY* EVENINGS, conducted by Mrs. Helen M. Stark.

Library open Monday, Wednesday and Friday afternoons.

ALL WELCOME.

## Krotona Institute of Theosophy

Mrs. Annie Besant, President  
Mr. A. P. Warrington, Vice-President  
Mr. George H. Hall, Manager  
2130 North Vista Del Mar Ave., Hollywood  
Telephone Hollywood 5752

May 21—MISS JULIA K. SOMMER, B.Sc.

Divisional Lecturer Theosophical Society.

"The Scientific Basis of True Education."

"Krotona Service", a pan-religious ceremonial, will be given in the Italian Gardens immediately following this lecture. There will be no charges for collections and all are invited.

May 28—MR. RALPH M. deBIT

"Psychology Properly Applied."

June 4—FREDERICK FINCH STRONG, M.D.

National Lecturer Theosophical Society.

"A Study of Some Newly Discovered Forces."

Friday, September 15, 1922

## NORSE STUDIO EVENT

Dr. Strong Gives Address at Party Last Saturday Evening, With Mrs. Strong as Hostess.

Mrs. Frederick Finch Strong was hostess at an informal studio party given at the Norse Studio of Finn Haakon Frolich, sculptor, at 1444½ Wilcox avenue, Hollywood, Saturday evening, September 9, when her gifted husband, Dr. F. Strong, gave a short talk on the subject of "Art and the Fourth Dimension."

Dr. Strong was the first lecturer in Los Angeles to present the Einstein theory in a popular form. He has been deeply interested in the metaphysical study of Higher Space and believes that a new consciousness is awakening in the thinking portion of humanity. The strange tendencies in modern art result from futile efforts to objectify this consciousness in a two or three dimensional medium.

Dr. Strong is well known to Los Angeles audiences, having given over 500 lectures in Southern California during the past four years.

An interesting program of music, solo, dancing, readings was also being given for the entertainment of the guests, who were 200 or more in number.

## Sunday Lectures

April 2—FREDERICK FINCH STRONG, M. D.  
National Lecturer Theosophical Society.  
"The Law of Karma in Relation to Health and Disease."

April 9—MISS JULIA K. SOMMER, B. Sc.  
President Fraternity in Education.  
"The Age of the Human Race."

April 16—MIRZA AHMAD SOHRAB  
Persian Lecturer and Scholar.  
"Ideals of the New Age."

April 23—C. F. HOLLAND, L. L. B.  
Trustee American Theosophical Society.  
"What is Theosophy?"

April 30—FREDERICK FINCH STRONG, M. D.  
National Lecturer Theosophical Society.  
"A Study of Motion, Physical and Metaphysical."

## Church of the People

Music-Art Auditorium Sunday Mornings at Eleven 233 South Broadway

MANLEY P. HALL. June 11, "A God to Suit Everybody."

June 18—"Christian Heathenism and Heathen Christianity."

Friday, June 9, 8 p. m. MR. B. P. WADIA. "What India Can Teach Us."

Sunday Evening, June 11, 8 o'clock. Joint Lecture. PROF. EDGAR L. HOLLINGSHEAD, DR. FREDERICK FINCH STRONG: "The New Force--The Odic Ray; Its Nature and Possibilities."

SYMPHONY HALL, 232 South Hill St.

Wednesdays, 8 p. m., MANLEY P. HALL.

June 7. Picture Lecture, "The Queen of Night." June 14--"Aladdin and the Mystic Lamp."

Headquarters, Room 432. Lecture Classes

Mondays, 2 p. m., MAUD FLETCHER GALIGHER.

June 5, "Consummation;" June 12, "Realization."

8 p. m. DR. FRANK L. RILEY, Chinese Classics. June 5, "Taoism-Lao-Tze and the Tao Teh King;" June 12, "The Writings of Kwang-tze."

Tuesdays, 8 p. m., EVA TREW. June 6, "Nicodemus Visits Jesus at Night;" June 13, "A Night Storm on the Sea."

Thursdays, 8 p. m., DR. F. F. STRONG. June 8, "The Philosophy of Mathematics. Importance of a Proper Understanding of Numerical Values;" June 15, "Occult Effects of Conditions of Modern Life on the Coming Generation."

Lyceum 9:30 a. m. Sundays. June 11, SUZANNE DEAN, "The Cloud Upon the Sanctuary."

MUSIC-ART AUDITORIUM  
233 South Broadway

### THREE SPECIAL LECTURES

Sunday, May 28, 11 a. m. REYNOLD E. BLIGHT  
"A Dream of the World That is to Be."

Friday, June 9, 8 p. m. MR. B. P. WADIA.  
"What India Can Teach Us."

Sunday Evening, June 11, 8 o'clock. Joint Lecture. PROF. EDGAR L. HOLLINGSHEAD, DR. FREDERICK FINCH STRONG: "The New Force--The Odic Ray; Its Nature and Possibilities."

### 5. THE NEW SCIENCE OF HEALING

Frederick Finch Strong, M. D.  
Wednesday, 3:00 to 4:00 p.m.  
First lecture, September 27th.



INTERNATIONAL ASSOCIATION  
—FOR—  
RACIAL PURIFICATION

Address all correspondence to  
HON. SECRETARY,  
2235 WASHINGTON STREET  
TEL. WEST 592

San Francisco, 16 January 1922

GENERAL MEETING

International Association for Racial Purification

TUESDAY,  
~~THURSDAY~~, JANUARY 24TH, 1922, AT 8 P. M.

Gold Room, Bellevue Hotel, 508 Geary Street

....Program....

1. Business Report.
2. Lecture: DR. FREDERICK FINCH STRONG, of Hollywood, on:  
"Preparation for Parenthood."

As our meetings have been postponed on ground of the holidays of the season, we expect **every** member, and as many of their friends as possible, to attend the above announced meeting, which deals with the **most** important actions of our Association, actions to be taken almost **immediately** by the assistance of our attorneys, Messrs. McCormack and Gottesfeld.

The lecture also will be of unusual value, as Dr. Strong, staying only for a few weeks in this city to study Electronic Medicine, is one of the most prominent scientists in the United States.

PLEASE ALL ATTEND

In the name of the I. A. F. R. P.

Yours very truly,

H. W. D.  
Vice-President

F. T.  
Hon. Secretary







## Church of the People

A Universal Fellowship

932 South Grand Avenue

Telephone 62603

AT 8 P. M. DR. FREDRICK FINCH STRONG

In Lecture Hall

March 8—Relation between Physical and Metaphysical Methods of Healing.

March 15—The Education of the Sympathetic Nervous System.

March 22—Development and Training of the Emotions.

March 29—Power of Concrete Thought.

April 4—Power of the Abstract Thought.

April 12—The Slayers of the Real.

April 19—That which is Beyond the Mind.

April 26—Perfection.

## HUMANS SLIDING BACKWARD

### *New Thought Leader Says We Are Slipping and Taking the Animals With Us in Cave Man Instincts*

It's looking pretty dark for all mankind. Sisters and brethren, hang your heads in shame. For, not only did man once have the consciousness of the animal, but since throwing off the animal instinct several years hence, he has been retrograding.

And not only has he been retrograding, developing evil and therefore disease, but the poor animals who are brought face to face with civilization are deteriorating and developing disease among themselves because of their association with mankind.

But before delving into this delicious subject, you will probably want to know what it is all about. Well, it's "new thought." And the refreshing facts cited herein are among those discussed last night by Dr. Frederick Finch Strong, eminent metaphysicist of Hollywood, at the second national conference of the National New Thought Association, Inc., of Burlington Apartments.

When man first began to throw off the animal instinct and began to reason, in the opinion of Dr. Strong, the well-known cave man was a degenerate of a higher civilization. Man began to use reason instead of animal instinct, because of his desire for the repetition of worldly pleasures, Dr. Strong said. And when man with his consciousness of an animal instinct realized that he could derive pleasures by certain means, he began to reason and devise ways of repeating such sensations as often as possible. Those sensations included tickling the palate by eating and others of a more animal nature.

And so that was the beginning of brain work, and thus man gained his mind through loss of animal instinct. But, take it from

Dr. Strong, man with the consciousness of the animal was much better in many ways than man with his mind. And man is now going through a transition stage. He is studying himself more and more. But, it would appear, according to Dr. Strong, that the more he learns about himself the worse he gets.

In other words, as was said before, it looks pretty dark for us. Still, Dr. Strong gives a ray of hope. We are sliding back, but it is all for some mysterious purpose. We will "hit bottom" and then began to improve. "The pearl diver must first reach the bottom before he gets the pearl," in the words of the metaphysicist.

But hold, friends, while we are retrograding, we are carrying the poor animals with us. The beasts of the forest which have never come into contact with our cherished civilization are better physically and "morally" than domesticated animals. As Dr. Strong explained it, we, poor we, radiate some mysterious bad influence or other which is responsible for the diseases of the to-be-pitied animals.

And now recalling Dr. Strong's belief that the cave man was a degenerate of a former higher civilization, we are wont to ponder whether we members of poor mankind can be returning to the mentality and manner of living of the degenerate of that lost higher civilization. It's all mighty mysterious.

DR. FREDRICK FINCH STRONG

June 6—A Frank Discussion of the Abrams Discoveries and Healing. Questions Answered.

June 13—What Becomes of Our Mistaken Ideas; Showing that Nothing is Lost in the Great Plan.

June 20—Symphonic Healing; Possibilities of Vibrations in the Future Treatment of Disease.

June 27—How Can a Human be an Individual When There is But One Self?



# X-Ray Tubes for High Frequency Coils

By Dr. FREDERICK FINCH STRONG

Lecturer on Electro-therapeutics, Tufts Medical School, Boston

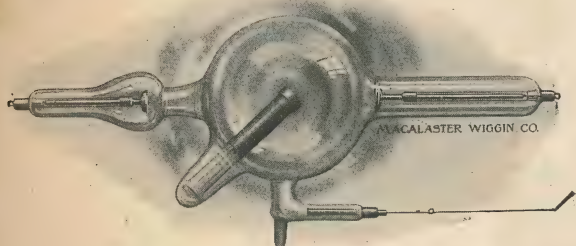
IN all the history of scientific achievement there has been perhaps no discovery of such a startling and revolutionary character as that of the X-Ray. The *Electron theory*, which forms the basis of the chemistry and physics of our New Age has been formulated almost en-

an atmosphere. He gave to the world the "Crookes tube," with which Lenard in 1894, proved the existence of the "Cathode rays," and from which in 1895, Roentgen accidentally discovered a new form of emitted energy which he tentatively called the "X-Ray."

We all recall the circumstances of this discovery. Roentgen was experimenting with a Crookes tube enveloped in an opaque cover, when he noticed a bright glow on a nearby card, coated with Platinum-Barium-Cyanid. The glow continued even when the uncoated surface of the card was presented to the tube, and further experiment showed that the interposition of the experimenter's hand between the covered tube and the fluorescent screen would cause a shadow-picture of the bones to appear upon the glowing surface.

The publication of Roentgen's discovery led investigators in all parts of the world to study the new phenomena. Static machines and Ruhmkorff induction coils were at first employed to excite the Crookes tubes, but the intensity of the re-

may be made in the fraction of a second. For the general practitioner, the dentist and the amateur experimenter, however, the high-frequency apparatus is still the most convenient and inexpensive device for ex-



Standard Form of Single-Focus High Frequency X-Ray Tube. The First Powerful X-Ray Tubes Were Excited By a High Frequency Oscillator.

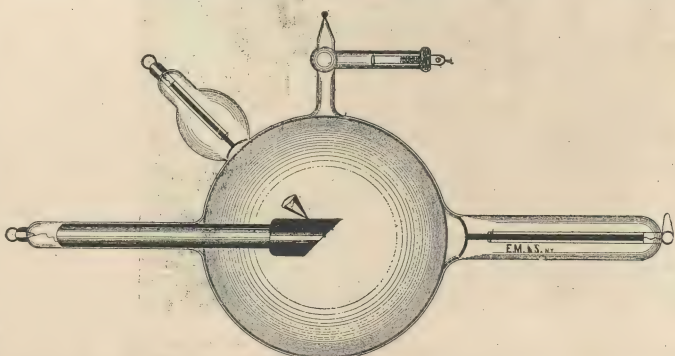
tirely from deduction made possible by the work of Roentgen and the Curies.

If we review the history of these discoveries we find that they have resulted from long series of researches dealing with the phenomena of electrical discharges in partial vacua.

The air pump was invented in 1650 by Otto von Guericke; by its use Sir W. Snow Harris, in 1834 was able to show that the spark-length of a given electrical machine increases in inverse ratio to the pressure of the gas thru which it passes. His tubes were exhausted to about one five-hundredth of an atmosphere, and the discharge took the form of a pencil of violet-pink light.

Geissler, in 1838, experimented with discharges in low vacua, and invented the beautiful tubes which bear his name. By improving the air-pump, he was able to withdraw all but one ten-thousandth of the original air from the glass tube, and change the color of the glow, in the electrified space from violet-pink to a pure white.

The invention of the mercury air-pump by Sprengel in 1865, made it possible for



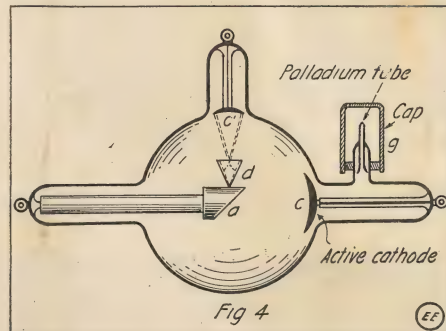
Commercial Form of a Second Type of Single-Focus High Frequency X-Ray Tube Shown Sectionally in Fig. 4. These Tubes Are Adapted to High Power Tesla or Oudin Coils.

sulting X-rays was not very great. In those days an induction coil giving a four-inch spark was regarded as exceedingly powerful. We know now that such an apparatus is entirely inadequate to the production of X-rays for any practical purpose.

Tesla and Elihu Thompson advocated high-frequency currents for X-ray generation, and in 1896 the Knott Apparatus Company of Boston designed the first practical commercial X-ray machine. It consisted of an open-core transformer, glass-plate condenser and Tesla coil, immersed in oil, and a rotary spark-gap not unlike those now used in Radio-telegraphy.

A few months later, the writer made the first practical high-frequency apparatus having solid insulation instead of oil, and suitable for therapeutic as well as X-ray work. The many types of high-frequency machines that are now made for physicians' use are but variations and improvements of this original apparatus.

At the present time the professional Roentgenologist uses almost exclusively powerful apparatus of the high-tension transformer type; the high-voltage, low-frequency, alternating current being rectified by a high-tension commutator operated by a synchronous motor. With such an apparatus and suitable X-ray tubes, a skiagraph of the adult thorax or abdomen

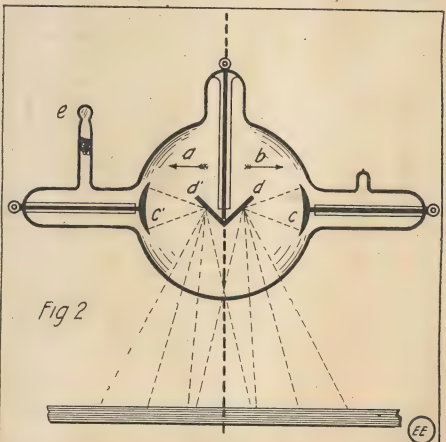


Special Form of X-Ray Tube of the Single-Focus Type, Fitted With Palladium Vacuum Regulator and Focussing Mirror "C", Also Copper Cone "d," for Dissipating Auxiliary Cathode Stream.

citing X-ray tubes, and produces results quite adequate to their respective needs.

The construction of an X-ray tube is familiar to all:—in its simplest form it consists of a Crookes tube (as shown in Fig. 1), containing an anode or target (a), faced with platinum or tungsten, and a concave aluminum cathode (b). A high-voltage, unidirectional current flowing thru the tube causes streams of electrons to pass from the cathode to the target, which is set at an angle of forty-five degrees to the axis of the tube. The electronic stream ("Cathode rays"), is reflected at right angles and part of the energy is transformed into X-rays, which emerge from the glass in a divergent cone, as shown. Such a tube is not suited for use with alternating or oscillating currents, as a double set of rays would be produced; this would tend to melt the aluminum cathode and cause the absorption of the residual gas in the tube so that it would soon be too "hard" to use.

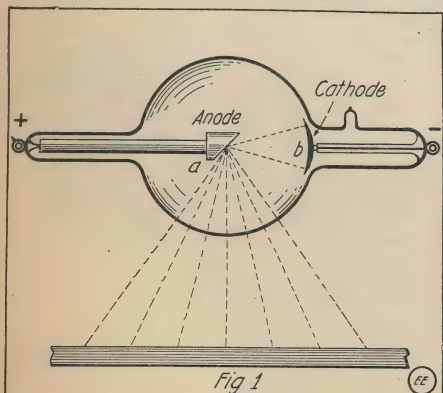
This led Elihu Thompson, in 1896, to invent his "double-focus tube"; the con-



The Original Thompson Double-Focus High Frequency X-Ray Tube Which Really Comprised Two Distinct Bulb Elements.

struction and operation of the Thompson double-focus tube is shown in Fig. 2.

(Continued on page 328)



The Simple X-Ray Tube Contains an Anode or Target "a" and an Aluminum Cathode "b." The Cathodic Electron Bombardment of Target "a" Causes X-Rays to be Produced At Right Angles or Downward As Shown.

Sir William Crookes in 1878, to study electrical discharges in rarefied gases with pressures as low as one one-millionth of







## X-RAY TUBES FOR HIGH-FREQUENCY COILS.

(Continued from page 309)

It is really a combination of two distinct tubes, as indicated by the heavy vertical dotted line. When the current passes in the direction of the arrow (b) X-rays are produced from the cathode and target (c and d) in the right-hand half of the tube; alternations in the opposite direction, indicated by the arrow (a), produce a stream of rays from the left half of the tube. This is the most efficient form of high-frequency X-ray tube, as it uses both sets of alternations. It is now practically obsolete, however, as it was found that the two sets of X-rays overlap and produced double outlines in the skiagram.

At the present time there are two types of X-ray tubes made for use with high-frequency currents. The one shown in Fig. 3 has a target of heavy copper faced with tungsten, and is mounted opposite the active cathode (c); when the current flows in the opposite direction the electronic stream from the small cathode (c') becomes choked out and dispersed by the constricted glass neck (d), which acts, in a measure, as a valve, eliminating the inverse discharge.

Another type of modern high-frequency X-ray tube is shown in Fig. 4, in which the cathode rays from the small aluminum mirror (c') focus inside a small copper cone (d), in which they are converted into heat and take no part in the production of the X-rays.

Tubes of these types may be operated by the current from a Tesla coil or from an Oudin resonator. In a previous article in the May issue of the *ELECTRICAL EXPERIMENTER* the writer has given details for the construction of apparatus of both these types.

When the Tesla coil is used its terminals are connected to the two aluminum cathodes (c and c'); the Oudin coil has but one active terminal which should be connected to the active cathode (c); the small cathode (c') may be grounded, but this is not absolutely necessary.

X-ray tubes are spoken of as "hard" and "soft"—a "hard" tube is one which has been exhausted to a very high degree—(say, one-ten-millionth of an atmosphere)—a "soft" tube has a lower degree of exhaustion (between one-five-hundred-thousandth and one-one-millionth of an atmosphere). More current is needed to operate a hard tube, but it gives deep penetration and works more quickly. The soft tube, on the other hand, produces strong contrasts in the skiagram or fluoroscope.

Tubes have a tendency to become hard by use, the trace of residual air or gas being gradually driven out thru the intermolecular spaces of the glass by the electronic bombardment. So it is necessary to provide the tube with some means for replacing these lost ions at intervals.

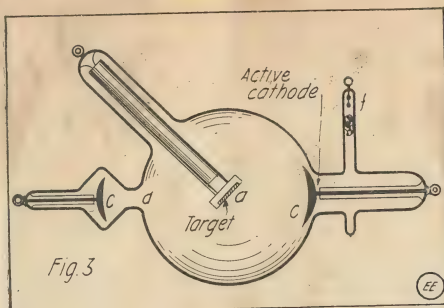
The first is of the thermic type and is now seldom used (see e, Fig. 2); it consists of a small bulb containing potassium chlorate sealed into the side of the X-ray tube. By heating this bulb with a match or spirit-lamp, a trace of oxygen is given off, which reduces the pressure in the tube to the required degree. The modern high-frequency tubes use the forms known as the "spark regulator" and the "osmotic regulator."

The first is the more common type and is shown in (f, Fig. 3). A platinum wire is sealed in the regulator tube which contains a gas-producing chemical, such as manganese dioxid, or sodium formate, f.

In practise a piece of E-shaped stiff brass wire set in a rubber handle is used to divert a portion of the current from the active terminal to the wire in the regulator; the heat from the current liberating the gas and softening the tube.

A regulator of the osmotic type is shown at (g, Fig. 4). It consists of an extremely small tube of metallic palladium sealed into the side of the X-ray bulb, the inner end of the metal tube being open while the outer end is closed. Ordinarily the tube is protected by a cylindrical glass cap. If the latter be removed, and the flame of a spirit-lamp be applied to the closed extremity of the palladium tube, hydrogen ions from the interior of the flame will be drawn thru the intermolecular spaces of the heated metal into the X-ray bulb.

Amateurs and physicians using X-ray outfits often desire to view considerable areas of the body simultaneously; this can be done only by using a large fluorescent screen and covering the X-ray tube with opaque material. Ordinary fluoroscopic screens are coated with barium-platinum-



One Form of Commercial High-Frequency X-Ray Bulb of the Single-focus Type, Utilizing An Active Cathode "C", Also a Small Cut-off Cathode "C'". The Inverse Cathodic Stream from "C'" Is Choked Off and Dispersed by the Constricted Glass Neck "D", Which Acts As a Valve.

cyanid and cost about \$0.25 per sq. inch. A very good screen may, however, be easily made by evenly coating a sheet of white cardboard with a solution of sodium silicat and immediately sifting on it finely powdered calcium tungstat. Gently raise the screen on its edge and tap it to shake off the excess of tungstat; then allow to dry. A still simpler experimental screen may be made by painting a card several times with a strong solution of quinine bi-sulfate.



## How to Use High Frequency Currents in the Treatment of Disease

By Dr. FREDERICK FINCH STRONG.

Lecturer in Electrotherapeutics, Tufts Medical School, Boston

**N**OW that the exigencies of war have temporarily suspended the activities of amateur Radiotelegraphers, many of those possessing transmitting outfits are using them for the experimental study of the

be used by the amateur. It is made up as follows:—

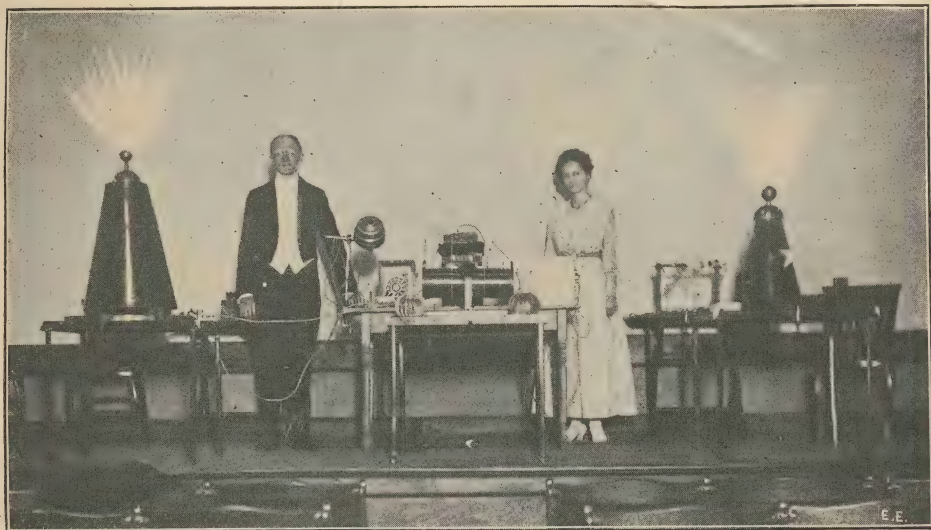
*Transformer*.—Any standard  $\frac{1}{4}$  K.W. radio transformer (E. I. Co., Clapp-Eastham, Thordarson, etc.)

*Condenser*.—Standard wireless glass plate

turns to the inch; 12" winding, 1" margin on each end). Slip the secondary into a 4" mailing tube, center accurately by means of three corks in each end, seal one end by standing coil on end in a shallow pan filled with melted resin, and when cold fill the annular space between tubes with a mixture of beeswax (yellow) one part, to resin, 5 parts. Wind primary, consisting of six turns "Magneto" cable (which can be bought for five cents a foot) around center of outer tube; turns spaced  $\frac{1}{2}$ " apart. Secondary leads, of magneto cable, should be connected to the outer posts of the writer's "triple terminals." One arrangement of the complete apparatus is shown in Fig. 2. The triple terminals greatly facilitate the therapeutic use of the Tesla Currents, and also afford an opportunity for studying different forms of the high-frequency discharge. The actual terminals, A and C, are formed of two moulded high-tension insulators, surmounted by 2" brass bed balls, (known to the furniture trade as "brass vases"); thru terminal A slides a brass rod having a rubber or hard-wood handle on the outer end, and a 3" flat brass disc on the inner end. Terminal C is similar but has a small brass ball on the inner end of the sliding rod. A "Dummy" terminal, B, is mounted as shown, midway between the actual terminals. By closing the gap between the brass discs and opening that between the balls B and C, an arc discharge is obtained, while by closing gap B C, and separating the disc electrodes, the discharge forms a beautiful purple brush or "effluve."

In giving treatments the patient is seated on a folding condenser pad of thin fibre of Bakelite, Fig. 4, backed with copper or tin foil to which is attached an insulated cord connected with terminal C. The operator will require a set of vacuum electrodes, Fig. 5, a metal hand electrode formed of an eight-inch length of  $\frac{1}{4}$ " nicked brass pipe, "effluve" electrode made from the gong of an old electric bell screwed on the end of a hard-wood handle, and two pieces of sheet block tin 3" x 3" x  $\frac{1}{32}$ " with insulated conducting cords soldered to their corners, Fig. 6. The condenser-pad can be obtained from any electro-therapeutical supply house, as also the vacuum electrodes and other materials.

For ordinary general treatment to promote nutrition, increase circulation and elimination—a treatment of value in almost any condition of impaired health—the balls and discs are widely separated and



This Photo Shows Dr. and Mrs. Strong with the Elaborate Apparatus Used in Lecturing in Different Cities. Note the Large Conical Oudin Coils in Full Activity.

phenomena of High Frequency currents.

In the ELECTRICAL EXPERIMENTER for May, 1917, the writer described the construction of a Tesla D'Arsonval high-frequency outfit made from standard "Wireless" apparatus, consisting of a  $\frac{1}{4}$  or  $\frac{1}{2}$  K.W. transformer with glass plate condenser and oscillation transformer, the latter used as a series inductance to obtain various effects from the Tesla coil, or as a "D'Arsonval Solenoid" for obtaining the "Diathermic" and "Auto-condensation" currents so valuable in the treatment of certain diseases.

Many excellent results can be obtained from high-frequency treatment administered by those who have little or no knowledge of medicine. A physician's advice should always be obtained before undertaking the treatment of any serious case, but the amateur may safely employ moderate doses of Tesla currents, and even mild diathermy and autocondensation, provided he makes himself reasonably familiar with the elementary principles of electrotherapeutics.\*

In a few States there is a law prohibiting the therapeutic use of electricity by any but licensed physicians, but even this would not apply to treatments given gratuitously by amateurs to relatives or friends. A number of the writer's former pupils have become successful practising electrotherapeutists, altho they are not physicians. Most of them wisely refrain from the use of the sinusoidal, Galvanic and static currents; these belonging more to the field of the electro-medical specialist.

A simpler and cheaper apparatus than the one described in the May issue of this journal will give all the varieties of therapeutic high-frequency currents that may safely

condenser, one section of .005 microfarad; two sections of .01 m.f., each in series will be safer.

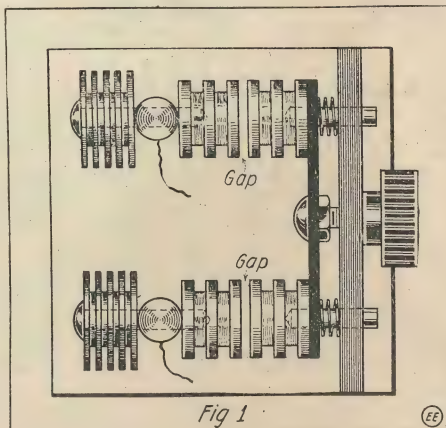


Fig. 1. A Simple Form of Fixed Spark Gap, Found Very Satisfactory for High Frequency Outfits.

*Inductance Coil*, ("D'Arsonval" solenoid), thirty turns No. 12 bare copper wire, wound around a wooden cage 8" in diameter,  $\frac{1}{4}$ " between turns.

*Spark gap*.—Adjustable series gap, made as shown in the diagram, Fig. 1. The sparking surfaces are of copper, turned in annular or concentric grooves as described in a previous article. Copper washers of  $\frac{1}{2}$ " and 1" diameter, are slipped alternately on an 8-32 machine screw, and form the heat radiating wings. The further construction and operation of the gap is indicated in the drawing.

*Tesla Coil*.—Identical in winding to that previously described, viz.,—secondary—on a 2" diameter paper mailing tube wind 480 turns of No. 34 S. C. C. magnet wire (40

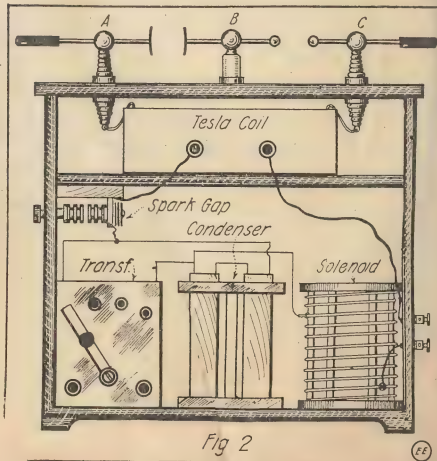


Fig. 2. Assembly of Apparatus in the Author's High Frequency Therapeutic Outfit.

\* The new edition of the writer's book, "Essentials of Modern Electrotherapeutics," now in press, gives all needed information, with an alphabetical list of various diseases and the method of treating them electrically.



# Laws of Matter Up-to-Date

Compiled by HELEN M. DAVIS, Editor of CHEMISTRY

1. A single ATOM is the tiniest particle of any chemical element that can exist by itself and retain the qualities that mark it as that element.
2. All material things in the universe known to our senses are composed of one or more CHEMICAL ELEMENTS.
3. Substances composed of more than one element are known as COMPOUNDS. Atoms of elements are held together in compounds by electrical forces in the outer parts of their structure.
4. The smallest unit of a compound, usually composed of two or more atoms, is known as a MOLECULE.
5. There used to be 92 chemical elements, from hydrogen ( $^1\text{H}$ ) the lightest, to uranium ( $^{92}\text{U}^{238}$ ), the heaviest. There are now two new elements, NEPTUNIUM ( $^{93}\text{Np}^{239}$ ) and PLUTONIUM ( $^{94}\text{Pu}^{239}$ ).
6. When elements are represented, as above, by their chemical SYMBOLS, the subscript number is the atomic number. This is different for each element. The superscript number represents the atomic weight.
7. One of the qualities characteristic of matter is weight or mass. ATOMIC WEIGHT is expressed on a relative scale, as compared with the weight of hydrogen which is taken as one.
8. ATOMIC NUMBER is the measure of the electric charge on the nucleus of the atom. Atomic weight is the measure of the atom's mass.
9. Different samples of the same element, when tested by chemists, are sometimes found to have different atomic weights. Lead which occurs with radium, for example, has a different atomic weight from ordinary lead.
10. In all other ways the two kinds of lead are chemical twins, exactly alike except for weight. Elements which differ in weight only are called ISOTOPES.
11. Uranium has several isotopes. The usual kind, whose atomic weight is 238, was used to produce the two new elements. U-235 was used to make the ATOMIC BOMB.
12. Each of the new elements, neptunium and plutonium, has two isotopes whose atomic weights are 238 and 239.
13. Different elements, quite distinct in chemical behavior, may have the same atomic weight. We have  $^{92}\text{U}^{238}$ ,  $^{93}\text{Np}^{238}$  and  $^{94}\text{Pu}^{238}$ , all with different properties. Such elements are now called ISOBARS.
14. All atoms are composed of standard interchangeable parts. These are PROTONS, NEUTRONS and ELECTRONS.
15. Protons and neutrons make up the NUCLEUS of the atom. The structure of the atom is much like that of the solar system. The nucleus corresponds to the sun at the center. The planets are electrons.
16. The proton and the neutron each have a mass about equal to that of a hydrogen atom, which is 1 on the chemist's scale. Each is about 1800 times heavier than the electron.
17. The ELECTRONS, light in weight and some distance away from the heart or nucleus of the atom, revolve around the nucleus much as planets revolve around the sun. They are held in their courses by electric attraction.
18. The proton has a POSITIVE charge of electricity, the electron has a NEGATIVE

- charge equal and opposite to the positive charge of the proton. The neutron has no charge at all.
19. The difference in chemical properties of the elements is caused by difference in the number of protons in the nucleus. This is the ATOMIC NUMBER.
20. Atomic weight is the SUM of the weights of the protons and neutrons in the nucleus.
21. It is the NEUTRON which figures in the transmutations which give atomic power. Neptunium and plutonium were formed by bombarding uranium 238 with neutrons.
22. Neutrons can PENETRATE to the nucleus of heavy atoms when charged particles would be repelled by charges in the atom.
23. The HYDROGEN atom is believed to have just one proton as its nucleus, with one electron circling around it. Hydrogen's atomic weight and atomic number are each one.
24. Hydrogen has one isotope which is just like ordinary hydrogen except that it is twice as heavy. It is known as "heavy hydrogen" and sometimes as DEUTERIUM. Its compound with oxygen is called "heavy water."
25. The nucleus of HEAVY HYDROGEN contains one proton and one neutron. The atomic number of heavy hydrogen is one, corresponding to one proton. The atomic weight is two, corresponding to the two heavy particles, proton and neutron.
26. HELIUM has two protons and two neutrons in its nucleus. The two protons correspond to helium's atomic number two. The combined weights of protons and neutrons in the nucleus give helium its atomic weight 4. Two electrons, held in their orbits by the two protons, revolve around the nucleus.
27. The VOLUME of an atom is determined by the orbits of its outermost revolving electrons. Only a small fraction of the size of an atom is actually occupied by the protons, neutrons and electrons, just as the space occupied by the sun, the earth and other planets is only a small part of our solar system.
28. In spite of all the unoccupied SPACE, an atom is quite IMPENETRABLE to other atoms and to larger bodies. The electrons revolve millions of times a second, and keep everything out of the space within quite as effectively as though they were everywhere at once.
29. The only things that can get inside an atom are smaller things, FRAGMENTS of other atoms, protons, neutrons or electrons. They must be shot with just the right speed. These fragments of atoms are observed as radiations given off by radio-active elements which are breaking up spontaneously.
30. RADIATION is wave motion, known to us as the electro-magnetic waves used for radio transmission, heat, light, X-rays and cosmic rays. Large numbers of extremely tiny particles in motion together act like waves.
31. Three types of radiation are given off by radio-active substances. ALPHA particles are high-speed nuclei of helium atoms. BETA particles are high-speed electrons. GAMMA rays are electro-magnetic radiations similar to X-rays and light.
32. Of these, only the gamma rays are

properly called radiations, and even these act very much like particles because of their short wave-length. Such a "particle" or quantum of gamma radiation is called a PHOTON.

33. In general, the gamma rays are very penetrating, the alpha and beta rays less so. Even though the alpha and beta rays are not very penetrating, they have enormous SPEED.

34. The speed with which atom particles travel is the source of atomic energy. ENERGY is capacity to do work. It is work stored up for future use.

35. If you raise a weight to a height above the ground and suspend it there by some device, the WORK you put into raising it can be stored there indefinitely as POTENTIAL ENERGY. It will be there, ready, whenever you decide to release it.

36. The energy which a moving body has because it is in motion is called KINETIC ENERGY. The kinetic energy of any particle depends upon its mass and the square of its velocity. Energy is conserved by the moving particle until it strikes an object, then work is done.

37. All ENERGY is either potential or kinetic. Either one can be converted into the other. These two conversions are continually occurring.

38. Particles of atomic size have kinetic energy arising from several different kinds of MOTION. All atoms are constantly in motion.

39. If the atoms are so dispersed that the material constituting them is a GAS, that gas will exert pressure on all sides of the container that holds it. If the container is a balloon bag, the imprisoned gas can do work by lifting heavy weights into the air.

40. Atoms which compose an element that will combine readily with another element, as hydrogen or carbon will combine with oxygen, have unsymmetrical arrangements of the outer electrons in their systems. These unsymmetrical arrangements tend to set up a sort of strain, which causes CHEMICAL COMBINATION to take place when elements with suitable combining powers are brought together.

41. These unsymmetrical arrangements give rise to FORCES which result in kinetic energy. This energy appears, for example, when carbon and oxygen burn to carbon dioxide, giving off heat, or hydrogen and oxygen explode to form water, again giving off heat.

42. Chemicals combining to form stable compounds give off energy in the process. These are known as EXOTHERMIC REACTIONS. Combinations which absorb energy, forming unstable compounds, are known as ENDOTHERMIC REACTIONS. Explosives, for example, which are highly unstable, are formed by endothermic reactions.

43. Chemical forces, electricity and heat are all forms of energy. Potential and kinetic energy may be distinguished in each case.

44. These energies all arise from motion of the atom as a whole, or motion resulting from attractions and repulsions between the outer PLANETARY ELECTRONS of the atom's structure.

45. Energy resulting from motion of particles deep within the structure of the atom was unknown until the discovery of RADIO-ACTIVITY.

46. Radioactive elements undergo SPONTANEOUS breaking up of their atoms, giving off alpha and beta particles and gamma rays. Loss of these particles causes the radio-active elements to change into other elements.



# Laws of Matter Up-to-Date

Continued from previous page

47. The energies shown in these TRANSFORMATIONS are thousands of times greater than the kinetic energies which the molecules of a gas have by reason of their motion when heated. They are thousands of times greater than the energy changes per atom in chemical reactions.

48. The property of matter that connects it with motion is INERTIA. Inertia is opposition to change of motion.

49. One conclusion that appeared early in the development of the theory of RELATIVITY was that the mass due to inertia of a moving body increases as its speed is increased.

50. This increase implied an equivalence between an increase in energy of motion of a body (kinetic energy) and an increase in its MASS.

51. It was for this reason that Einstein suggested that studies of radioactivity might show the EQUIVALENCE of mass and energy.

52. Einstein's statement is that the amount of energy,  $E$ , equivalent to a mass,  $m$ , is given by the equation  $E=mc^2$  where  $c$  is the VELOCITY OF LIGHT.

53. From this equation, one kilogram (2.2 pounds) of matter, if converted ENTIRELY into energy, would give 25 billion kilowatt hours of energy. This is equal to

the energy that would be generated by the total electric power industry in the United States (as of 1939) running for approximately two months.

54. Compare this fantastic figure with the 8.5 kilowatt hours of heat energy which may be produced by BURNING an equal amount of coal.

55. Until the atomic power research program, no instance was known of matter being converted into energy without more energy being used to produce the transformation than was released by it.

56. Two axioms of physics stated: (1) MATTER can be neither created nor destroyed; (2) ENERGY can be neither created nor destroyed. For all practical purposes they were true and separate principles until about 1940.

57. It is now known that they are, in fact, two phases of a single principle, for we have discovered that energy may sometimes be CONVERTED into matter and matter into energy.

58. Such conversion is observed in the phenomenon of nuclear FISSION of uranium, a process in which atomic nuclei split into fragments with the release of an enormous amount of energy.

59. The extreme size of the CONVERSION FACTOR explains why the equivalence of mass and energy is never observed in ordinary chemical combustion.

60. We now believe that the heat given off in such COMBUSTION has mass associated with it, but this mass is so small that it cannot be detected by the most sensitive balances available.

61. Transformation of matter into energy is an entirely different sort of phenomenon than the usual chemical transformations, where the matter is changed into a different form but its MASS persists.

62. From the standpoint of the Laws of the Conservation of Matter and of Energy alone, transformation of matter into energy results in the DESTRUCTION of matter and CREATION of energy.

63. The OPPOSITE transformation, which astronomers believe may be going on in some of the stars, amounts to the destruction of energy and the creation of matter.

64. It is difficult for us to imagine the reconciliation of two such different concepts as matter, with its characteristic mass or weight, and energy, which does not have this quality. We shall, perhaps, be forced to think of the stuff of the universe as some such combination of matter and energy as would be symbolized by the coined word "MATTERGY."

Science News Letter, October 6, 1945

## For Exciting Progress Reports Read CHEMISTRY

To keep further up-to-date on important new advances in chemistry, read CHEMISTRY magazine each month. Such developments as the atom bomb and the researches looking toward the utilization of atomic energy are explained in this Science Service publication.

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## Question Box

### AERONAUTICS

Who has been awarded the Daniel Guggenheim Medal for this year? p. 222.

### BOTANY

What are the redeeming traits of the Japanese honeysuckle? p. 216.

### CHEMISTRY

How much of the new poison, ANTU, is needed to kill 300,000 rats p. 211.

How well were our soldiers prepared for gas attacks? p. 215.

What is "mattergy"? p. 224.

### ENGINEERING

How many homes does fire attack each day in this country? p. 213.

### GEOGRAPHY

How was the New Guinea Shangri-La identified? p. 216.

### MEDICINE

How has it been shown that the tropics do not "thin" blood? p. 218.

### ORDNANCE

What is the proximity fuze? p. 214.

### PLANT PHYSIOLOGY

What effect does vacuum treatment have on some plants? p. 218.

### ZOOLOGY

What are "habu" snakes? p. 212.

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the patient is seated on the condenser pad connected to the terminal C. Open the spark gap until a vacuum electrode lights up when held about a foot from the patient: this shows that the body is being charged inductively to a high potential, the charges alternating some 1,500,000 times per second. The patient feels nothing and is absolutely insulated from all electrical connection with the apparatus, yet hot sparks can be drawn from any part of the body showing that the whole organism is being subjected to a rapidly alternating molecular massage, which has the effect of increasing all the vital functions without acting as a stimulant. In other words the treatment tends to bring the patient into a normal condition, but it has no more effect upon a perfectly healthy person than pouring water into a pail already full. This is the reason why high frequency treatments may be safely given by those who are not physicians, whereas all other forms of therapeutic currents act as stimulants or counter-irritants and must be employed with precise knowledge and discrimination.

The condenser treatment as described above, is usually given for about fifteen minutes after which the bulb-shaped vacuum electrode is applied for a few minutes over the spine and solar-plexus. It is applied either directly to the surface of the body or thru one thickness of clothing. The insulating handle of the vacuum electrode is connected to the middle post B, in Fig. 2, and after turning on the current and placing the electrode on the patient, the discs A and B, are closed, being opened again before lifting the electrode from the surface of the body: if this is not done painful sparks will pass from the glass electrode to the patient. In treating obstinate cases of recurrent neuralgia, chronic rheumatism and partial paralysis, this vacuum sparking treatment is often beneficial, but it is rather unpleasant for most cases. A milder form of this counter-irritant effect is obtained by using the vacuum electrode over two or three thicknesses of clothing; it must be moved rapidly from place to place, otherwise the skin might be blistered.

For sedative effects and to reduce local inflammation and congestion, the vacuum electrode should always be applied directly

to the skin or mucous membrane; this applies to such conditions as acute rheumatism, neuritis, tonsillitis, etc., an acute "cold in the head" (coryza) can often be aborted

around the metal "pipe" electrode connected to the upper turn of the coil, the current is turned on and the spark-gap opened until a pleasing sensation of warmth is felt flow

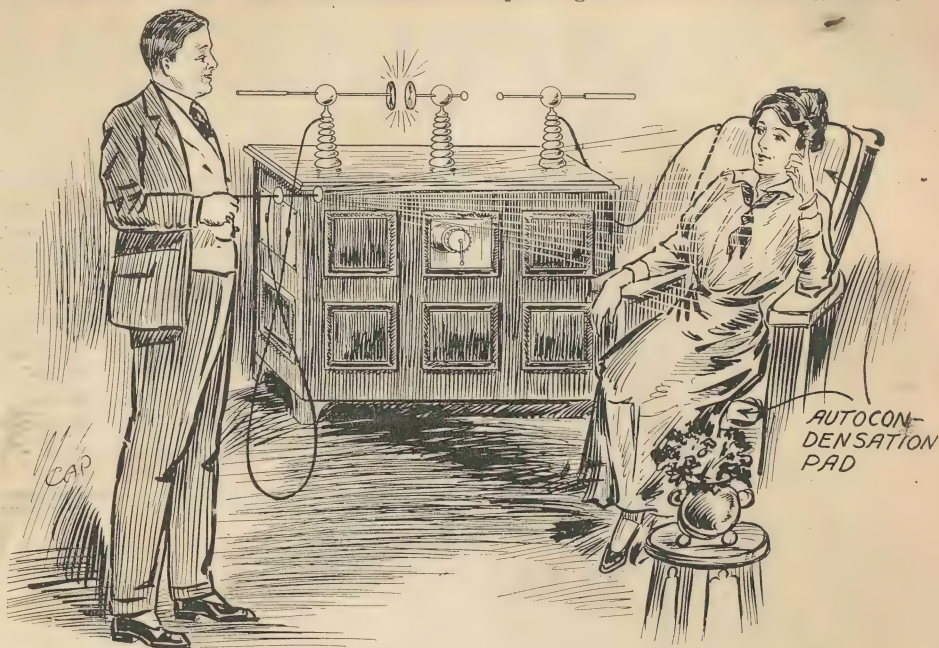
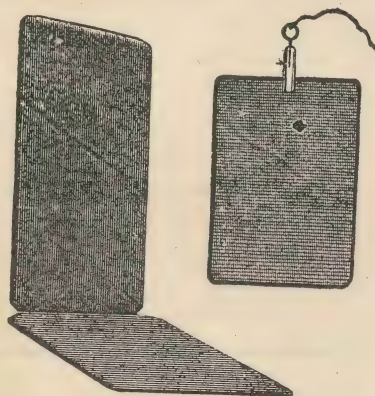


Fig. 3. Showing How a Patient Is Given the High Frequency "Effluve" or Spray Treatment. The Patient Sits on a Folding Condenser Pad Placed in the Chair.

in one treatment by the above technique, using the vacuum electrode over the nose



Figs. 4 and 6. Condenser Pad Used for Giving Auto-Condensation Treatment and Auxiliary Tin Electrode.

and the thin slender vacuum electrode in the nasal cavity.

In treating skin diseases, such as eczema and acne, where we wish to avail ourselves of the antiseptic and tonic effects of the "effluve," we connect the effluve electrode in place of the vacuum electrode, close the discs and gradually approach the bell of the electrode to the patient until a full, blue violet effluve plays upon the surface to be treated (see Fig. 3). To obtain the best effluve effects several turns of the tuning coil should be used in series with the Tesla primary (see article in May issue). The effluve is also valuable as a general tonic in sluggish conditions of the digestive system, also in nervous depression and functional nervous diseases.

For the relief of abnormal arterial tension—"high blood-pressure", and in the treatment of arteriosclerosis, as well as in conditions involving excess of uric acid, we employ "D'Arsonval autocondensation." To obtain this current we short-circuit the Tesla primary by means of the single-throw switch, and attach the condenser pad to the lowest turn of the "Solenoid" or tuning coil. The patient clasps both hands

ing up the patient's arms. In all regular therapeutic high-frequency outfits, a hot-wire milliamperemeter is placed between the patient and the machine. This is not necessary in connection with the above described apparatus, as it only delivers a maximum of 800 milli-amperes to the patient—an amount well within the limits of safety. In chronic cases autocondensation should be given daily in twenty-minute treatments. This treatment should never be given immediately after eating, or in cases of "Bright's Disease," or in organic heart trouble. High frequency treatments are of great value even in these conditions, but they should be applied only by a skilled specialist.

In inflammation following acute infection, as in acute bronchitis, incipient pneumonia, etc., we employ "local autocondensation" or "indirect Diathermy." In this method the patient sits upon the pad as for autocondensation, but instead of the metal handle we employ one of the plates of block tin; this is applied in close contact with the skin over the affected area, covered with a folded towel and held in place by the patient; a sensation of deep penetrating heat is felt, and relief from the pain and congestion follows. This is one of the most valuable methods in electrotherapeutics; were it available for the general practitioner, or better still, in the patient's home, there is no doubt but that nine-tenths of the cases of acute local infectious disease could be aborted. This is also of great value in the treatment of asthma.

Statistics show that one-seventh of all recorded deaths are due to Pulmonary Tuberculosis ("Consumption"): proper treatment in the home by high frequency currents would greatly increase the percentage of recoveries from this dread disease. Dr. Howard Van Rensselaer of the Albany Tuberculosis Hospital has reported 80% of cures by high frequency treatment, and an even higher percentage is reported by Dr. Alfred Geyser of New York. The writer feels that this subject is of sufficient importance to be treated in a separate article, which will appear in next month's ELECTRICAL EXPERIMENTER under the title "The Home Treatment of Tuberculosis with High-frequency Currents."

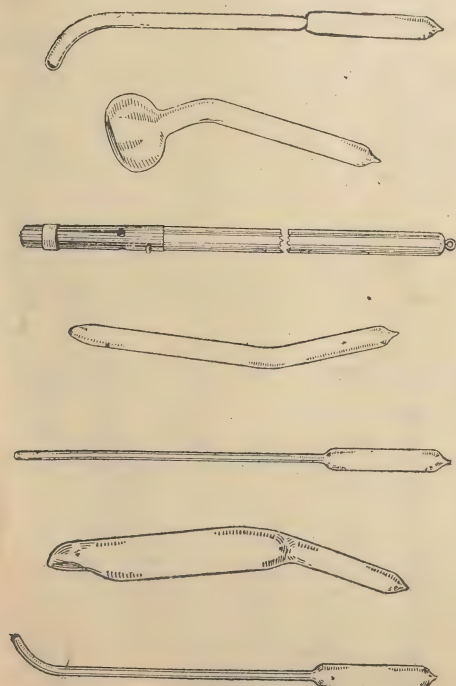


Fig. 5. Various Forms of High Frequency Treatment Electrodes. They Are Made of Glass.



# The Home-Treatment of Tuberculosis by High-Frequency Currents

By DR. FREDERICK FINCH STRONG

Lecturer in Electrotherapeutics, Tufts College, Boston

STATISTICS show that one death in every seven is caused by tuberculosis, usually in the form called "Pulmonary tuberculosis," "Tuberculosis of the Lungs" or "Consumption." Sanitary regulations, isolation of cases and hygienic education are rapidly lowering this high death rate, but tuberculosis is still humanity's most terrible scourge.

Thruout the ages "The Great White Plague" has done more to retard human progress than all the wars of the centuries—not excepting the present Armageddon.

Fortunes have been spent in the study of the prevention and cure of this disease; countless fortunes have been made by quacks and mistaken enthusiasts who either claimed or believed themselves to have discovered "A Sure Cure for Consumption." The discovery of tuberculin by Koch was widely heralded as the longed-for panacea, but it proved a failure, and up to the present time no "specific" has been found for the cure of tuberculosis.

The importance of the subject is further emphasized when we reflect that even when it does not manifest as consumption, tuberculosis still does its insidious work in undermining the stamina of the entire race. Dr. A. C. Geyser states that "ninety per cent of all children are infected before their twelfth year, and nearly all bodies that come to autopsy show unmistakable signs of previously existing tubercular lesions." That more people do not develop the disease in its active form is due to the natural curative forces that are always at work in the human body.

Disease germs grow only in a suitable soil or medium; healthy human tissues do not furnish this medium. Only when these tissues are weak, inactive or charged with dead matter do they allow disease germs to multiply in their midst and produce their poisonous secretions.

In a previous article in the March, 1917, EXPERIMENTER—"Electricity and Life"—the writer called attention to the existence of the "Vital-force," or "Prana," thru the activity of which all life is maintained. This is absorbed from the food, air and water,

and is probably distributed by a circulating system all its own—a subtle "Ethereic Body" which interpenetrates the coarser molecules of the organism and is doubtless formed of imponderable chemical atoms finer than the gas atom and coarser than the electron. Just as modern physicists find it necessary to employ the hypothesis of "The Ether of Space" in order to account for the phenomena of radiant energy, so the most advanced of our physiologists and biologists are assuming the existence of the "Ethereic Body" in order to explain the phenomena of life in animal and vegetable bodies.

Probably the great sympathetic nervous system distributes the life-carrying matter of the etheric body in much the same way as the heart and blood vessels transmit food and oxygen to the cells and tissues. The latter circulation depends upon the maintenance of the former, for if pressure is made over certain nerve centers the blood stream is retarded or ceases altogether; pressure on another center stops the breathing mechanism and death from syncope follows. Great discoveries will be made in the immediate future thru the study of the nerve currents and their relation to the Etheric Body and to "Vital Force."

It is because this vital circulation is fairly active in the majority of persons that so many recover spontaneously from pulmonary tuberculosis. But in cases of weak "vital resistance," where the Prana is not actively distributed to the lung cells, the tubercular germs grow, multiply, secrete poisons and ultimately make the physical body unfit for its human tenant who is forced to move elsewhere!

This lowered cell vitality results from hereditary weakness, improper food, and above all, from insufficient fresh air and out-of-door exercise. We can prevent this hereditary weakness in future generations by following Eugenic principles and exercising the same care that we now use in breeding blooded cattle and horses.

But meanwhile we have in our midst countless thousands of poor sufferers in whom tuberculosis exists in an active form, and the majority of whom face a lingering death scarcely less horrible

than that resulting from the "poison gas" of the war zone. What can we do for these unfortunates? Those of them who can go to the special tuberculosis sanitariums and

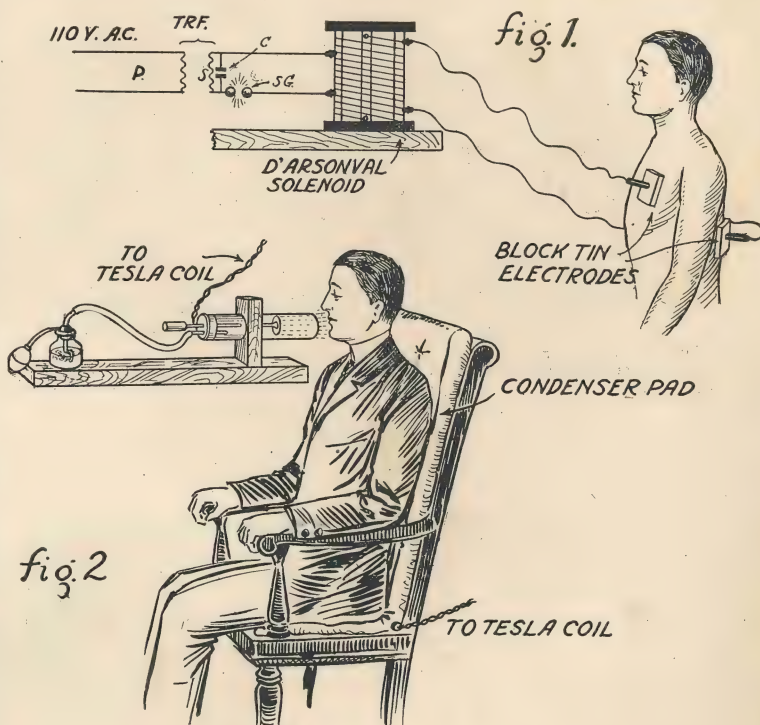
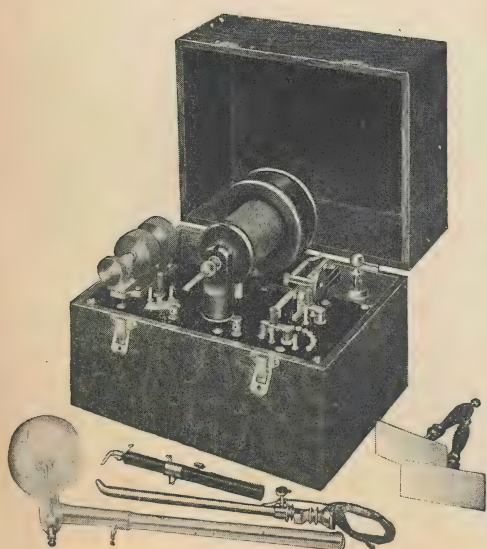


Fig. 1 Shows Treatment of Tuberculosis by "Diathermy," Fig. 2, Treating Tuberculosis by "Ozone Nebula" and Tesla Currents.

have daily treatment under proper surroundings stand a fair chance of recovery, especially when the disease is in the early stages. There are hundreds, however, who cannot go to such institutions.

When we do not use a machine it rusts and falls to pieces; when we do not use an organ or tissue of the human body the life-force and blood supply are diminished and we have a condition where disease germs can find a ready foothold. If certain parts of the lung are not periodically expanded by the inspired air they become "Anaemic" and susceptible to tubercular infection, which afterwards spreads to other parts of the lung. Now if we can find a way of revitalizing these anaemic areas, nature will use the blood and oxygen to start a regenerative process and the bacilli and dead cells will be thrown off in the expectoration. This latter material—the "tubercular sputum"—carries the infection to others; it should always be burned or received in vessels containing antiseptics such as creolin or sulphonaphthol. If this were always done the disease would soon be stamped out.

It is a well known fact that high-frequency currents when past thru the body cause every molecule to vibrate to their particular periodicity, and this vibration produces secondary effects, notably the release of heat in the tissues and the increase of local blood supply. When an acute infection occurs in any part of the



Portable Yet Effective Electrical Apparatus for Diathermy and Tesla Treatment of Tuberculosis.

(Continued on page 718)



The Boston Post-Graduate School

— OF —

Electro-Therapeutics.



1906







FREDERICK FINCH STRONG, M. D.  
1755 EL CERRITO PLACE  
HOLLYWOOD, CALIFORNIA

Estelle Lindrays articles  
about  
Dr Strong







Estelle Lindseys articles  
about  
Dr Strong

file

GLENDALE NEWS-PRESS, FRIDAY, SEPTEMBER 23, 1932

## SOCIAL ACTIVITIES

### Log Of The Good Ship Life

By ESTELLE LAWTON LINDSEY

Communications relative to this department should be addressed to Estelle Lawton Lindsey, in care of the News-Press

Here is good news for the deaf. I am publishing it in spite of a deaf correspondent who has accused me of "raising false hopes" when I tell deaf people that there may be help for them. It is definitely cruel, I grant, to raise false hopes, especially when they are held out to those who are so eager to be relieved of an affliction. I would not do it for the world. But what will my critic say to the following. But—let me assure you, before we go further, that I personally know the scientist of whom R. F. writes: For years he has been a personal friend of my family and I have watched his wonderful work with interest and sometimes with awe. Of late I had lost contact with him though at one time I was one of his patients. His work among the deaf is new to me and I write of it only because I know he can be trusted:



MRS. LINDSEY

"Since you are interested in serving people I think that it might be worth your while to visit the doctor whose name and address I inclose and yourself see the type of work that he is doing and the kind of man he is.

"He is a theosophist and a humanitarian. He is a scientist and a physician and he has invented a quite remarkable electric and colored light equipment.

"He has an apparatus especially made for the ears. It seems to awaken dead cells and has even restored partial hearing in some persons who had no ear drums.

"One of the Kosloff dancers, a lad of 19 or so, had been deaf from infancy. After three weeks of treatments with this doctor he suddenly heard the honking of automobile horns.

"He was so excited that he rushed out into the middle of the street and shouted at the top of his lungs:

"Oh, I hear you. I hear you."

"Not long after, during one of the dance rehearsals, he heard the music for the first time."

Well, I see where I spend a very pleasant afternoon. As soon as my work is done I shall jump into my flivver and hie me out to see my old friend and congratulate him.

If he can give hearing to even a part of the deaf I believe it my duty to get the message over to them, especially, as I said above, when the

physician is personally known to me and by me fully trusted.

And the very first person to whom I shall send his name and address is the lonely, doubtful woman who reproached me with raising false hopes in the breasts of people like her.

Q.—I am glad to be able to tell you of a good way to press flowers. Put about three inches of fine dry beach sand in a box.

nd Citizen-News

### Log of the Good Ship Life

By ESTELLE LAWTON LINDSEY

I wonder how many of the loggers saw a moving picture that was exhibited some time ago. It showed two world fliers

stepping from their big airplane in a remote section of New Guinea. They alighted just in front of a group of native chieftains and the terror on the faces of those poor savages was something to stay in your memory always. Those of us who saw



Mrs. Lindsey

the picture felt, probably, most superior. We understood, just as we understand the radio and a few other things that would have frightened our ancestors into a coma. But how much in fact do we understand, comparatively? I'm asking because, yesterday afternoon, I felt as much bewildered as those Papuan chiefs. I, too, saw something that, before I saw it, I would have sworn did not and could not exist.

And I saw it in the office of that physician who has invented the electric apparatus that restores hearing to the deaf.

So far it has restored hearing to 80 per cent of the deaf whom the good doctor has treated.

Will it help all who have impaired hearing? I do not know, nor does the doctor.

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Years ago I heard this scientist lecture and I heard "practical" people charge him with charlatanism and physicians—old school—denounce his claims as quackery.

And yet today, 12 years later, I see a stream of people come from his house well of many ills heretofore held incurable.

And it's all natural and scientific. It is only we who are limited in our power to believe the "unbelievable."

Q.—Is it possible for a person

PASADENA

## COMMENT—

Office of Publication, Pasadena Star-News  
Morning, Evening and Sunday (thirteen pa  
a month, \$10.50 a year Entered

### Log of the Good Ship, Life

By ESTELLE LAWTON LINDSEY

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There are three of these birds, mother and two babies, and he has tamed all of them, taught them and his cat to live in peace together.

It was a lovely sight to see the tiny creatures so unafraid of man, so trusting and so full of understanding.

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# SOCIAL

## Log Of The G

By ESTELLE LA

Communications relative to this d  
Estelle Lawton Lindsey, 1

Here is good news for the deaf. I  
correspondent who has accused me  
deaf people that there may be help  
grant, to raise false hopes, especially  
are so eager to be relieved of an af  
world. But what will my critic say  
to the following. But—let me as-  
sure you, before we go further, that



MRS. LINDSEY

I personally  
know the scien-  
tist of whom  
R. F. writes: For  
years he has  
been a personal  
friend of my  
family and I  
have watched  
his wonderful  
work with inter-  
est and some-  
times with awe.  
Of late I had  
lost contact with  
him though at  
one time I was  
one of his pa-  
tients. His work among the deaf is  
new to me and I write of it only  
because I know he can be trusted:

"Since you are interested in serv-  
ing people I think that it might be  
worth your while to visit the doctor  
whose name and address I inclose  
and yourself see the type of work  
that he is doing and the kind of  
man he is.

"He is a theosophist and a hu-  
manitarian. He is a scientist and a  
physician and he has invented a  
quite remarkable electric and col-  
ored light equipment.

"He has an apparatus especially  
made for the ears. It seems to  
awaken dead cells and has even re-  
stored partial hearing in some per-  
sons who had no ear drums.

"One of the Kosloff dancers, a lad  
of 19 or so, had been deaf from in-  
fancy. After three weeks of treat-  
ments with this doctor he suddenly  
heard the honking of automobile  
horns.

"He was so excited that he rushed  
out into the middle of the street and  
shouted at the top of his lungs:

"'Oh, I hear you. I hear you.'

"Not long after, during one of the  
dance rehearsals, he heard the mu-  
sic for the first time."

Well, I see where I spend a very  
pleasant afternoon. As soon as my  
work is done I shall jump into my  
flivver and hie me out to see my  
old friend and congratulate him.

If he can give hearing to even a  
part of the deaf I believe it my duty  
to get the message over to them,  
especially, as I said above, when the



file

GLENDALE NEWS-PRESS, FRIDAY, SEPTEMBER 23, 1932

## SOCIAL ACTIVITIES

### Log Of The Good Ship Life

By ESTELLE LAWTON LINDSEY

Communications relative to this department should be addressed to Estelle Lawton Lindsey, in care of the News-Press

Here is good news for the deaf. I am publishing it in spite of a deaf correspondent who has accused me of "raising false hopes" when I tell deaf people that there may be help for them. It is definitely cruel, I grant, to raise false hopes, especially when they are held out to those who are so eager to be relieved of an affliction. I would not do it for the world. But what will my critic say to the following. But—let me assure you, before we go further, that



MRS. LINDSEY

I personally know the scientist of whom R. F. writes: For years he has been a personal friend of my family and I have watched his wonderful work with interest and sometimes with awe. Of late I had lost contact with him though at one time I was one of his patients. His work among the deaf is new to me and I write of it only because I know he can be trusted:

"Since you are interested in serving people I think that it might be worth your while to visit the doctor whose name and address I inclose and yourself see the type of work that he is doing and the kind of man he is.

"He is a theosophist and a humanitarian. He is a scientist and a physician and he has invented a quite remarkable electric and colored light equipment.

"He has an apparatus especially made for the ears. It seems to awaken dead cells and has even restored partial hearing in some persons who had no ear drums.

"One of the Kosloff dancers, a lad of 19 or so, had been deaf from infancy. After three weeks of treatments with this doctor he suddenly heard the honking of automobile horns.

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"'Oh, I hear you. I hear you.'

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If he can give hearing to even a part of the deaf I believe it my duty to get the message over to them, especially, as I said above, when the

physician is personally known to me and by me fully trusted.

And the very first person to whom I shall send his name and address is the lonely, doubtful woman who reproached me with raising false hopes in the breasts of people like her.

Q.—I am glad to be able to tell you of a good way to press flowers. Put about three inches of fine dry beach sand in a box.

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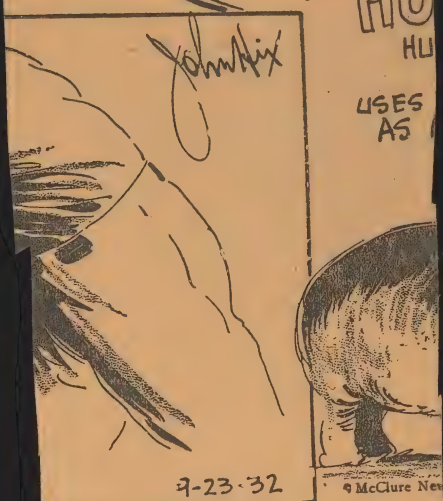


## STRANGE AS IT SEEMS

REGISTERED UNITED STATES  
PATENT OFFICE



A  
MALLARD  
DUCK  
FLEW FROM  
GREEN BAY, WIS.,  
TO GEORGETOWN,  
S. C., IN  
FIVE DAYS.



9-23-32

© McClure News

The artist also follows other unconventional methods in his art work.

He paints with spoons instead of brushes, and signs his name with his middle finger dipped in ink. Huang is a graduate of a Japanese art school.

Although he has played in fewer series than Babe Ruth, Frank Frisch has been in more games in world's championship playoff.

He played in forty-three, compared with Ruth's thirty-seven. Frisch also holds several other world



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Mrs. Lindsey

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Q—Is it possible for a person to



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## COMMENT—

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## BERLIN BOUND



MRS. STEPHEN BRUNAUER

## Seeks Opinions Of Germany's Party Leaders

Her Study Ahead For  
Sierra Madreans'  
Daughter

Germany's turbulent political scene will be watched by Mrs. Stephen Brunauer, daughter of Mr. and Mrs. R. O. Caukin of Sierra Madre, during a year's study in Berlin under an Oberlander Trust fellowship.

Brunauer, international secretary of the American Association of University Women, and holder of a degree in history, is visiting her parents for the first time in years before going abroad.

**To Interview Leaders**  
She will interview German political leaders and visit their headquarters in one of the two cities of her study, the relationship of German politics to Ger-

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*You are cordially invited to attend*

— A LECTURE —

By the noted Scientist, Lecturer and Inventor

Dr. Frederick Finch Strong

Lecturer on Electricity Tufts Medical Collège, Boston

— SUBJECT —

“Science and Theosophy”

101 Cornwall Building, Friday, Feb. 22, at 8:15 P. M.

*FREE—ALL WELCOME*

NOTE—Please Present this Card at the Door







*Biographical Data*

*Frederick Finch Strong*

*Copied from*

"WHO'S WHO IN AMERICA"

(Vol. 21)

*and*

WHO'S WHO AMONG  
PHYSICIANS AND SURGEONS  
1940-42



LOS ANGELES, CALIFORNIA

1946



"WHO'S WHO IN AMERICA" (Vol. 21)

STRONG, FREDERICK FINCH, M. D.

Inventor; b. Aurora, N. Y., June 6, 1872. s. Thomas Campbell (D.D.) and Mary Arabella (Finch) Strong. Grad. High Sch., Ithaca, N. Y. student Cornell Univ. 1889-93; Univ. of Berlin, 1893-94. Boston Univ. Med. Sch. 1895-97. M. D. Tufts Coll. Med. Sch. 1898. m. Ethel Ellen Haley, Sept. 27, 1916; Practiced Medicine, Boston '98-'08. Research in Paper-pulp, St. Petersburg, Florida. Granted 4 patents on pulp process, 1910-13; In practice of Medicine, St. Petersburg, Fla., 1913-15. Scientific Lecture Tour of U. S., 1916-18. In practice in Hollywood, Cal., 1919. Dr. Strong Therapeutic Inst., 1928-37. Senior Regent, Life Research Foundation, Inc., Los Angeles, 1938. Mem. Medical Editor's and Author's Assn. Pac. Physical Therapy Soc., Mason, Republican, Theosophist. *Author*: Modern Electro-therapeutics, 1906-18. High-frequency Currents, 1908; Science of a Living Universe, Vital Normalization; Dance of the Octaves (Scenario), 1939. *Composer*,—"Valse Petite," "Minuet in C," "Barcarole." (*Inventor*,—Tesla-High-Frequency therapeutic Apparatus; "Cold Ray" and "Cold Quartz" Ultra-Violet Apparatus, 1936. "Photosonic Harmony System (copyrt., 1936) Photosonic Synchronizer for cure of deafness (1935). "Hole-in-One Club" 1932. Author of numerous Scientific articles. *Poems*, "Echoes," Palmetto, Fla., 1913, "Lesson of the Cloud" (pub. in "New England Craftsman," 1916).

Address—

6129 Fountain Ave.  
Hollywood, California.

*Dr. Strong is also originator of special technique for cure of STREPTOCOCCUS INFECTIONS (such as "Strep. Throat," Common "Colds," Influenza ("Flu"), etc.)*

"WHO'S WHO AMONG PHYSICIANS  
AND SURGEONS"  
(1940-42)

STRONG, FREDERICK FINCH

s. Physiotherapist; b. June 6, 1872, Aurora, N. Y., Strong, Thos. Campbell (D.D.) and Mary Arabella (Finch) Strong. ed. Cornell U., 1889-93; U. of Berlin, 1893-'94, Boston U. Med. Sch., '96-'97. Tufts Coll. Med. Sch. M. D., 1898; m. Ethel Ellen Haley, Sept. 27, 1916. Instr. Microscopy and Bacteriol. Boston Univ. Med. Sch., 1897-98. Originated and made first therapeutic High-frequency apparatus, 1897 (this was "father" of all diathermy, short-wave and ultra-short wave since that date). Invented and made the first carrier-wave apparatus: (this was the basis of modern RADIO and was shown at A.M.A. Meeting, New York Academy of Medicine, 1904. Inventor, Cold Quartz Ultra-Violet Apparatus, patented 1903; Vacuum Electrode, etc. Instr. Clinical Hematology Tufts Coll. Med. Sch. 1898; Lecturer in Electrotherapeutics 1898-1908. Research in paper-pulp, St. Petersburg, Fla., 1910-13. Granted 4 patents paper-pulp process; granted 8 patents on various electrical devices. Lecture Tour of U. S., 1916-18. Dir. Strong Therapeutic Inst., 1928-37. Senior Regent Life Research Foundation, Inc., Author "HIGH-FREQUENCY CURRENTS" (1908), "MODERN ELECTRO-THERAPEUTICS" (2nd edit., 1918), also many medical and scientific articles in various journals, Mem. Amer. Med. Editor's and Author's Assn.

Address—6129 Fountain Ave.,  
Phone HI-8041  
Hollywood, Cal.

*Originator of special technique for cure of Cardiac (valvular) infections, and diseases associated with HIGH BLOOD PRESSURE.*







17558 Cervino Place  
Hollywood  
California  
U.S.A.

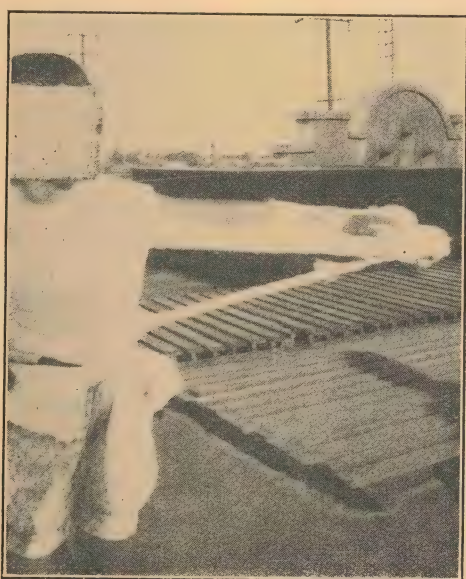


October 17<sup>th</sup> 1930  
The International Congress of Physical  
Therapy & Massage was an awful  
failure in many ways. I saw Dr.  
Hagelschmidt, both in Berlin and  
at Siegen. He showed me a mercury  
argon ultra-violet generator. I told him  
I had your small improved one and had  
used it a few times before. Left Detroit  
and found it excellent. His was somewhat  
larger and adapted for more general  
surface radiation but apparently not  
equal to the one you exhibited in Berlin  
for that purpose. I shall expect a report  
from you soon. I am very interested in your  
work.

From: Thill, Bruxelles, série 12, no 12.



without changing the position of the splint. After reduction an extension bandage is applied to the forearm and drawn over the end of the splint, giving any degree of extension pressure required. A bandage is then placed around the arm and the splint. This can be changed as often as necessary, for inspection or massage, and the extension pressure varied



Splint and cast, fracture reduced, extension applied.



Posterior view.

as conditions suggest, without any alteration of the position of either the arm or the splint, and, which is more important, without any movement of the shoulder joint. The cases in which I have used this splint have recovered rapidly, the amount of callus seems to be

less, and the line continuity of the bone has been better preserved than with any other method I have heretofore used.

The distinct advantages to my mind are:

The immobilized shoulder with the arm entirely free to be manipulated as necessary.

The splint already in place, thus preventing the possibility of the bones slipping after they are approximated.

The ease with which extension is secured and varied.

The opportunity offered for inspection, and massage with no possibility of alteration in position of the arm, the splint, or the shoulder.

7129 S. Vermont Ave.

### ENTOPTIC FLUORESCENCE AND OTHER ALLIED ULTRA-VIOLET PHENOMENA

By FREDERICK FINCH STRONG, M. D.

IN studying the ultraviolet rays transmitted by the No. 1 filter of the Cold-Ray Mercury apparatus, it will be noticed that many patients, on looking into the filter, will ask what the moving particles are that appear to be filling their field of vision. Some of the patients have been apologetic and diffident in speaking of this phenomenon, saying afterwards that they thought they were "seeing things." This effect was first noted by Sir David Brewster in 1843 on looking into a clear sky on a sunny day against a background of white clouds. The air appears to be filled with scintillating, darting, silvery, white stars, moving in spiral paths with extreme rapidity.

Professor Ogden Rood in 1860 called attention to the fact that the interposition of a blue glass between the eyes and the sky greatly increased the brilliancy of the phenomenon. Helmholtz studied the subject several years later and proved that the moving bodies are not in the air, as they appear to be, but are in the eye, and he expressed the opinion that they were blood corpuscles moving in front of the retina. These are not to be confused with other well known entoptic bodies such as the *muscae volitantes*. These were first described by the Jesuit scientist, Deschals, in the sixteenth century, and are the familiar strings of black specks seen moving slowly across the field of vision when looking at the sky.

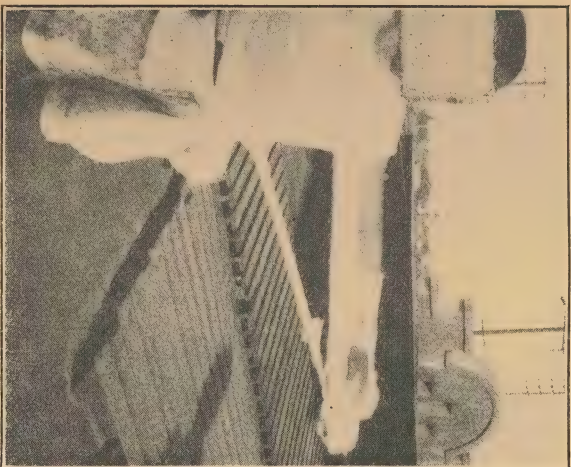
Practically all the literature on entoptic vision is embodied in three monographs by Sir William Barrett, presented to the Dublin Royal Society in October, 1906. Professor Barrett believes the bodies to be white blood corpuscles moving close to the optic nerve endings.

The writer has studied this phenomenon for many years, and has only recently evolved an

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explanation which seems to be proved by deductions from experiments. The study of the eye of a patient under the No. 1 filter of the Cold-Ray apparatus shows a decided green fluorescence behind the iris, apparently in the crystalline lens. The brilliancy of the moving corpuscles is seen when looking into the Cold-Ray apparatus shows that they must possess a greater luminosity than the light itself, in other words, they are fluorescent and add their brilliancy to the visible rays emanated from the Mercury spectrum. The mass of these corpuscles in the eye would account for the pale green fluorescence seen in the crystalline lens above mentioned.

Sir William Barrett's contention that they are more brilliant with each cardiac systole has not been confirmed by the writer's experiments, nor has the study of blood in a microscopic field illuminated with the blue ultraviolet ray group from the Cold-Ray apparatus show any evidence of fluorescence of the white corpuscles, nor any greater brilliancy as seen under the immersion lens than the red discs. That these fluorescent moving bodies are exceedingly small, ultra-microscopic in fact, is evident by the study of their apparent size as made visible by the Cold-Ray with the eye at different distances. With the eye close to the filter hundreds of the darting points of light are seen, resembling highly mobile spirillae as seen under the microscope with dark ground illumination. Moving the eyes a few inches away from the apparatus the spirals appear twice their former size and correspondingly diminished in number. Six feet away from the apparatus the spiral paths appear nearly two inches in length and only about six or eight moving entities are seen in the entire field of the Cold-Ray. This, of course, shows that the objects, whatever they may be, are in the eye and are projected on the luminous field of the Cold-Ray as a lantern slide would be projected on a screen, and, therefore, appear larger as the distance between the eye and the apparatus is increased. That the effect is due to fluorescence the writer has demonstrated by experimenting with the No. 3 filter of the Cold-Ray, which transmits no ultraviolet, but only the green and yellow line. With this filter the moving entities are practically invisible to the ordinary observer.

Much mystery has surrounded these entoptic bodies and many people who have observed the phenomenon think that they are in the outside air, as they appear to be. This has been used as the basis of a whole system of so-called clairvoyant investigation of the chemical elements and published by Annie Besant and C. W. Leadbeater under the title of "Occult Chemistry." The recent advances in chemical science, especially the demonstration of Moseley's law, proved

the imaginary source of these pseudo-scientific researches and the easily demonstrated entoptic nature of the moving bodies shows that the so-called clairvoyant visions were very literally "all in their eye." Seriously, however, there is undoubtedly a true occult chemistry known perhaps to some of the more advanced students in the East and mentioned by Paracelsus and also in the "Secret Doctrine." Until we know more about this subject and those mysterious entities called the "fiery lives," the real nature of the vital processes as well as the phenomenon of the entoptic corpuscles will probably remain a closed book to science.

Other interesting fluorescent effects are obtainable by the use of the No. 1 filter with the Cold-Ray. Natural teeth, for example, fluoresce pink, while artificial teeth appear a dull blue. Certain types of gray hair fluoresce a brilliant yellow. Some old ladies who still add to their coiffure the mid-Victorian "switch" appear very strange when receiving the Cold-Ray treatment, their own blue-gray hair being surmounted by a brilliant yellow mass.

Various skin diseases may be diagnosed by the use of the Cold-Ray No. 1 filter, and others by the use of special filter No. 6. Dr. Herman Goodman has written several monographs on this subject in the British Journal of Dermatology.

The writer's special filter No. 6 transmits the violet Mercury lines, and all of the ultraviolet lines up to about 3200 A. U. It resembles in some ways the Corning-Woods filters, but allows the passage of a greater amount of energy. It consists of Beta Cobalt glass and gelatin films impregnated with a combination of aniline dyes. Pityriasis versicolor, Leucoderma, Chloasma, Ringworm, and other skin diseases can be diagnosed with the help of this filter and brilliant demonstrations of the phenomena of fluorescence and phosphorescence are easily obtained.

Fluorescence is a phenomenon possessed by certain bodies, which absorb invisible ultraviolet rays and give them out again as visible bands of different colors, depending on the nature of the substance. Bodies are said to be *phosphorescent* when in addition to fluorescence the colored light is given out for some time after the exciting ultraviolet rays are turned off. It will be seen, therefore, that phosphorescent and fluorescent bodies act as step-down vibratory transformers to radiant energy. Many organic compounds exhibit these properties. Solutions of Quinine sulphate and Aesculine fluoresce sky-blue. Fluorescein, (which is Resorcin-phthalein), and common vaseline fluoresce yellow-green, and Rhodamin a bright pink. Among inorganic bodies, Uranium glass is perhaps the most brilliant fluorescent substance under ultraviolet rays, especially those of the 3660 A. U. group trans-

mitted by the Cold-Ray with filters No. 1 or No. 6. Willemite and certain specimens of Calcite also fluoresce, but these substances are most sensitive to the very short ultraviolet rays above 2600 A. U. Some years ago the writer constructed a special apparatus for the generation of these rays from the spectrum of an iron nickel alloy. The apparatus produced a high frequency arc of very great brilliancy and richer in the ultraviolet rays than any device tested up to the present time. A rotary quenched gap greatly increased the spark frequency. At the present time the writer is engaged in research covering the whole range of the ultraviolet region, using the ordinary Cold-Ray, the Cold-Ray in quartz, the Mercury Arc, the Carbon Arc, and the special apparatus just described.

Other fluorescent bodies are seen to best advantage under the bombardment of cathode rays in a Crookes' tube. Among these latter may be mentioned Strontianite, Kunzite (which is a lilac spodumene), Aragonite and Selenite.

Sensitization to ultraviolet rays by the application of fluorescent substances or by their internal ingestion has received considerable study within the past few years. It is highly probable that a low degree of fluorescence is possessed by many substances used in medicine, and any light which contains ultraviolet rays, especially the more penetrating, long rays in the region of 3660 A. U., no doubt increases the therapeutic activity of these agents. This is a fertile field for research, and the writer commends it to those using the Cold-Ray apparatus. He has noticed that many remedies act more energetically in patients taking Cold-Ray treatments and suggests the above theory as a tentative explanation of this fact.

Years of experience in the clinical study of all forms of ultraviolet light has convinced the writer that the vitalizing qualities just attributed to the rays from the quartz arc are not due to the erythema-producing rays as is generally believed. The latter are the so-called "vital ultraviolet" of Dr. Herman Goodman, who classes the longer ultraviolet rays as "intra-vital," and the shorter ultraviolet rays above 2900 A. U. as "extra-vital." Now it has been clearly demonstrated that the rays between 3100 and 2900 A. U. act specifically upon the cholesterol of the skin which they transform into ergosterol, the latter promoting calcium and phosphorous metabolism in quite the same way as if it were administered internally—for example: cod liver oil which has been exposed to ultraviolet rays. This, therefore, is a biochemical action and the ultraviolet rays merely induce chemical change in the cholesterol. That these should not be called "vital rays" is quite clear from the fact that Nature strongly resists and protests against them, this persistence being

evidenced by the immediate erythema and the later deposition of melanin granules in the Malpighian layers of the skin. A skin so tanned no longer transmits these short ultraviolet rays, such as the visible rays, and the long ultraviolet, such as the 3660 A. U. group, are still absorbed. It should be evident, therefore, that any adjunct or vitalizing effects obtained by ultraviolet treatment after tanning must be due to the latter rays. It has been repeatedly demonstrated that ultraviolet rays above 2900 A. U. are highly destructive to all forms of organized life, and they are used for this purpose in the water-cooled quartz lamp, a most valuable germicidal modality. With the highest appreciation of the fine work of Dr. Herman Goodman, the writer nevertheless suggests a classification of rays more in accord with the facts would be as follows:

Below 7000 A. U.—heat-producing rays (infra-red).  
From 7000 to 4000 A. U.—Visible vitalizing rays.  
From 4000 to 3100 A. U.—Vitalizing ultraviolet rays.  
Below 3100 to 2900 A. U.—Biochemical rays.  
From 2900 to 2300 A. U.—Lethal rays.

The mere fact that visible light is essential not only to vegetable and animal life, but also to the psychical, mental and spiritual development in the human race is too evident to require specific proof.

The whole subject is summed up in a quotation from the writings of H. P. Blavatsky, "Light is Life,—both are Electricity."

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HIGH AND LOWBROW

A St. Louis critic says "Strange Interlude," the new O'Neill play, has points of interest for psychiatrists, gynecologists and psychoanalysts." Judging from the box office receipts, it seems to be a popular attraction for the tired business man and not so tired business woman, who have week-ends as well as money to spend in a theater.

A WAY TO DO IT

"Do you think the best English literature will ever become popular in America?"  
"Not unless the postoffice department excludes it from the mails."

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## California Medicine

JOHN WM. SHUMAN, M. D., F. A. C. P.

### AMEBIASIS

By SAMUEL J. GLASS, M. D.,  
LOS ANGELES

Chronic intestinal amebiasis is of more frequent occurrence throughout the United States than is generally believed. Recent statistics place the incidence of infestation at 10 per cent of the population. One must therefore, suspect endamebiasis in all individuals with chronic colitis regardless of the residence. There is a growing belief that apparently healthy carriers are really suffering from a chronic toxemia due to the parasite. When the individuals' resistance is good, the minute lesions produced by the parasite in the intestines heal quickly or never become numerous enough to produce symptoms. But with resistance lowered, healing doesn't occur in many of the lesions, and symptoms do arise. Thus one is forced to the conclusion that symptoms of dysentery is actually the end result of infection with endameba histolytica. The case here reported is one of a chronic carrier, who as a result of lowered vitality had an acute exacerbation with symptoms of acute dysentery.

Case No. 19876—A white male, age 28, was admitted 9-17-18, with diarrhoea, abdominal pain and tenderness of two and one-half months duration. Was operated upon for appendicitis 1-15-28. Two months following he began having colicky pain chiefly in the epigastrium and right lower quadrant a half hour after meals. On admission he was having 3 to 5 stools daily. There was considerable tenesmus. He had lost 30 pounds in weight.

On examination an undernourished pale male presented no focal findings except tenderness on deep pressure in the right iliac region and an ulcerative colitis (per proctoscope). There was a mild anemia and leucocytosis with eosinophiles 3 per cent. Stool analysis revealed blood, mucus and many motile forms of endameba histolytica.

He was fed a smooth non residue diet with full doses of tincture belladonna and emetine hydrochloride grains one-third, intramuscularly for 10 days. Diarrhoea ceased. He was then placed on an extended course of yatren by mouth, and yatren enemas. His nutrition greatly improved, but he remained in the hos-

pital because of weakness, tachycardia, and the persistence of parasites in the stool. Stovarsol and more yatren by mouth finally eradicated the parasites and he was discharged as cured, 12-18-28.

**Comment**—There is no specific for amebiasis; but raising the general resistance of the individual and the creation of an acid medium in the bowels is of vital importance. Amebas do not proliferate when the intestinal tract is acidified. A non residue or smooth diet with milk and cultured buttermilk predominating, is conducive to the elimination of the parasite. Along with these general hygienic measures to promote increased vitality, occasional courses of drugs, chiefly *ipecac* (an its alkaloid emetine), yatren and arseni (stovarsol, treparsol or the arsephenamines are indicated. There is a tendency to favour yatren and arsenic to the exclusion of the other drugs, especially emetine. The latter is of undoubted value in the acute dysenteries but unlike the case reported above most amebic infections seen in this institution are of the chronic variety.

Discussion by Dr. Shuman: The management of chronic amebiasis is a long tedious clinical problem. It is one which taxes both patient and doctor. Read the monographs of Dobel, Craig, Kofoid, Kessel, and Barrows to know the pathologic significance of protozoiasis. Bear it in mind in all chronic colitis especially those characterized by alternating constipation and diarrhoea. Boyers and Kofoid\* write, "We are dealing with a disease entirely as protean and undramatic in behavior and subtle in onset as syphilis. The dearth of the usual findings to account for the patient's symptoms, should make one suspicious of an amebic infection, especially if the symptoms are vague in character."

520 West Seventh Street.

\*L. M. Boyers, C. A. Kofoid, Olive Swezey—Chronic Human Amebiasis J. A. M. A., Nov. 7, '25, Vol. 85, No. 19, Pp. 1141-47.

### THE SPIRIT OF SERVICE

IN this issue will be found an announcement emanating from the American Pharmaceutical Manufacturers Association, setting forth the principles governing the activities of this old and worthy organization. The ethics of this body of scientific men are noteworthy, and should convince even the most skeptical that its members are sincerely striving to serve the medical profession to the best of their ability. This organization is right now making history for scientific medicine; a worthy hand-maiden, indeed!

From the Medical Service of John W. Shuman, M. D., Ward 156 Los Angeles General Hospital.



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2007 Wilshire Blvd.

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#### THE USE OF BRIGHT-LINE SPECTRA IN PHYSIO-THERAPY

By FREDERICK FINCH STRONG, M. D.

As we become more accurate in our adaptation of physical forces to therapeutic use we are following a tendency similar to that which resulted in the development of the modern radio, namely: the use of definite selective wavelengths accurately adapted to the purpose for which they are intended.

The new theory of wave-mechanics and the modern conception of the photon as the unit of light-energy emphasizes again the statement made thousands of years ago in the Sanskrit "Vishnu Purana" that the fundamental reality of Life in manifestation is Vibration. The old scriptural fable of the walls of Jericho falling before blasts of trumpets is recognized as a possible fact by engineers today. It is well known that the whistle on one of the large transatlantic liners had to be changed inasmuch as its vibrations accidentally tuned into the keynote of a large New York skyscraper so that those in the building felt the oscillations whenever the whistle was sounded.

At the meeting of the American Electrotherapeutic Association at the New York Academy of Medicine in 1902 the writer emphasized this principle and stated his belief that a rational scientific system of physio-therapy would be possible only when we were able to produce definite single vibrations, both of the sound and light order, and devise some method by which we could determine the keynote of the different organs and tissues of the human body in a state of health. This is still far from realization, but the tendency is in this direction and has already yielded remarkable clinical results as well as definite biological evidences of the selective vibratory response of living tissue. The German researcher Nagelschmidt quoted by the present writer in the March number of the Medical Herald showed distinct differences of action in light waves separated by a space of not more than two hundred A. U., while the case reports from the use of selective light rays as emitted by the writer's Cold-Ray apparatus are offering daily confirmation of his belief as to the value of selective wave-therapy.

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not always due to p constitute menopause proved by a few in Werner claims that women with normal the presence of pelvic whom actual pressu few days before the m requires more force a sible. Later, when t lished, the patients c neously. In these ca out the lower pelvis strual swelling causes the urethra which is mia goes down. In the ment would be of no t pen that spontaneous sible for a considerab would be due to the sw is the first effect of change to atrophy for

5. Every form of s myoma demands oper there is usually fever, all of which cannot be i

6. Cases in which t by inflammatory disea adhesions should not b treatment.

7. Excessive size of trandication, and this a above the umbilicus. cess is uncertain for se because the exact locati certain and, therefore, i their exposure to the ray

Although the number high, Werner claims th about 50 per cent of all ray. A careful study of it possible to treat some indications successfully, special cases in which th tered in deference to the patient.

#### COURT

The poet Cowper wrote: "A moral, sensible and Will not affront me, a The philosopher Emerson short but that there is alway tesy."

And James T. Fields wrote "How sweet and gracious, Is that fine sense which men Wholesome as air and genial Welcome in every clime as b It transmutes aliens into trus And gives its owner passport



without changing the position of the splint. After reduction an extension bandage is applied to the forearm and drawn over the end of the splint, giving any degree of extension pressure required. A bandage is then placed around the arm and the splint. This can be changed as often as necessary, for inspection or massage, and the extension pressure varied



Splint and cast, fracture reduced, extension applied.



Posterior view.

as conditions suggest, without any alteration of the position of either the arm or the splint, and, which is more important, without any movement of the shoulder joint. The cases in which I have used this splint have recovered rapidly, the amount of callus seems to be

less, and the line continuity of the bone has been better preserved than with any other method I have heretofore used.

The distinct advantages to my mind are: The immobilized shoulder with the arm entirely free to be manipulated as necessary.

The splint already in place, thus preventing the possibility of the bones slipping after they are approximated.

The ease with which extension is secured and varied.

The opportunity offered for inspection, and massage with no possibility of alteration in position of the arm, the splint, or the shoulder.

7129 S. Vermont Ave.

## ENTOPTIC FLUORESCENCE AND OTHER ALLIED ULTRAVIOLET PHENOMENA

By FREDERICK FINCH STRONG, M. D.

IN studying the ultraviolet rays transmitted by the No. 1 filter of the Cold-Ray Mercury apparatus, it will be noticed that many patients, on looking into the filter, will ask what the moving particles are that appear to be filling their field of vision. Some of the patients have been apologetic and diffident in speaking of this phenomenon, saying afterwards that they thought they were "seeing things." This effect was first noted by Sir David Brewster in 1843 on looking into a clear sky on a sunny day against a background of white clouds. The air appears to be filled with scintillating, darting, silvery, white stars, moving in spiral paths with extreme rapidity.

Professor Ogden Rood in 1860 called attention to the fact that the interposition of a blue glass between the eyes and the sky greatly increased the brilliancy of the phenomenon. Helmholtz studied the subject several years later and proved that the moving bodies are not in the air, as they appear to be, but are in the eye, and he expressed the opinion that they were blood corpuscles moving in front of the retina. These are not to be confused with other well known entoptic bodies such as the *muscae volitantes*. These were first described by the Jesuit scientist, Descartes, in the sixteenth century, and are the familiar strings of black specks seen moving slowly across the field of vision when looking at the sky.

Practically all the literature on entoptic vision is embodied in three monographs by Sir William Barrett, presented to the Dublin Royal Society in October, 1906. Professor Barrett believes the bodies to be white blood corpuscles moving close to the optic nerve endings.

The writer has studied this phenomenon for many years, and has only recently evolved an

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CLINICAL STUDY AND USE OF NEON MERCURY LIGHT

By FREDERICK FINCH STRONG, M. D.

SOME years ago the writer perfected a series of filters for use with a quartz Mercury arc, with which he was able to isolate the different lines in the visible Mercury spectrum as well as certain groups in the longer ultraviolet region. Many of these filters were of colored gelatine and did not stand up well under the heat produced by the Mercury arc. This led to the study of the so-called "Cold Mercury Light," which is emitted from vacuum tubes containing small amounts of Neon gas, together with metallic Mercury. Such a tube when excited by an alternating current of 14,000 volts emits an almost pure Mercury spectrum, practically free from heat and infra-red rays. Filters such as those designed by the writer have been used with this source of light for several years without showing any signs of deterioration.

At the present time the writer has equipped his offices with a variety of cold light units, not only those of the Neon Mercury type but others containing pure Neon. Nagelschmidt has reported surprising results with Neon light in relief of pain and reduction of fever. The writer is at present studying this source in connection with filters which transmit respectively a pure red group of wave-lengths and a pure orange group. Clinical results with these two groups will be reported in a subsequent article.

A large number of cases have been treated with rays emitted from Neon Mercury units, and some very surprising results obtained. The first experiments demonstrated the decided anodyne effects of a group of rays transmitted with the writer's No. 1 filter (a crystal violet Ultraviolet). He has called this group the "Blue Ultraviolet," as it consists of three wave-lengths in the following proportions: Blue 4358 A. U. 45 per cent, Violet 4047-78 A. U. 20 per cent, Ultraviolet 3663-55-50 A. U. 35 per cent. A few brief case reports may be cited to illustrate this action.

(1) *Trit-Facial Neuralgia.*

Mrs. L., age 48. Tic-doloreux for twelve years. Left for eight years after removal of Gasserian Ganglion, but reappeared worse than ever two years before treatment. When first seen patient was almost insensible from lack of sleep and pain. Large doses of morphine had given no relief. Other physio-therapeutic modalities had been tried before she came to the writer, but unsuccessfully. She was treated over the face and head with Mercury Neon unit, consisting of a grid ten inches square, formed of about five feet of radiant tubing. No immediate relief of pain followed the first treatment, but the patient slept five hours that night. Gradual improvement followed successive daily treatments of one hour each for several months. Patient has gone back to work and has been, written especially for the Medical Herald and Physiotherapist.

COURTESY

The poet Cowper wrote:

"A moral, sensible and well-bred man Will not affront me, and no other can."

The philosopher Emerson wrote: "Life is not so short but that there is always time enough for courtesy."

And James T. Fields wrote:

"How sweet and gracious, even in common speech, Is that fine sense which men call courtesy! Wholesome as air and genial as the light, Welcome in every clime as breath of flowers, It transmutates aliens into trusting friends, And gives its owner passport round the globe."



other source of a continuous spectrum shows, when analyzed spectroscopically, the presence of a large amount of red light, a band in the yellow, and another in the green in addition to the blue and violet. The blue color, therefore, is only subjective and the best that can be obtained with filters used with light sources giving continuous spectra is a mixture of many vibrations with only a slight preponderance of intensity in one part of the spectrum.

There is a definitely defined limit to the possible sources of light for true monochromatic therapy. Up to the present time the writer has been able to obtain satisfactory results with but three different sources. Two of these have been described in the writer's previous articles. Neon gas in a vacuum tube affords a bright-line spectrum, 95 per cent of the energy of which is emitted from wave-lengths in the red, orange and yellow. Recent spectrograms have shown the presence of a number of ultra-violet lines emitted by Neon, but they are quantitatively too weak to be of use. For therapeutic experiments with rays in the red or orange, Neon seems to be the most satisfactory source. Mercury gas ionized by Argon, Neon or Helium is peculiarly suited to the production of monochromatic light in the region above the orange. It has but four ray-groups in the visible spectrum, the yellow, green, blue and violet lines, each of which is sufficiently powerful to be used alone as a therapeutic agent, this being accomplished by the writer's selective filters. Helium in a vacuum tube with a special filter gives a brilliant monochromatic light from the line 5876 A. U. Helium tubes do not stand up well, however, and while still experimenting with this wave-length, the writer uses for his yellow ray the 5790 A. U. double-line from the Mercury spectrum. While all gases emit bright-line spectra, there are no others which afford single wave-lengths of sufficient power to be regarded as therapeutic possibilities.

While on this subject it may be well to explain the technical details involved in the construction of the Cold-Ray tubes. Helium, Neon, Argon, Krypton, Xenon, and Radon constitute the group known to chemists as the "Noble" or "inactive" gases. They are all monatomic and form no chemical combinations. Aside from their emission of luminous energy, it is difficult to imagine any part that they could play in the economy of Nature. This does not apply to Radon, the heaviest of all gases, which has an atomic weight of 222, higher than most metals. It is what is commonly known as the "radium emanation," and being unstable, emits alpha, beta and gamma rays, which are, of course, important in therapeutics. With this latter exception, all of these gases exist in the air. Krypton and Xenon in mere traces, Argon in fairly large quantities (one part in 10,000), while Neon and

Helium are present in lower percentages. Commercially, these gases are obtained by the fractional distillation of liquid air and are marketed in sealed flasks containing from one to five liters. The improved type of unit which the writer now employs in his Cold-Ray apparatus uses as an ionizer a mixture of Argon, Neon and Helium.

In making the luminous unit, the glass tubes are first washed, dried and baked; then proper electrodes, specially devised by Georges Claude, of Paris, are fused to the end of the unit and the air almost completely exhausted. A high-voltage current is then turned on and the tube is operated as a Geissler tube on the residual air. It becomes very hot, this heat serving to drive out the gas molecules occluded in the glass. After several hours the air is still further exhausted and a small quantity of the Argon-Neon mixture is admitted until the pressure gauge registers about 7 millimeters. The current is then again passed through the tube and after several hours' operation it is sealed off from the pump. A small U tube containing a few drops of chemically pure mercury has been sealed into one side of the unit at the beginning of the above operation, and after the tube has been removed from the pump it is tipped and rocked in such a way that the mercury passes through its entire length several times, microscopic particles of mercury adhering to the walls of the tube. The current is now again turned on and the familiar turquoise blue of Mercury light is seen. The process is a delicate one, but the final product as made at the present time has an extremely long life. In the writer's laboratory and offices he has at the present time in operation nearly 1,000 feet of luminous tubing in his different treating rooms and experimental apparatus. Some of these units have been in daily use for over three years, yet not a single unit has ever "gone bad." In the Claude laboratories Neon tubes have been operated for over 20,000 hours without breaking down. This long life, of course, is due to the care in the details of manufacture and to the fact that heat and infra-red rays are practically absent. The units as constructed at present operate at a temperature of about 110 degrees F. although in the commercial Cold-Ray lamps a slightly higher temperature is sometimes reached from the radiations of the transformer, which normally operates at a temperature of 125 degrees F.

Passing now to some clinical observations in the recent use of the Cold-Ray apparatus, a number of interesting points will be considered, although without any special sequence.

First, further experiment has been conducted in order to determine the difference in the therapeutic value of selected waves from the Mercury spectrum emitted by the Cooper Hewitt

process (the Mercury Arc in either quartz or glass, which operates at a temperature of about 3,000 degrees F.), and the same wave-lengths from the cold Mercury spectrum. In all cases where comparative tests have been possible a much greater intensity of the specific action has been noted when the Cold-Ray source was employed. This is particularly true in connection with the No. 1 filter when applied for its anodyne effect, and almost equally so with the No. 2 filter (turquoise group) when applied for the relief of burns or acute inflammation. Patients have complained of ocular irritation from all of the Mercury rays as transmitted through the writer's filters from the Mercury arc, while with the Cold-Ray no instances of eye irritation have been reported. Indeed the writer believes that his instructions to the patient to look directly into the generator during treatment is definitely associated with one of the systematic therapeutic effects obtained with the apparatus. When we consider that the "cold rays" come in sharply defined pulses, whereas the Mercury arc shows only slight undulations with the alternations of the current, we may obtain a hint as to the possible action of the former when transmitted through the optic mechanism. Passing along the optic nerves the vibratory energy would concentrate in the optic chiasm, which is in intimate relation with the pituitary. While the pituitary is generally conceded to be the governing center of the entire endocrine chain, the writer believes that it possesses functions still more important than that of a Hormonic balancer.

A series of recent studies of hypertension reported in June Medical Herald and Physiotherapist have shown that many patients exhibit a systolic imbalance on the two arms. The average patient registering over 200 mm usually shows from 10 to 30 mm lower reading on one arm than on the other, and it is usually the left arm which is lower. This is significant inasmuch as the majority of physicians take blood pressures on the left arm only. After Cold-Ray treatment, with the large Bath and the No. 1 filter, this imbalance is almost entirely eliminated or reduced to a difference of not over 10 mm, which seems to be a variation within normal limits. In the writer's opinion the two sides of the sympathetic nervous system act somewhat independently in these cases so that the balance of the action in the vasodilators and vasoconstrictors on the two sides of the body is disturbed. The Cold-Ray pulses, consisting, as they do, of selected light vibrations emitted synchronously with the electrical impulses and passing into the pituitary region via the optic nerves, produce in this body, and perhaps in some adjacent structures in the brain, a normalizing effect as is shown by the reduction of systolic and pulse pressures and the total or partial ob-

iteration of the imbalance as shown by the readings on the two arms.

In this connection the writer believes that the work which he is at present doing in hypertension cases with the Cold-Ray treatment is so uniformly successful that the publication of his records for a single month would not be believed by his colleagues in the medical profession who have not themselves personally tested this wonderful new modality.

For years the writer has given special attention to the treatment of diseases associated with hypertension. He devised the first Tesla auto-condensation treatment in 1896, using a large plate of glass as the dielectric. Later his methods were improved by Dr. Frederick De Kraft, and still later by Dr. Burton Grover who has accomplished very satisfactory results with auto-condensation or indirect diathermy in the treatment of these conditions. That the Cold-Ray treatment is much more satisfactory than diathermy has been repeatedly demonstrated by the writer in his treatment of hypertension cases during the past three years. Many of these cases have had no treatment for a year or more and are running normal pressures after having had a course of an average of forty treatments with the Cold-Ray. Much improvement has been noted in all the cardiac and renal derangements exhibited by many of these patients when they first presented themselves for treatment. While little can be expected from this or any other treatment in advanced cases of arteriosclerosis, the writer's experience proves that life may be prolonged and many distressing symptoms palliated. This effect is unquestionably brought about centrally rather than biochemically, and while an endocrine balance is established it is the writer's belief that the effect is due to a vitalization or normalization of certain brain centers which are even more profoundly and directly associated with the maintenance of the life processes than is the endocrine chain. That the pituitary is intimately associated with the mechanism of the emotional nature has been claimed for many years by certain Eastern students, and it may be that future scientific research will confirm this belief.

Just a word in conclusion regarding the true nature of Light. Metaphysically speaking, Light is a *State of Consciousness*; true Light is also color, white Light being the simultaneous consciousness of all colors. Physically speaking, Light corresponds to a single octave of electromagnetic vibrations, roughly, between 7000 and 4000 A. U., but this force does not produce Light—it induces or evokes its manifestation in the consciousness of the *Man himself*. The optic apparatus, with its diaphragm, lens and retinal receiving antennae, excited by the electro-magnetic rays, passes them on to the visual centers



other source when analyzed a large amount and another in and violet. The subjective and filters used with spectra is a minute slight preponderance of the spectrum.

There is a considerable number of suitable sources for therapy. Up to the present time three different methods have been described in the literature. The first is the use of gas in a vacuum tube, 95 per cent of the gas being removed from way yellow. The second is the use of a fluorescent substance by Neon, but this is not yet of use. For the future, the use of Argon, Neon, and the production of groups in the blue and violet by powerful agents, this being a special filter, is a special filter, light from it do not stand experimenting uses for his line from the emit bright light which affords power to be used.

While on the technical side, the use of the Curies, Krypton, and group known as "active" gases, no chemical reaction of any kind, economy of Radon, the use of atomic weight, and what is known as "emanation," beta and gamma rays, are important in the treatment of all of these and Xenon quantities (

in the brain in the form of an energy which we roughly call "nerve force," but about which we know nothing whatever. It is one of the highly complex phenomena of the subtler side of life in organisms and is not measurable by the crude instruments of our modern laboratories, although its physical by-products may sometimes be recorded. Behind the brain is the *Perceiver*, the *Man himself*, and behind the Man is the *Power to Perceive*, inherent in that greatest of all mysteries, the *One Reality—Absolute Life itself*.

Hollywood, California.

### TECHNIC OF CONSTRUCTING A TEMPORARY COLOSTOMY

CHARLES J. DRUECK, M. D., F. A. C. S.

Professor of Diseases of Colon and Rectum, Post Graduate Hospital and Medical School  
CHICAGO

THE tendency of the opening of a fecal fistula is to gradually close of its own accord; therefore, where it is desired to keep the abdominal orifice patent indefinitely a more elaborate technic than that of a fecal fistula is necessary. In planning this drainage it is very important that the operation can be rapidly done by the surgeon, and the orifice afterwards easily managed by the nurse or the individual himself. Tuttle (1) and Paul have each devised methods of dealing with the bowel and both operations have certain individual advantages.

In any type of operation it is important that the colon be lifted out of the wound sufficiently far to expose its mesentery. Lifting the gut completely out of the abdomen insures a good spur formation. It is this spur, or sudden turn of direction of the fecal stream which mechanically prevents the subsequent bowel contents of the proximal portion of the bowel from passing on into the distal end. Hanes (2) who first advised dragging the colon up, aimed to use as much of the lower sigmoid as possible, and with his method the major part of the sigmoid, except the lower 2 and 3 inches is available. The individual thus experiences a normal sensation, or desire to defecate, except of course that the feces escape at the new opening. If the sigmoid is drawn down from above as has been recommended by Hartson Cripps to prevent prolapse of the mucosa a direct passage to the outlet is established and the intestinal contents constantly dribble at the artificial anus.

The exposed loop of bowel must be lifted well above the level of the abdominal wall, without tension. If it does not easily lift up sufficiently it must be mobilized by dividing adhesions, straightening out kinks of the bowel or even division of the outer leaf of the mesosigmoid. If

this is not properly cared for subsequent mesenteric pain and even sloughing may occur.

From this point on the technic differs a little from the plan of Tuttle or of Paul.

#### Temporary Colostomy of Tuttle

While the exposed loop of bowel is supported by an assistant a bloodless spot in the mesentery is selected and a blunt hemostat is worked through, care being taken to avoid the blood vessels. A glass rod, about  $\frac{1}{4}$  of an inch in diameter and 4 inches in length, is passed through this rent; its ends resting upon either side of the wound, it thus becomes a support for the bowel. The abdominal wound is next closed in either end, with interrupted stitches, until it is the bowel snugly on all sides. The lower end of the wound is closed to such an extent that it compresses the inferior leg of the intestinal loop against the glass rod. The last stitch at either end penetrates the longitudinal white band and anchors that portion of the bowel.

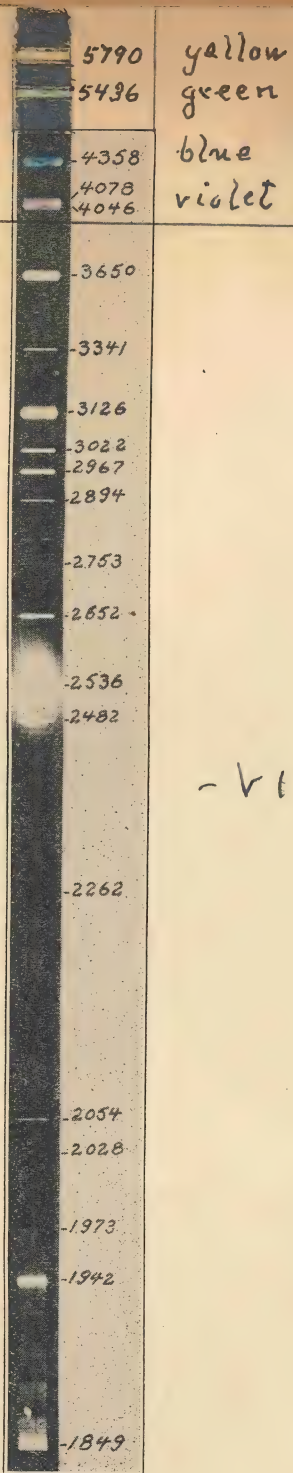
The lower limb (aboral) of the exposed bowel below the supporting glass rod may be snared and compressed when closing the wound but it must not be strangulated. The upper (oral) portion of the bowel requires an orifice 1 inch (2.54 cm.) in diameter for proper functioning. Too small or strictured an artificial anus excites frequent dribbling evacuations and on the other hand a very large opening remains patulous and permits involuntary escape of solid feces mucus. The muscular contractions going on in the sigmoid tend to draw the gut within the abdomen and therefore the sutures in the belly should be reinforced by mechanically supporting the exposed loop on a glass rod slipped through the opening in the mesentery and retained in place by threading a piece of rubber tubing over each end. The glass tubes containing ligatures are always at hand in the operating room and suit this purpose admirably. This rod acts as a guide when opening the bowel later.

If the appendices epiploicae are so large as to be in the way, they should be ligated and cut away, else they prevent union between the sigmoid and the abdominal wall and favor hernia of the small intestine.

The whole exposed loop of bowel is snared with vaseline and covered with a piece of rubber tissue held in place by slipping the glass supporting rod through it at either end. This prevents adhesion of the gut to the dressings. A small towel or gauze roll is now wrapped tightly around the entire mass and carried high enough to support all dressings and bandages away from pressing on the gut. This dressing then held in place with a large muslin binder, with adhesive strips carefully placed so as not to squeeze the protruding knuckle of bowel.



visible



ultra-

-violet

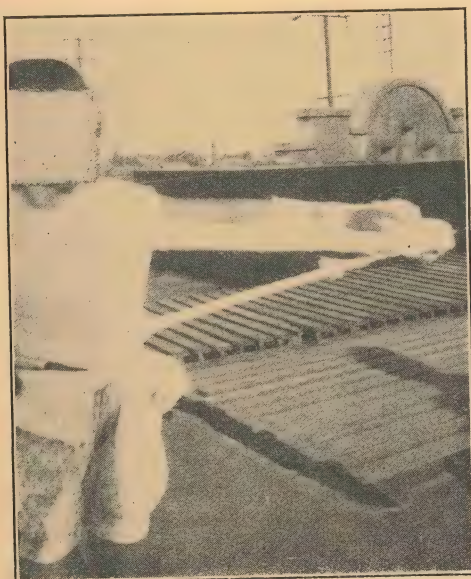
Figure 1

Spectrogram of Gold-Quartz  
Ultra-Violet Rays

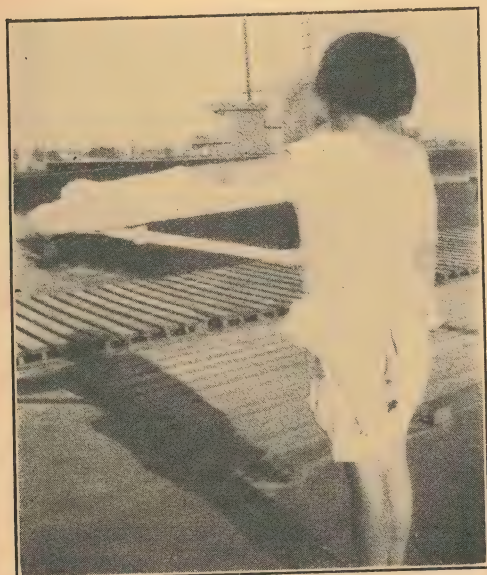




without changing the position of the splint. After reduction an extension bandage is applied to the forearm and drawn over the end of the splint, giving any degree of extension pressure required. A bandage is then placed around the arm and the splint. This can be changed as often as necessary, for inspection or massage, and the extension pressure varied



Splint and cast, fracture reduced, extension applied.



Posterior view.

as conditions suggest, without any alteration of the position of either the arm or the splint, and, which is more important, without any movement of the shoulder joint. The cases in which I have used this splint have recovered rapidly, the amount of callus seems to be

less, and the line continuity of the bone has been better preserved than with any other method I have heretofore used.

The distinct advantages to my mind are:

The immobilized shoulder with the arm entirely free to be manipulated as necessary.

The splint already in place, thus preventing the possibility of the bones slipping after they are approximated.

The ease with which extension is secured and varied.

The opportunity offered for inspection, and massage with no possibility of alteration in position of the arm, the splint, or the shoulder.

7129 S. Vermont Ave.

## ENTOPTIC FLUORESCENCE AND OTHER ALLIED ULTRA-VIOLET PHENOMENA

By FREDERICK FINCH STRONG, M. D.

IN studying the ultraviolet rays transmitted by the No. 1 filter of the Cold-Ray Mercury apparatus, it will be noticed that many patients, on looking into the filter, will ask what the moving particles are that appear to be filling their field of vision. Some of the patients have been apologetic and diffident in speaking of this phenomenon, saying afterwards that they thought they were "seeing things." This effect was first noted by Sir David Brewster in 1843 on looking into a clear sky on a sunny day against a background of white clouds. The air appears to be filled with scintillating, darting, silvery, white stars, moving in spiral paths with extreme rapidity.

Professor Ogden Rood in 1860 called attention to the fact that the interposition of a blue glass between the eyes and the sky greatly increased the brilliancy of the phenomenon. Helmholtz studied the subject several years later and proved that the moving bodies are not in the air, as they appear to be, but are in the eye, and he expressed the opinion that they were blood corpuscles moving in front of the retina. These are not to be confused with other well known entoptic bodies such as the *muscae volitantes*. These were first described by the Jesuit scientist, Deschals, in the sixteenth century, and are the familiar strings of black specks seen moving slowly across the field of vision when looking at the sky.

Practically all the literature on entoptic vision is embodied in three monographs by Sir William Barrett, presented to the Dublin Royal Society in October, 1906. Professor Barrett believes the bodies to be white blood corpuscles moving close to the optic nerve endings.

The writer has studied this phenomenon for many years, and has only recently evolved an



explanation which seems to be proved by deductions from experiments. The study of the eye of a patient under the No. 1 filter of the Cold-Ray apparatus shows a decided green fluorescence behind the iris, apparently in the crystalline lens. The brilliancy of the moving corpuscles is seen when looking into the Cold-Ray apparatus shows that they must possess a greater luminosity than the light itself, in other words, they are fluorescent and add their brilliancy to the visible rays emanated from the Mercury spectrum. The mass of these corpuscles in the eye would account for the pale green fluorescence seen in the crystalline lens above mentioned.

Sir William Barrett's contention that they are more brilliant with each cardiac systole has not been confirmed by the writer's experiments, nor has the study of blood in a microscopic field illuminated with the blue ultraviolet ray group from the Cold-Ray apparatus show any evidence of fluorescence of the white corpuscles, nor any greater brilliancy as seen under the immersion lens than the red discs. That these fluorescent moving bodies are exceedingly small, ultra-microscopic in fact, is evident by the study of their apparent size as made visible by the Cold-Ray with the eye at different distances. With the eye close to the filter hundreds of the darting points of light are seen, resembling highly motile spirillae as seen under the microscope with dark ground illumination. Moving the eyes a few inches away from the apparatus the spirals appear twice their former size and correspondingly diminished in number. Six feet away from the apparatus the spiral paths appear nearly two inches in length and only about six or eight moving entities are seen in the entire field of the Cold-Ray. This, of course, shows that the objects, whatever they may be, are in the eye and are projected on the luminous field of the Cold-Ray as a lantern slide would be projected on a screen, and, therefore, appear larger as the distance between the eye and the apparatus is increased. That the effect is due to fluorescence the writer has demonstrated by experimenting with the No. 3 filter of the Cold-Ray, which transmits no ultraviolet, but only the green and yellow line. With this filter the moving entities are practically invisible to the ordinary observer.

Much mystery has surrounded these entoptic bodies and many people who have observed the phenomenon think that they are in the outside air, as they appear to be. This has been used as the basis of a whole system of so-called clairvoyant investigation of the chemical elements and published by Annie Besant and C. W. Leadbeater under the title of "Occult Chemistry." The recent advances in chemical science, especially the demonstration of Moseley's law, proved

the imaginary source of these pseudo-scientific researches and the easily demonstrated entoptic nature of the moving bodies shows that the so-called clairvoyant visions were very literally "all in their eye." Seriously, however, there is undoubtedly a true occult chemistry known perhaps to some of the more advanced students in the East and mentioned by Paracelsus and also in the "Secret Doctrine." Until we know more about this subject and those mysterious entities called the "fiery lives," the real nature of the vital processes as well as the phenomenon of the entoptic corpuscles will probably remain a closed book to science.

Other interesting fluorescent effects are obtainable by the use of the No. 1 filter with the Cold-Ray. Natural teeth, for example, fluoresce pink, while artificial teeth appear a dull blue. Certain types of gray hair fluoresce a brilliant yellow. Some old ladies who still add to their coiffure the mid-Victorian "switch" appear very strange when receiving the Cold-Ray treatment, their own blue-gray hair being surmounted by a brilliant yellow mass.

Various skin diseases may be diagnosed by the use of the Cold-Ray No. 1 filter, and others by the use of special filter No. 6. Dr. Herman Goodman has written several monographs on this subject in the British Journal of Dermatology.

The writer's special filter No. 6 transmits the violet Mercury lines, and all of the ultraviolet lines up to about 3200 A. U. It resembles in some ways the Corning-Woods filters, but allows the passage of a greater amount of energy. It consists of Beta Cobalt glass and gelatin films impregnated with a combination of aniline dyes. Pityriasis versicolor, Leucoderma, Chloasma, Ringworm, and other skin diseases can be diagnosed with the help of this filter and brilliant demonstrations of the phenomena of fluorescence and phosphorescence are easily obtained.

Fluorescence is a phenomenon possessed by certain bodies, which absorb invisible ultraviolet rays and give them out again as visible bands of different colors, depending on the nature of the substance. Bodies are said to be phosphorescent when in addition to fluorescence the colored light is given out for some time after the exciting ultraviolet rays are turned off. It will be seen, therefore, that phosphorescent and fluorescent bodies act as step-down vibratory transformers to radiant energy. Many organic compounds exhibit these properties. Solutions of Quinine sulphate and Aesculine fluoresce sky-blue. Fluorescein, (which is Resorcin-phthalein), and common vaseline fluoresce yellow-green, and Rhodamin a bright pink. Among inorganic bodies, Uranium glass is perhaps the most brilliant fluorescent substance under ultraviolet rays, especially those of the 3660 A. U. group trans-

mitted by the Cold-Ray with filters No. 1 or No. 6. Willemite and certain specimen of Calcite also fluoresce, but these substances are most sensitive to the very short ultraviolet rays above 2600 A. U. Some years ago the writer constructed a special apparatus for the generation of these rays from the spectrum of an iron nickel alloy. The apparatus produced a high frequency arc of very great brilliancy and richer in the ultraviolet rays than any device tested up to the present time. A rotary quenched gap greatly increased the spark frequency. At the present time the writer is engaged in research covering the whole range of the ultraviolet region, using the ordinary Cold-Ray, the Cold-Ray in quartz, the Mercury Arc, the Carbon Arc, and the special apparatus just described.

Other fluorescent bodies are seen to best advantage under the bombardment of cathode rays in a Crookes' tube. Among these latter may be mentioned Strontianite, Kunzite (which is a lilac Spodumene), Aragonite and Selenite.

Sensitization to ultraviolet rays by the application of fluorescent substances or by their internal ingestion has received considerable study within the past few years. It is highly probable that a low degree of fluorescence is possessed by many substances used in medicine, and any light which contains ultraviolet rays, especially the more penetrating, long rays in the region of 3660 A. U., no doubt increases the therapeutic activity of these agents. This is a fertile field for research, and the writer commends it to those using the Cold-Ray apparatus. He has noticed that many remedies act more energetically in patients taking Cold-Ray treatments and suggests the above theory as a tentative explanation of this fact.

Years of experience in the clinical study of all forms of ultraviolet light has convinced the writer that the vitalizing qualities justly attributed to the rays from the quartz arc are not due to the erythema-producing rays as is generally believed. The latter are the so-called "vital-ultraviolet" of Dr. Herman Goodman, who classes the longer ultraviolet rays as "intra-vital," and the shorter ultraviolet rays above 2900 A. U. as "extra-vital." Now it has been clearly demonstrated that the rays between 3100 and 2900 A. U. act specifically upon the cholesterol of the skin which they transform into ergosterol, the latter promoting calcium and phosphorous metabolism in quite the same way as if it were administered internally—for example: cod liver oil which has been exposed to ultraviolet rays. This, therefore, is a biochemical action and the ultraviolet rays merely induce chemical change in the cholesterol. That these should not be called "vital rays" is quite clear from the fact that Nature strongly resists and protests against them, this persistence being

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evidenced by the immediate erythema and the later deposition of melanin granules in the Malpighian layers of the skin. A skin so tanned no longer transmits these short ultraviolet rays, but the visible rays, and the long ultraviolet, such as the 3660 A. U. group, are still absorbed. It should be evident, therefore, that any adjuvant or vitalizing effects obtained by ultraviolet treatment after tanning must be due to the latter rays. It has been repeatedly demonstrated that ultraviolet rays above 2900 A. U. are highly destructive to all forms of organized life, and they are used for this purpose in the water-cooled quartz lamp, a most valuable germicidal modality.

With the highest appreciation of the fine work of Dr. Herman Goodman, the writer nevertheless suggests a classification of rays more in accord with the facts would be as follows:

Below 7000 A. U.—heat-producing rays (infra-red).

From 7000 to 4000 A. U.—Visible vitalizing rays.

From 4000 to 3100 A. U.—Vitalizing ultraviolet rays.

Below 3100 to 2900 A. U.—Biochemical rays.

From 2900 to 2300 A. U.—Lethal rays.

The mere fact that visible light is essential not only to vegetable and animal life, but also to the psychical, mental and spiritual development in the human race is too evident to require specific proof.

The whole subject is summed up in a quotation from the writings of H. P. Blavatsky, "Light is Life,—both are Electricity."

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Hollywood, April, 1929.

#### HIGH AND LOWBROW

A St. Louis critic says "Strange Interlude," the new O'Neill play, has points of interest for psychiatrists, gynecologists and psycho-analysts. Judging from the box office receipts, it seems to be a popular attraction for the tired business man and not so tired business woman, who have week-ends as well as money to spend in a theater.

#### A WAY TO DO IT

"Do you think the best English literature will ever become popular in America?"  
"Not unless the postoffice department excludes it from the mails."



## California Medicine

JOHN WM. SHUMAN, M. D., F. A. C. P.

### AMEBIASIS

By SAMUEL J. GLASS, M. D.,  
LOS ANGELES

Chronic intestinal amebiasis is of more frequent occurrence throughout the United States than is generally believed. Recent statistics place the incidence of infestation at 10 per cent of the population. One must therefore, suspect endamebiasis in all individuals with chronic colitis regardless of the residence. There is a growing belief that apparently healthy carriers are really suffering from a chronic toxemia due to the parasite. When the individuals' resistance is good, the minute lesions produced by the parasite in the intestines heal quickly or never become numerous enough to produce symptoms. But with resistance lowered, healing doesn't occur in many of the lesions, and symptoms do arise. Thus one is forced to the conclusion that symptoms of dysentery is actually the end result of infection with *endameba histolytica*. The case here reported is one of a chronic carrier, who as a result of lowered vitality had an acute exacerbation with symptoms of acute dysentery.

Case No. 19876—A white male, age 28, was admitted 9-17-18, with diarrhoea, abdominal pain and tenderness of two and one-half months duration. Was operated upon for appendicitis 1-15-28. Two months following he began having colicky pain chiefly in the epigastrium and right lower quadrant a half hour after meals. On admission he was having 3 to 5 stools daily. There was considerable tenesmus. He had lost 30 pounds in weight.

On examination an undernourished pale male presented no focal findings except tenderness on deep pressure in the right iliac region and an ulcerative colitis (per proctoscope). There was a mild anemia and leucocytosis with eosinophiles 3 per cent. Stool analysis revealed blood, mucus and many motile forms of *endameba histolytica*.

He was fed a smooth non residue diet with full doses of tincture belladonna and emetine hydrochloride grains one-third, intramuscularly for 10 days. Diarrhoea ceased. He was then placed on an extended course of yatren by mouth, and yatren enemas. His nutrition greatly improved, but he remained in the hos-

pital because of weakness, tachycardia, and the persistence of parasites in the stool. Stovarsol and more yatren by mouth finally eradicated the parasites and he was discharged as cured, 12-18-28.

**Comment**—There is no specific for amebiasis; but raising the general resistance of the individual and the creation of an acid medium in the bowels is of vital importance. Amebas do not proliferate when the intestinal tract is acidified. A non residue or smooth diet list with milk and cultured buttermilk predominating, is conducive to the elimination of the parasite. Along with these general hygienic measures to promote increased vitality, occasional courses of drugs, chiefly *ipecac* (and its alkaloid emetine), yatren and arsenic (stovarsol, treparsol or the arsephenamines) are indicated. There is a tendency to favour yatren and arsenic to the exclusion of the other drugs, especially emetine. The latter is of undoubted value in the acute dysenteries but unlike the case reported above most amebic infections seen in this institution are of the chronic variety.

Discussion by Dr. Shuman: The management of chronic amebiasis is a long tedious clinical problem. It is one which taxes both patient and doctor. Read the monographs of Dobel, Craig, Kofoed, Kessel, and Barrows to know the pathologic significance of protozoiasis. Bear it in mind in all chronic colitis especially those characterized by alternating constipation and diarrhoea. Boyers and Kofoed \* write, "We are dealing with a disease entirely as protean and undramatic in behavior and subtle in onset as syphilis. The dearth of the usual findings to account for the patient's symptoms, should make one suspicious of an amebic infection, especially if the symptoms are vague in character."

520 West Seventh Street.

\*L. M. Boyers, C. A. Kofoed, Olive Swezey—Chronic Human Amebiasis J. A. M. A., Nov. 7, '25, Vol. 85, No. 10, Pp. 1141-47.

### THE SPIRIT OF SERVICE

IN this issue will be found an announcement emanating from the American Pharmaceutical Manufacturers Association, setting forth the principles governing the activities of this old and worthy organization. The ethics of this body of scientific men are noteworthy, and should convince even the most skeptical that its members are sincerely striving to serve the medical profession to the best of their ability. This organization is right now making history for scientific medicine; a worthy hand-maiden, indeed!

From the Medical Service of John W. Shuman, M. D., Ward 155 Los Angeles General Hospital.



(return to Dr Strong for filing) *Scrapbook*

light and the itching and burning stopped one hour after his first treatment, healing was manifest after the third treatment and the lesion was completely healed in thirteen visits.

Involvement of the respiratory tract was noted in forty-seven cases in this series, including twenty-two cases of bronchitis, most of whom received from one to six treatments with uniformly good results using both systemic and local irradiation. Fourteen cases of upper respiratory infection including acute coryza, naso pharyngitis and so on, show uniform improvement in from two to six treatments, using local applications of water-cooled light with quartz applicators. Empyema responds readily to radiation and we employ both local and systemic applications. In nine cases of bronchial asthma, good results were obtained in six, two were absolute failures and the third quit after the second treatment.

Staphylococcal infections of the skin such as boils, carbuncles respond very readily to ultraviolet as a rule. We use both local and systemic irradiation, and the average number of treatments in this series of forty-five cases was five, with the duration of symptoms from twenty-four hours to four weeks. When a boil is seen in the early stage, before pus formation, it is quite often possible to abort the infection; but if seen after this point, the abscess should be opened and after the establishment of good drainage, applications of quartz light are made by direct contact with the inflammatory area. Care should be exercised however, to see that the area radiated is not too large for that will produce an inflammatory reaction of its own and offer new fields for the infecting organism. The chief benefit here is derived from the germicidal activity of the short wave-length ultraviolet.

#### Conclusions:

Ultraviolet of itself is not a true specific for any disease, but is a most decided adjunct in the treatment of many.

Treatment should not be given more often than every alternate day, and in some instances, no oftener than twice a week.

In eczema and the eczematoid dermatoses, treatment should be continued a short time after the initial lesion is healed.

Calcium therapy is important in combination with ultraviolet radiation.

Parry Bldg.

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#### NEW COLD-RAY QUARTZ LAMP KILLS ORGANISMS IN FIVE SECONDS

Cold-Ray Light Research Laboratory,

Hollywood, California,

Gentlemen:

**R**ECENTLY a "Cold-Ray Quartz apparatus" was submitted to me with the request that tests be made of its possible germicidal power, both without and with quartz intervening between it and the preparations of bacteria to be tested. The following is a report of such experimental trials.

For these tests two organisms were selected. First: *B. coli*, since it is one having a rather high degree of dispersion by which is meant that it does not readily clump as does the *Staphylococcus* for instance. Moreover it does not form spores. Second: *B. subtilis* was used as a test organism since it forms spores profusely and easily. These spores are some of the most resistant living bodies known in nature and withstand many times more concentration of untoward conditions than do vegetative organisms such as *B. coli*. In addition, this organism tends to cling together and this characteristic makes it more difficult to kill by external agents such as light radiation since certain of the bacteria tend to mask others.

Cultures were prepared as follows: They were cultivated upon beef agar slants at 37 degrees incubation. The *B. coli* was used after 48 hours incubation while the *B. subtilis* was given five to seven days growth before exposure to radiation in order to allow heavy spore formation. The presence of spores in large numbers was verified by smear preparations.

The technique of exposure is the following: The organisms to be tested were first suspended in sterile water and then one 2 mm. loopful of this liquid suspension was placed in the middle of the circle of the lower half of a sterile petri dish. The water was driven off by a few minutes drying in the incubator at 37 degrees C. By this means all of the forms to be radiated were placed within a circle of not more than 5 mm diameter upon the plate. Following radiation 5 cc of sterile water was added to the plate for the purpose of resuspending the organisms. The plate was then rotated gently for approximately one minute after which beef agar was added and the preparation allowed to become semi solid. It was then incubated at 37 degrees for a period required to allow maximum growth of the forms. Finally this plate was given a series number for record. Unexposed control preparations were included for each series and no desiccated plate, was allowed to stand longer than two hours before use.



starting with one-half minute and increasing to two to five minutes, slowly, depending on the erythema and the resulting pigmentation. While the reason for the sedative effect is unknown, I believe it to be due either to an affect on the sympathetic nervous system alone, or as a result of the increased calcium metabolism, since calcium controls muscle and nerve tone.

Among those conditions manifesting themselves locally, probably eczema ranks first in frequency in our office. In a group of twenty-five cases we have had uniformly good results, using from three to thirty treatments for complete relief. It is our custom to use very heavy radiation in these cases, using the water-cooled lamp at a distance of one-half to three inches for a period of five minutes at first, increasing rather rapidly up to perhaps ten or fifteen minutes. If, however, the area to be treated is large, we then use the air-cooled lamp at a distance of ten inches for the same or a slightly longer period. The heavy dose is necessary because of the extremely poor penetrative power of the short wave lengths of ultraviolet, and because of the piled up mass of epithelium due to the desquamative action of the eczematoid lesions. We also use heavy systemic irradiation in every case because of its effect on calcium metabolism, and every patient in this class needs and receives calcium in some form. Personally we prefer calcium chloride intravenously because it can be given in large doses and we are sure it reaches the blood stream, and it seems to have quite a favorable effect on the itching. It is necessary to remember in giving calcium intravenously, that there is a constant reaction; that is, at each injection the patient experiences an uncomfortable sensation of warmth and may in some instances faint; therefore the patient should be warned beforehand and the injection should be given very slowly to minimize the effect. In many cases of clinically proven calcium insufficiency, it is frequently impossible to detect this fact chemically by blood analysis. So that while we combine our calcium and ultraviolet therapy, we probably influence the ability of the body to take care of the calcium administered or already present but not assimilated. Kime<sup>4</sup> says that calcium fixation is the one universally accepted bio-chemical activity of ultra-violet but the exact mechanism by which it is consummated still remains unproven. The probable mode of action is by increased assimilation through the bowel.

Two cases will illustrate our methods and results in this condition. The first, a lady 78 years of age, who had been to many different clinics throughout the country, came in with a large weeping, scaling, eczematous mass covering her scalp from the neck up over the back of her head

to the bregma in front. This area was shaved and intensive local air-cooled quartz light in the course of two months produced an absolute cure, a cure that stayed cured for she is now 82 and has not had a sign of recurrence at any time. The other case is that of an infant six months old who had been treated by two pediatricians and two dermatologists without success. She had a weeping eczema beginning at the waist line in front and extending upward over the neck, face, head and down across the shoulders in back. The baby was in agony and was constantly scratching her chest and face. Two treatments, sufficed to relieve the itching and all lesions were entirely healed after six treatments, given every second day. In the first case we used intravenous calcium chloride and in the second we used calcium lactate, ten grains three times a day.

In other forms of dermatoses we find both good and bad results. In fourteen cases of dermatitis of varying etiology, including X-ray, we had complete cures in eight patients, three failures of which one was an X-ray burn; two were slightly improved and in one the improvement was noticeable but very slight. Twelve cases of acne vulgaris responded very slowly but surely to combined local and systemic irradiation. In eleven cases of psoriasis we had uniform good results except in one case which showed no improvement after twenty-eight treatments. Five cases of pruritus yielded promptly to combined local and systemic irradiation but one was made much worse. In these last two types of cases, we find the addition of calcium very beneficial and also that the treatment must be given very heavy. I believe our results with psoriasis would be more dramatic if we gave a dose sufficient to produce a first degree burn, thus producing a local anaphylactic reaction, since we believe psoriasis to be a protein disturbance. Seborrheic dermatitis accompanied by alopecia responds only fairly well. Out of seven cases, only two showed any marked benefit, though four were improved.

Superficial ulcers, exclusive of the rodent ulcer which is best treated with some form of endothermy, respond very nicely. Of the seven in this series, one deserves special mention. A young man, age 24, developed a chancroidal ulcer involving the glands on both sides and below the meatus. For obvious reasons he avoided his family physician and went to a quack who used a blue light on it for six weeks without any improvement. In desperation he consulted his family physician who immediately called in a reputable genito-urinary specialist. Under his care there was some improvement but nothing definite. When ultraviolet was suggested the patient demurred because of his previous experience with "light," but he finally consented to try it again. We used intensive applications of water-cooled

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The relative resistance of *B. subtilis* also is evident in Table II but nevertheless 5 minutes exposure killed all and the mortality beginning with 5 second exposure is most evident.

TABLE I.

Cold-Ray ultraviolet *B. coli* fully opened grid, Distance 1-5/8 inches.

| Time    | Results     | Record Number |
|---------|-------------|---------------|
| 5 Min.  | 2 colonies  | 4D            |
| 3 Min.  | Sterile     | 4C            |
| 1 Min.  | Sterile     | 4B            |
| 30 Sec. | Sterile     | 4A            |
| 5 Sec.  | Sterile     | 4G            |
| Control | Innumerable | 4E            |
| Control | Innumerable | 4F            |

Judging by these results the 2 colonies in 4D were adventitious.

TABLE II

Cold-Ray ultraviolet *B. subtilis*, fully opened grid, Distance 1-5/8 inches.

| Time    | Results     | Record Number |
|---------|-------------|---------------|
| 5 Min.  | Sterile     | 2E            |
| 3 Min.  | 1 Colony    | 2D            |
| 1 Min.  | 3 Colonies  | 2C            |
| 30 Sec. | 8 Colonies  | 2B            |
| 15 Sec. | 15 Colonies | 2A            |
| 5 Sec.  | 50 Colonies | 2H            |
| Control | Innumerable | 2F            |
| Control | Innumerable | 2G            |

The second series simulated the first except that the distance between the organisms exposed and the source of radiation was increased to 6 inches. Here it should be borne in mind that the effectiveness of light varies inversely with the square of the distance and that thus the potency of radiation is greatly lessened by the increase in distance from its source. Results of this series are shown in Tables 3 and 4 which follow. The non spore former again is relatively susceptible while the spore former, *B. subtilis*, is somewhat resistant although 5 minutes exposure at 6 inches distance has killed nearly all of them.

TABLE III

Cold-Ray ultraviolet *B. coli* fully opened grid, Distance 6 inches.

| Time    | Results     | Record Number |
|---------|-------------|---------------|
| 5 Min.  | 1 Colony*   | 3A            |
| 3 Min.  | Sterile     | 7D            |
| 1 Min.  | Sterile     | 7C            |
| 30 Sec. | 2 Colonies  | 7B            |
| 15 Sec. | 2 Colonies  | 7A            |
| Control | Innumerable | 3B            |
| Control | Innumerable | 7E            |

\*This one colony was killed by tamination.

TABLE IV

Cold-Ray ultraviolet fully opened grid, Distance 6 inches.

| Time    |
|---------|
| 5 Min.  |
| 3 Min.  |
| 1 Min.  |
| 30 Sec. |
| 15 Sec. |
| Control |
| Control |

The next series was designed to determine the effect of ultraviolet radiation through a wide applicator on the organisms in a Petri dish and on a surface. The distance was 3/4th inch. In Table 4. It was quartz applicator used effectively.

TABLE V

Cold-Ray ultraviolet fully opened grid, Distance 3/4 inch.

| Time    |
|---------|
| 3 Min.  |
| Control |
| 3 Min.  |
| Control |

Tests were then made of these results. The more narrow applicator which there was approximately 5/8 inch outer end. Again the surface of the applicator was 3/4th inch. 7 herewith included. The applicator has a large none spore bearing.

TABLE VI

Cold-Ray ultraviolet fully opened grid, Distance 5/8 inch, quartz grid and

| Time    |
|---------|
| 3 Min.  |
| 1 Min.  |
| 15 Sec. |
| Control |

TABLE VII

Cold-Ray ultraviolet fully opened grid, Distance 5/8 inch. Quartz grid and

| Time    |
|---------|
| 3 Min.  |
| 1 Min.  |
| 30 Sec. |
| 15 Sec. |
| Control |



This area was shaved and covered with quartz light in the course of an absolute cure, a cure which she is now 82 and has not relapsed at any time. The other child, six months old who had been treated by pediatricians and two dermatologists. She had a weeping eruption on the waist line in front and on the neck, face, head and shoulders in back. The baby was constantly scratching her chest and arms, sufficed to relieve the lesions were entirely healed and given every second day. In the intravenous calcium chloride and calcium lactate, ten days.

In dermatoses we find both in fourteen cases of psoriasis, including X-ray, in eight patients, three was an X-ray burn; two and in one the improvement was very slight. Twelve responded very slowly. In the systemic irradiation of psoriasis we had uniform results in one case which showed no improvement after eight treatments. Five responded promptly to combined treatment but one was made worse. In two types of cases, we found very beneficial and must be given very heavy. Psoriasis would be more sufficient to produce a local anaphylaxis producing a local anaphylaxis believe psoriasis to be a hemorrhagic dermatitis responds only fairly well. Two showed any marked improvement.

In the case of the rodent ulcer with some form of encrustation. Of the seven in special mention. A patient had a chancroidal ulcer on the sides and below the chin. He avoided his family and a quack who used a quack without any improvement. He consulted his family but nothing definite. He suggested the patient decided to try it again. He suggested the patient decided to try it again. He suggested the patient decided to try it again.

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| Time    | Results     | Record Number |
|---------|-------------|---------------|
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| 3 Min.  | Sterile     | 4C            |
| 1 Min.  | Sterile     | 4B            |
| 30 Sec. | Sterile     | 4A            |
| 5 Sec.  | Sterile     | 4G            |
| Control | Innumerable | 4E            |
| Control | Innumerable | 4F            |

Judging by these results the 2 colonies in 4D were adventitious.

TABLE II

Cold-Ray ultraviolet *B. subtilis*, fully opened grid, Distance 1-5/8 inches.

| Time    | Results     | Record Number |
|---------|-------------|---------------|
| 5 Min.  | Sterile     | 2E            |
| 3 Min.  | 1 Colony    | 2D            |
| 1 Min.  | 3 Colonies  | 2C            |
| 30 Sec. | 8 Colonies  | 2B            |
| 15 Sec. | 15 Colonies | 2A            |
| 5 Sec.  | 50 Colonies | 2H            |
| Control | Innumerable | 2F            |
| Control | Innumerable | 2G            |

The second series simulated the first except that the distance between the organisms exposed and the source of radiation was increased to 6 inches. Here it should be borne in mind that the effectiveness of light varies inversely with the square of the distance and that thus the potency of radiation is greatly lessened by the increase in distance from its source. Results of this series are shown in Tables 3 and 4 which follow. The non spore former again is relatively susceptible while the spore former, *B. subtilis*, is somewhat resistant although 5 minutes exposure at 6 inches distance has killed nearly all of them.

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|---------|-------------|---------------|
| 5 Min.  | 1 Colony*   | 3A            |
| 3 Min.  | Sterile     | 7D            |
| 1 Min.  | Sterile     | 7C            |
| 30 Sec. | Sterile     | 7B            |
| 15 Sec. | 2 Colonies  | 7A            |
| Control | Innumerable | 3B            |
| Control | Innumerable | 7E            |

\*This one colony was probably due to air contamination.

TABLE IV

Cold-Ray ultraviolet *B. subtilis*, fully opened grid, Distance 6 inches.

| Time    | Results      | Record Number |
|---------|--------------|---------------|
| 5 Min.  | 5 Colonies   | 1E            |
| 3 Min.  | 250 Colonies | 1D            |
| 1 Min.  | Appx. same   | 1C            |
| 30 Sec. | Appx. same   | 1B            |
| 15 Sec. | Appx. same   | 1A            |
| Control | Innumerable  | 1F            |
| Control | Innumerable  | 1G            |

The next series was centered about an attempt to determine the effectiveness of this source of ultraviolet radiation when passed through a flat wide applicator of quartz. The distance between the organisms upon the inner surface of the Petri dish and the flat surface of the quartz was 3/4th inch. Results are given below in Table 4. It becomes evident that this type of quartz applicator transmits the ultraviolet effectively.

TABLE V

Cold-Ray ultraviolet through square quartz applicator. Actual distance between quartz grid and surface of culture 2-7/8 inches.

| Time    | Organism           | Results     | Record No. |
|---------|--------------------|-------------|------------|
| 3 Min.  | <i>B. coli</i>     | 1 Colony    | 12A        |
| Control | <i>B. coli</i>     | Innumerable | 12B        |
| 3 Min.  | <i>B. subtilis</i> | 15 Colonies | 13A        |
| Control | <i>B. subtilis</i> | Innumerable | 13B        |

Tests were then made to ascertain the effectiveness of these rays when transmitted through a more narrow and conical shaped applicator in which there was a smaller flat quartz lens of approximately 5/8ths inch diameter placed in the outer end. Again the distance between the outer surface of the quartz and the organisms exposed was 3/4th inch. Results are given in Tables 6 and 7 herewith included. Evidently again this applicator has a large degree of effectiveness upon the none spore bearing *B. coli*.

TABLE VI

Cold-Ray Ultraviolet *B. coli* Conical Applicator 5/8 inch, diameter. Actual distance between quartz grid and surface of culture 6-1/8th inches.

| Time    | Results     | Record Number |
|---------|-------------|---------------|
| 3 Min.  | Sterile     | 6A            |
| 1 Min.  | 2 Colonies  | 6B            |
| 15 Sec. | Innumerable | 6C            |
| Control | Innumerable | 6D            |

TABLE VII

Cold-Ray Ultraviolet *B. subtilis* Conical Applicator 5/8 in. Diameter, Actual distance between Quartz grid and surface of Culture 6-1/8 inches.

| Time    | Results      | Record Number |
|---------|--------------|---------------|
| 3 Min.  | 20 Colonies  | 5A            |
| 1 Min.  | 200 Colonies | 5B            |
| 30 Sec. | Innumerable  | 5C            |
| 15 Sec. | Innumerable  | 5D            |
| Control | Innumerable  | 10C           |



starting with one-half minute and increasing to two to five minutes, slowly, depending on the arythema and the resulting pigmentation. While the reason for the sedative effect is unknown, I believe it to be due either to an affect on the sympathetic nervous system alone, or as a result of the increased calcium metabolism, since calcium controls muscle and nerve tone.

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| 3 Min.  | 1 Colony    | 2D            |
| 1 Min.  | 3 Colonies  | 2C            |
| 30 Sec. | 8 Colonies  | 2B            |
| 15 Sec. | 15 Colonies | 2A            |
| 5 Sec.  | 50 Colonies | 2H            |
| Control | Innumerable | 2F            |
| Control | Innumerable | 2G            |

The second series simulated the first except that the distance between the organisms exposed and the source of radiation was increased to 6 inches. Here it should be borne in mind that the effectiveness of light varies inversely with the square of the distance and that thus the potency of radiation is greatly lessened by the increase in distance from its source. Results of this series are shown in Tables 3 and 4 which follow. The non spore former again is relatively susceptible while the spore former, *B. subtilis*, is somewhat resistant although 5 minutes exposure at 6 inches distance has killed nearly all of them.

TABLE III

Cold-Ray ultraviolet *B. coli* fully opened grid, Distance 6 inches.

| Time    | Results     | Record Number |
|---------|-------------|---------------|
| 5 Min.  | 1 Colony*   | 3A            |
| 3 Min.  | Sterile     | 7D            |
| 1 Min.  | Sterile     | 7C            |
| 30 Sec. | 2 Colonies  | 7B            |
| 15 Sec. | 2 Colonies  | 7A            |
| Control | Innumerable | 3B            |
| Control | Innumerable | 7E            |

\*This one colony was probably due to air contamination.

TABLE IV

Cold-Ray ultraviolet *B. subtilis*, fully opened grid, Distance 6 inches.

| Time    | Results      | Record Number |
|---------|--------------|---------------|
| 5 Min.  | 5 Colonies   | 1E            |
| 3 Min.  | 250 Colonies | 1D            |
| 1 Min.  | Appx. same   | 1C            |
| 30 Sec. | Appx. same   | 1B            |
| 15 Sec. | Appx. same   | 1A            |
| Control | Innumerable  | 1F            |
| Control | Innumerable  | 1G            |

The next series was centered about an attempt to determine the effectiveness of this source of ultraviolet radiation when passed through a flat wide applicator of quartz. The distance between the organisms upon the inner surface of the Petri dish and the flat surface of the quartz was 3/4th inch. Results are given below in Table 4. It becomes evident that this type of quartz applicator transmits the ultraviolet effectively.

TABLE V

Cold-Ray ultraviolet through square quartz applicator. Actual distance between quartz grid and surface of culture 2-7/8 inches.

| Time    | Organism           | Results     | Record No. |
|---------|--------------------|-------------|------------|
| 3 Min.  | <i>B. coli</i>     | 1 Colony    | 12A        |
| Control | <i>B. coli</i>     | Innumerable | 12B        |
| 3 Min.  | <i>B. subtilis</i> | 15 Colonies | 13A        |
| Control | <i>B. subtilis</i> | Innumerable | 13B        |

Tests were then made to ascertain the effectiveness of these rays when transmitted through a more narrow and conical shaped applicator in which there was a smaller flat quartz lens of approximately 5/8ths inch diameter placed in the outer end. Again the distance between the outer surface of the quartz and the organisms exposed was 3/4th inch. Results are given in Tables 6 and 7 herewith included. Evidently again this applicator has a large degree of effectiveness upon the none spore bearing *B. coli*.

TABLE VI

Cold-Ray Ultraviolet *B. coli* Conical Applicator 5/8 inch, diameter. Actual distance between quartz grid and surface of culture 6-1/8th inches.

| Time    | Results     | Record Number |
|---------|-------------|---------------|
| 3 Min.  | Sterile     | 6A            |
| 1 Min.  | 2 Colonies  | 6B            |
| 15 Sec. | Innumerable | 6C            |
| Control | Innumerable | 6D            |

TABLE VII

Cold-Ray Ultraviolet *B. subtilis* Conical Applicator 5/8 in. Diameter, Actual distance between Quartz grid and surface of Culture 6-1/8 inches.

| Time    | Results      | Record Number |
|---------|--------------|---------------|
| 3 Min.  | 20 Colonies  | 5A            |
| 1 Min.  | 200 Colonies | 5B            |
| 30 Sec. | Innumerable  | 5C            |
| 15 Sec. | Innumerable  | 5D            |
| Control | Innumerable  | 10C           |



An attempt was included to learn whether a narrow pencil of rays from this lamp when transmitted through a rod applicator of quartz 6-3/4ths inches long by 1/4 inch in diameter has any high degree of germicidal effectiveness towards unprotected *B. coli* and *B. subtilis*. The concentration of ultraviolet within such a small rod of Quartz must of necessity be relatively small since the area which gathers the rays is of such cross section. Results are indicated upon Tables 8 and 9. The effectiveness upon *B. coli* is most surprising when one considers the great limitations of any possible concentration of the rays. The distance in this series of experiments was 5 mm. between the organisms and the outer tip of the applicator.

TABLE VIII

Cold-Ray Ultraviolet *B. coli*, Rod Applicator 6 3/4 x 1/4 inch, Actual distance between Quartz grid and surface of culture 9 3/4 inches.

| Time    | Results     | Record Number |
|---------|-------------|---------------|
| 5 Min.  | 2 Colonies  | 8A            |
| 3 Min.  | 1 Colony    | 8B            |
| 1 Min.  | 1 Colony    | 8C            |
| 30 Sec. | 1 Colony    | 8D            |
| 15 Sec. | 4 Colonies  | 8E            |
| Control | Innumerable | 8F            |

TABLE IX

Cold-Ray Ultraviolet *B. subtilis*, Rod Applicator 6 3/4 x 1/4 inch. Actual distance between Quartz grid and surface of culture 9 3/4 inches.

| Time    | Results       | Record Number |
|---------|---------------|---------------|
| 5 Min.  | 25% reduction | 9A            |
| 3 Min.  | Innumerable   | 9B            |
| 1 Min.  | Innumerable   | 9C            |
| 30 Sec. | Innumerable   | 9D            |
| 15 Sec. | Innumerable   | 9E            |
| Control | Innumerable   | 9F            |

These results herein presented thus indicate a high germicidal power towards organisms whether vegetative or sportulating when lying unprotected by colloidal coating upon the surface of glass. It is evident that there must be a marked band at or about 2,600 Angstrom Units as this area of the spectrum has decided germicidal activity.

Very truly yours,

(Signed) T. D. Beckwith, Ph.D.,

Associate Professor of Bacteriology,  
University of California.

ONE of the most worth while events of the fall season will be the combined meeting of the American Electrotherapeutic Association with the Western Association of Physical Therapy. It will be held at Indianapolis September 9 to 13, 1929. Preceding the combined session there will be a course of instruction sponsored by these associations. The speakers of the meeting are all men of national reputation. Those who attend either the school of instruction or the combined sessions will get the last word in physical therapy.

## California Medicine

### JAUNDICE

JOHN WILLIAM SHUMAN, M.D., F.A.C.P.  
LOS ANGELES, CALIF.

THE character, distribution and degree of jaundice are important because jaundice is the most striking single tangible sign of liver disease. The liver, like the spleen, usually suffers in silence. These organs often attain huge size before enlargement is recognized. Examine carefully the size, consistency, and shape of the liver; the feel and tenderness of the gallbladder; observe whether the rectus is rigid and look for compensatory venous circulation of the belly wall. Note absence or presence and character of ascites; also metastases, purpuric spots and pruritus. The color and consistency of urine and feces often give valuable leads; the stools in obstructive jaundice are clay colored, the urine deep amber.

The following is an illustrative case presented by Intern Frank S. Reding, M. D.

CASE.—Hospital No. 83, from the service of Walter Wessels, M. D., a white female aged seventy, admitted February 1, 1928, with the diagnoses of cholecystitis and myocarditis. The chief complaint was jaundice, which had been increasing the past two months; also loss of weight and weakness.

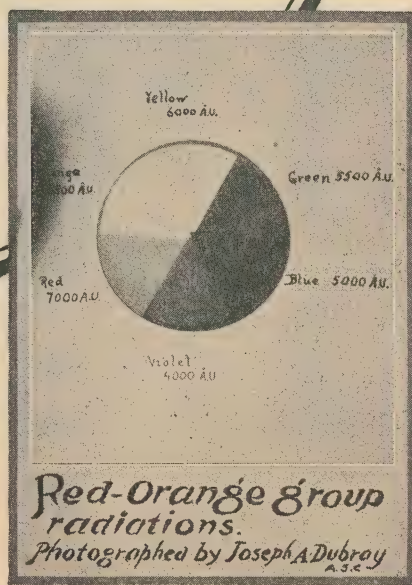
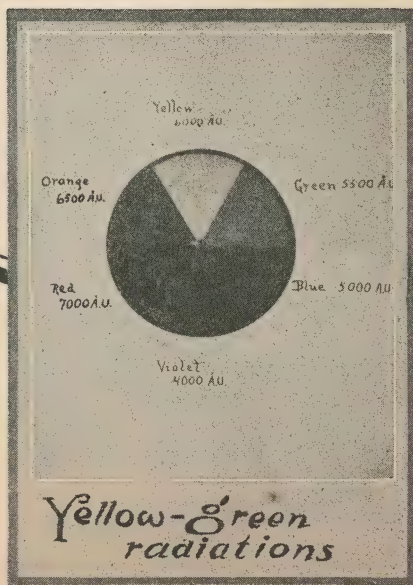
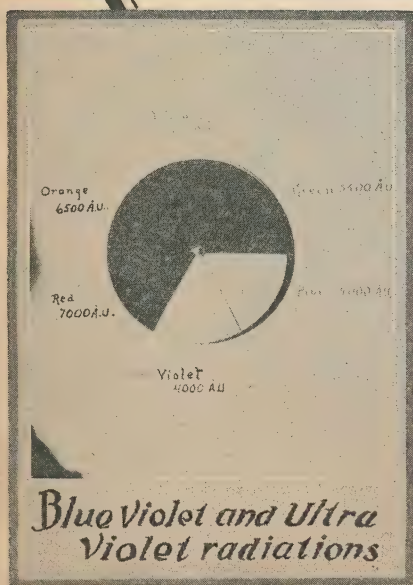
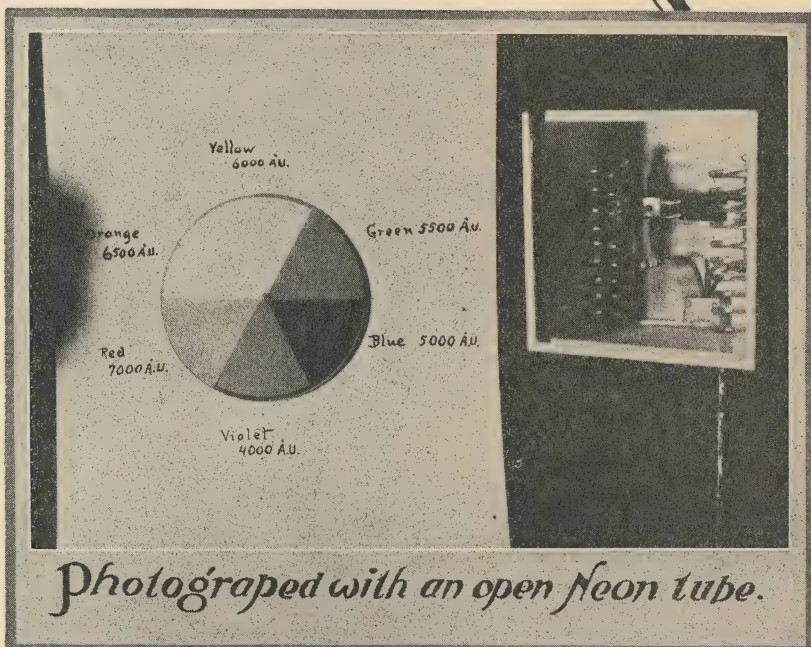
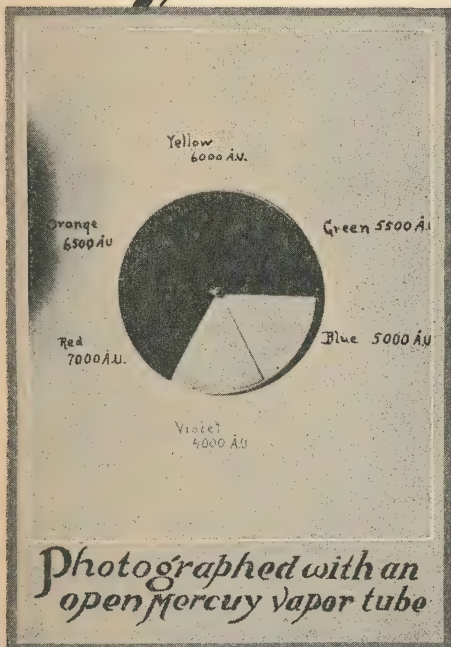
Personal history: Never seriously ill; ten pregnancies and no miscarriages; menopause at fifty-one; constipated for years; eructation of gas after eating for several years past; an attack of pain in the right upper quadrant two years ago with no jaundice.

The present jaundice painless; stools clay colored for three weeks; constipated, requiring daily cathartics; palpitation and shortness of breath on slight exertion; swelling of feet and ankles if on feet for several hours.

Physical examination: An emaciated and deeply jaundiced white woman; eyes and sclera a deep yellow; teeth, all out; tonsils, atrophic; pharynx, slightly injected. Heart, tones weak; regular, and no murmur. A mass in the right side of abdomen which extends down below the costal margin; a localized area of tenderness over the gall-bladder region with liver dullness at the costal margin. First degree edema of feet and ankles.

Tenth of twelve clinics for Seniors of Loma Linda University, Medical Department, held February 16, 1928, at the Los Angeles General Hospital.







# Monochromatic Light

*An Entirely New Field Appears to Be Opened for Investigation  
In Monochromatic Light Group*

The Cinema is the child of Cinematography and Cinematography is the direct offspring of Light.

Metaphysically speaking, Light is a state of consciousness and true light is also Color; white light being the simultaneous consciousness of all colors. Physically speaking, light corresponds to a single octave of electromagnetic vibrations, but this force does not produce light,—it induces or evokes its manifestations in the consciousness of the man himself.

Whatever we may think of man's true nature it will be conceded that he is neither ether-vibration, retina, nerves nor brain;—he uses these. Nor is he any or all of the states of color-consciousness which we call light;—he experiences these. The Immortal Spectator and Enjoyer of the Cosmic Cinema—this is the REAL MAN!

The language of light is seven-fold—the spectral colors of Newton. But we have to record this language on the tablets of consciousness by means of an ocular typewriter having but three keys. The generally accepted "Young-Helmholtz" theory of vision postulates three end-organs or antenna



Dr. F. F. Strong

for each retinal nerve unit. These correspond to Orange, Green and Violet. Simultaneous excitation of all three evoke white light in consciousness. Excitation of Orange and Green give subjective Yellow, Orange and Violet give Red, and Green and Violet induce the Blue sensation.

Science has reduced all ponderable matter to units of electricity—the Proton and the Electron. The electron is a unit of negative charge, groups of moving electrons constituting all types of electrical currents. The Proton is known in the free state only in the form of the Hydrogen Ion. These two are the primitive building blocks of the material universe. According to the generally accepted "Bohr Theory" the atoms of all the chemical elements are miniature solar-systems, each atom consisting of one or more protons as central suns around which revolve various numbers of planetary electrons in definite orbits. Bombardment of atoms by free electrons (electrical currents) cause some of the planetary electrons to jump from one orbit to another. The values of many of these "jumps" have been accurately determined, and the "splashes" they produce in the universal space-filler, the hypothetical ether, correspond to the single wave-lengths, the "Bright Lines" of the spectrum of gases.

What a light-wave really is is still a matter of speculation; about all that we can say is, that while sound waves are in one dimension, and water-waves in two dimensions, light energy is a three-dimensional wave. The phenomena of polarization prove this last statement.

Spectra may be divided into three general classes:—

1. **Continuous Spectra:** Emitted by incandescent solids such as tungsten filament in a "Mazda" lamp. Such a spectrum begins in the Infra-red and extends through all wave-lengths in the visible region up to about 3400 A. U. in the Ultra-violet. Light of this type, when the spectral values are balanced may appropriately be called artificial daylight and would appear to best be suited to the requirements of Cinematography.

2. **Band Spectra:** Emitted from gases heated to incandescence or from electrified molecular gases in a "vacuum tube" (all gases except hydrogen and the other monatomic gases). The spectrum of the flame of a car-

bon arc is of this class. (The incandescent ends of the carbons, of course, giving out a continuous spectrum.)

3. **Bright-line Spectra:** Emitted from electrified gases in the atomic state. These spectra are formed of chords, or mathematically related single wave-lengths. About the only practical sources of monochromatic light (from single wave lengths) are vacuum tubes containing the monatomic gases Helium, Neon, or Argon at pressures of about 10 mm., excited by a transformer current of from ten to fourteen-thousand volts. By adding metallic mercury to such a tube the electrified gas knocks out mercury ions and the tube then emits the familiar bright line spectrum of mercury similar to that produced by the Cooper Hewitt Arc, but without the large percentage of heat and infra-red rays generated by the latter.

The writer has devised a series of sixteen filters for use in connection with these vacuum tubes. The filters consist of various standard colored gelatine films, such as those used in theatrical lighting, in combination, or used in connection with various commercial colored glasses. In this manner it is possible to obtain single-wave monochromatic light in any part of the visible spectrum. Light of the following wave-lengths has been produced:

1. Red, 7032 A. U. (from Neon).
2. Orange, 6382-04 A. U. (Neon).
3. Yellow, 5790-69 (Neon-mercury) or 5876 A. U. (from Helium).
4. Green, 5461 A. U. (Neon-mercury).
5. Blue, 4348-59 A. U. (Neon-mercury).
6. Violet, 4047-78 (Neon-mercury).

To obtain a sufficiently powerful source of light the luminous tubing is formed into a close spiral about 15" long by 3" diam. representing a tube length of about fifteen feet. Many uses for this light will doubtless be found in psychological and biological laboratories and very important and interesting results may be expected from future research work.

In order to obtain and investigate the therapeutic effects of monochromatic light the writer has employed groups of adjacent lines in different spectral regions. One filter used with a Neon unit gives a very powerful orange red free from all other colors. It results from eighteen bright-lines. No data is available at the present time as to the physiological and therapeutic properties of this group, but these are being studied. These lines give a dominant hue of about 6300 A. U., corresponding to the first Young-Helmholtz Primary.

A yellow-green group formed from the mercury yellow and the green lines has a dominant hue of about 5600 A. U., corresponding to the Second Primary. This light has been found to be a powerful stimulant to cell reproduction, especially in connection with plant growth. Clinically it has given excellent results in the treatment of redundant scars, and skin diseases where it is desired to induce normal cell production. It promises well.

The third Young-Helmholtz primary is obtained by the use of the writer's "No. 1" Filter used in connection with a Neon-mercury generator. Its visible lines are the Blue 4359-48 A. U. and the Violet double line 4078-47 A. U. Spectrograms made at the Physics Department of the Univ. of Calif. of L. A. by Dr. Ellis show that in addition to the last mentioned visible lines, there is transmitted the powerful Ultra-violet triplet, 3663-44 A. U. The presence of this wave is also demonstrated by the brilliant yellow fluorescence of Willemite and Uranium glass.

Mr. Joseph Dubray has made a series of interesting photographic studies with these three ray-groups which



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# Light Radiations and Photography

Under this pompous title, which would presuppose the writing of many volumes, the writer presents a few of a series of photographs taken recently in the cabinet of Dr. Frederick Finch Strong, of Hollywood, under well defined spectral radiations. The illustrations on the opposite page are more eloquent than any written word and a simple description of the conditions under which they were taken will prove undoubtedly more interesting than a long and dry sequence of words without the accompaniment of the visual interpretation of their meanings.

Dr. Strong is an eminent practitioner and has carried on for several years thorough investigations on the therapeutic effects of different kinds of light radiations. His work has led him to the making of some light filters which transmit well defined spectral radiations.

The light units used are either a mercury vapor tube or a Neon gas tube of the type illustrated in the engravings. The filters are of gelatine dyed with carefully selected dyes and their transmission is determined by careful spectroscopic inspection.

The two pictures at the top of the page show Dr. Strong with his small spectroscope, examining the radiations emitted by the lights which in these two cases are: at the left a blue-violet and at the right a deep red monochromatic radiation.

The lights actually shown in the picture were the sole illuminant used in taking the pictures. Panchromatic plates were used.

Note the difference in value of the draped curtain in the background which was of a rather dark blue color.

The other illustrations present pictures of a chart made of colored woolen materials, the colors corresponding to each segment being readable on the chart itself.

The picture at the left in the middle row was taken

*Technical Editor*

with the mercury vapor tubes and the one at the right, in the same row, was taken with the Neon tubes, both lights unfiltered.

The difference of rendition of the color values are so evident that no comment is necessary.

The illustrations of the bottom row are pictures of the same chart taken with lights of the following radiations:

The picture at the left: Blue-violet and ultra-violet end of the spectrum showing the three following lines: Blue 4358 A. U., Violet 4078-47 A. U., Ultra-violet triplet 3680-50 A. U.

The visual dominant hue of the quality of light used in the taking of this picture is at about 4200 A. U. and the photographic energy peak is placed at about 4100 A. U.

The middle picture: Photographed through a yellow-green filter transmitting radiations corresponding to the two lines 5790 and 5461 A. U. with a visual dominant hue at 5500 A. U.

The picture at the right: Photographed through a filter transmitting the red-orange group of the spectrum, corresponding to twenty dominant lines in the Red, Orange and Yellow, from 7063 to 5000 A. U. The dominant visual hue being at about 6350 A. U.

No comment is necessary to emphasize the selective action of the filters and the response of the photographic material to the radiations transmitted by them.

The abridged Transaction of the Society of Motion Picture Engineers by Mr. L. A. Jones on light filters, which is being printed in the columns of THE AMERICAN CINEMATOGRAPHER at this time, treats the technical end of orthochromatic reproductions and distortions so thoroughly and clearly that the writer refers the readers to this transaction for all further information on the subject that he may desire.

## Monochromatic Light

By FREDERICK FINCH STRONG

(Continued from Page 9)

are reproduced in connection with his article in this number of THE AMERICAN CINEMATOGRAPHER.

Eight months' experience in the clinical use of the "Blue Ultra-violet" Light (the ray-group last mentioned), have developed some surprising facts. It appears to promote all normal vital processes, induce restoration of endocrine balance and adjust abnormal blood-pressure. It does not appear to act biochemically except indirectly, and is quite different from the shorter ultra-violet rays produced by the Quartz mercury arc. Hospital reports show that it allays pain and nervousness and

induces natural sleep. It has been of especial value as an adjuvant in post-operative cases.

An entirely new field appears to be opened for the investigation of monochromatic light groups through this novel method of generation.

The results obtained with the "Blue Ultra-violet" combination call to mind an epigrammatic statement in an interesting book written in the early seventies:—

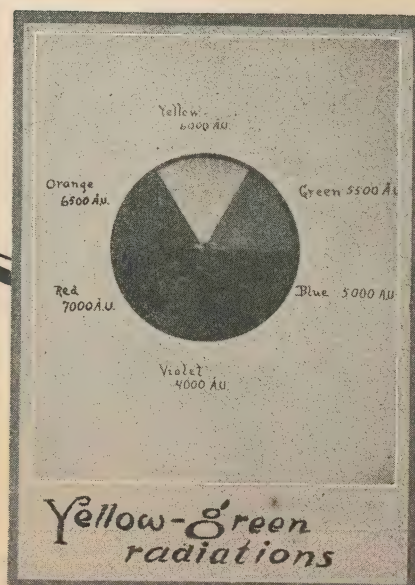
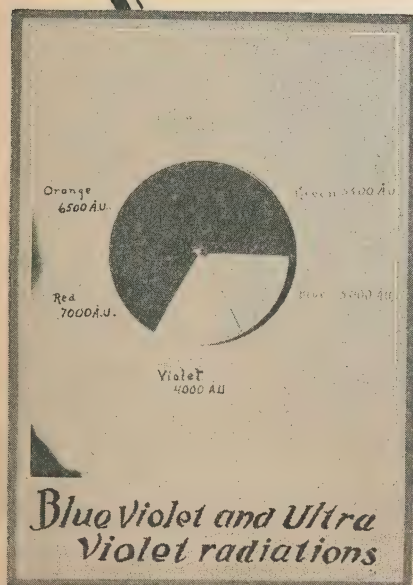
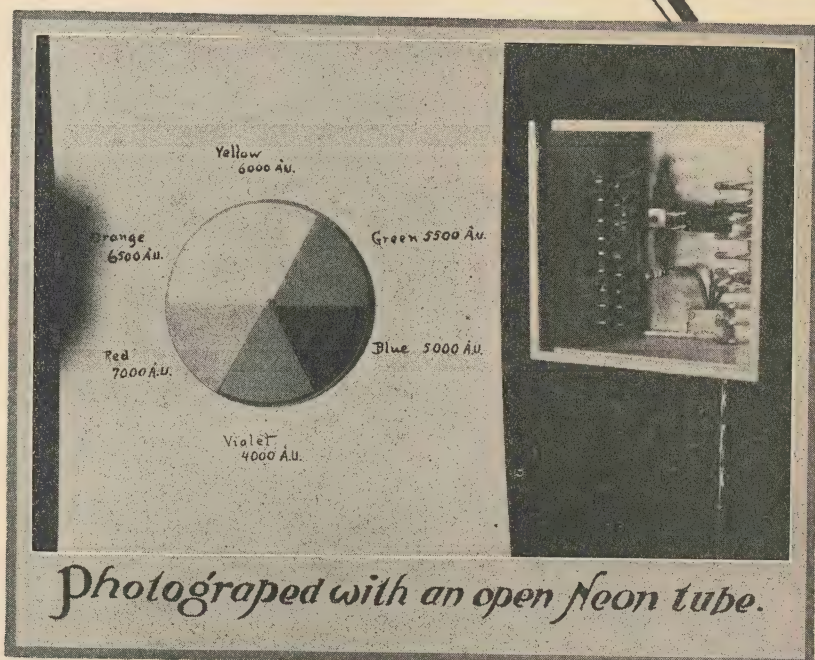
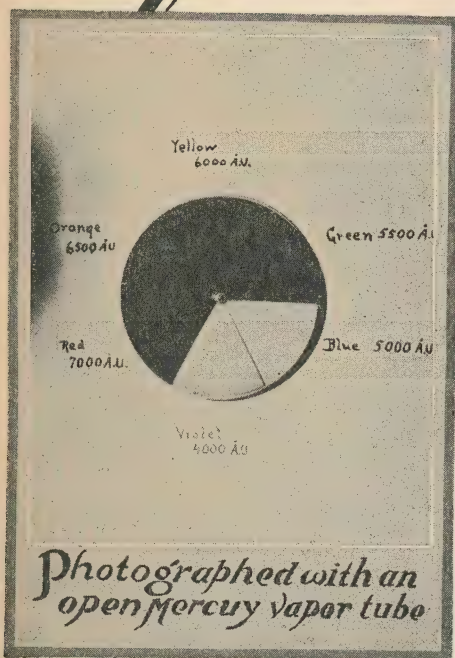
\* "Light is Life.....Both are Electricity." (foot-note)\* From "Isis Unveiled," by H. P. Blavatsky; 1877.

## Showmanship for Exhibitors

A complete new section of showmanship ideas will be found in the 1928 FILM DAILY YEAR BOOK published by THE FILM DAILY and which is now being distributed. These ideas are grouped so that the exhibitor who has a certain type of production to put over can quickly turn to that section and find countless ideas on how to exploit and sell his picture to his patrons. It has taken months and months to collect and prepare these many stunts for publication and the exhibitor who does not get for himself a copy of the 1928 FILM DAILY

YEAR BOOK will be doing himself an injustice. These money making stunts are all practical, they are not just theory as so many stunts submitted to exhibitors are these days. They are presented briefly and clearly so that exhibitors may readily grasp the idea and put it into practice. This is only one of the many interesting features that will be found in THE FILM DAILY YEAR BOOK which is given free with each yearly subscription to THE FILM DAILY whose offices are located at 1650 Broadway, New York city.







## THE HOME TREATMENT OF TUBERCULOSIS BY HIGH FREQUENCY CURRENTS.

(Continued from page 681)

body—for example, in acute bronchitis or "cold in the chest"—we have as prominent symptoms—fever, congestion, cough and expectoration. Most people think that by taking medicine to suppress these symptoms they can cure the disease; hence the use of cough-syrups, sedatives, etc. When the patient recovers under such treatment it is in spite of the medicine rather than because of it, for these symptoms are the very means nature is using to throw off the infection. Extra vital force is being wisely directed to the endangered area—hence the fever, heat, congestion and expectoration. Medical science has been working at the problem of "cure" from the wrong end. Instead of suppressing symptoms we must aid nature to throw off the disease-producing germs and neutralize their poisons. In other words we must assist and promote the process of inflammation. It is because the inflammation is not sufficiently vigorous that many cases of tuberculosis do not recover. The infected areas are usually anaemic to start with and after the infection becomes well established the general blood pressure drops and it is still more difficult to establish the healing inflammatory phenomena. Other germs come in and cause secondary infections which greatly hasten the progress of the disease.

Now the D'Arsonval High-frequency current, when applied to certain tissues of the body, produces all the effects of a natural inflammation—they cause "hyperaemia" or increase of blood to the parts, liberate heat and probably promote the circulation of the vital currents. This method is known as "diathermy" or "thermo-penetration" and has been successfully employed in many hospitals and clinics in treating pulmonary tuberculosis. Dr. Albert Geysler, of New York City, reports over sixty per cent of recoveries in cases so treated at his Clinic at Fordham University; others have reported equally good results, yet it is a fact that the State Boards of Health, the Public Sanatoriums and thousands of lung specialists ignore this important method of combatting the "Great White Plague."

For those who can make or procure a High-frequency apparatus, such as the writer described in the December, 1917, issue of the ELECTRICAL EXPERIMENTER, or any other standard therapeutic high-frequency apparatus giving both Tesla and D'Arsonval currents, the successful home treatment of tuberculosis is easily possible. The technique is exceedingly simple—once daily for twenty-five minutes, the patient is given a D'Arsonval treatment—a block-tin electrode attached to a cord connected with each terminal of the solenoid being held or strapped in close contact with the skin of the patient's chest and the corresponding portion of the back (Fig. 1), so that the infected area of the lung lies in the path between the electrodes. The spark is opened until the patient feels a deep penetrating heat in the tissues between the tin electrodes. If the heat becomes uncomfortable the spark gap should be made shorter. All physicians' machines are provided with hot-wire milliamperemeters in the patient's circuit. When the meter is available the current strength can be adjusted so as to begin with 1,000 ma., gradually increasing this to 2,000 ma., by the second or third week of treatment. A home-made machine operated from a one-quarter K. W. wireless transformer will not give more than 1,200 ma., in Diathermy, but this can be made sufficient by increasing the length of the treatment to forty

minutes. Continued daily for months this treatment will bring about recovery in a majority of consumptive patients. It is scarcely necessary to add that proper dietary and hygienic measures should also be employed. Bulletins giving all needed information on these points can be had gratis from any State Board of Health. A physician should be consulted occasionally so that the progress of the case can be intelligently followed.

The use of the "Ozone Nebula" by inhalation is of great value in treating tubercular cases and when it is given in connection with Diathermy the chances of the patient's recovery are materially increased. A simple home-made apparatus for this treatment is made from a Welsbach lamp chimney mounted in a wooden upright as shown in the drawing (Fig. 2); one end of the chimney is open, from which the patient inhales the nebula; the other end is closed with a disc of wood thru which is past a short glass tube three-eighths inch in diameter; a brass rod  $\frac{1}{4}$ " by 8" slides thru a hole in the center of the disc. The inner end of the rod carries a small brass disc  $\frac{1}{16}$ " by  $1\frac{1}{2}$ "; a small insulating rubber handle being attached to the outer end of the rod. A rubber tube connects the small glass tube with a DeVilbiss Oil Nebulizer (procurable for a small sum at any large drug store) containing a small amount of "Pinoleum"—a preparation containing oils of pine and eucalyptus.

In treating, the patient sits on the fiber condenser pad which is connected with one terminal of the Tesla coil; the other Tesla terminal is connected to the brass rod in the chimney which is brought up close to the patient's face until a fine purple effluve passes between him and the brass disc. An assistant now alternately compresses and releases the nebulizer bulb, thereby forcing the vaporized oil across the effluve so that it emerges from the open end of the chimney close to the nose and mouth of the patient. The patient, breathing naturally, inhales the chemical combination which is said to form between the oils and the ozone and nitrous vapors formed in the effluve; these are later released in the lung tissues. The action is antiseptic and also carries oxygen into the infected areas. Clinical tests seem to prove that there is a complicated vitalizing effect obtained by the simultaneous use of the ozone nebula and the Tesla currents.

This method was devised some years ago by the writer and differs from all the Ozone and "Oxylene" systems on the market in the above respect; in other words it is a combination treatment of two well recognized healing agents.

It should be given for only a few minutes at a time, and twice daily. If the vapor is too irritating, reduce the effluve by means of the spark gap or by withdrawing the sliding rod in the chimney.

No possible dangerous effects can follow the intelligent use of the electrotherapeutic methods above described, in the home treatment of tuberculosis, and the beneficial results are very marked.

Those interested in using high-frequency currents for the above purpose should obtain the back numbers of the ELECTRICAL EXPERIMENTER containing the articles "Electricity and Life," and "Treatment of Disease by High-frequency Currents" by the writer.

It is hoped that this article may be the means of enabling many sufferers from tuberculosis to regain their health.

After the disease is once cured its recurrence may be prevented by observing the following rules, which are equally appropriate for anyone who wishes to have more abundant health and life.

1. Breathe deeply plenty of fresh air, night and day.

2. Spend a part of each day walking or working out-of-doors.
3. Make at least one meal each day of nothing but fruit.
4. Make the rest of the diet largely or wholly vegetarian.
5. Never "get sorry for yourself"; get busy and help the other fellow who is worse off than you are.



Laboratory findings: blood showed a marked secondary anaemia; blood chemistry was negative; electrocardiograph indicated a left ventricular preponderance. Active hemorrhage contraindicated any Roentgen-ray study of the gastro-intestinal tract and other gastric tests.

Clinical diagnoses: (1) Secondary anaemia, (2) Peptic ulcer, (3) Hepatic cirrhosis, (4) Chronic pulmonary tuberculosis.

Postmortem diagnosis: Cause of death—gastric ulcer with erosion into the splenic artery.

*Comment:* Here we have an elderly male who presents a history of well being until a very recent date. There was a complete absence of any suggestive gastro-intestinal complaint except for a vague abdominal discomfort following meals. Hemorrhage is the first symptom for which he sought relief. It is a wonder that he survived the bleeding vessel as long as he did.

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Gross hemorrhage from primary gastric cancer is rare. Microscopic hemorrhage is common. A neoplasm in the location of the ulcer found at autopsy, being practically symptomless, is seldom diagnosed before it becomes inoperable. Gross bleeding *per se* suggests a lesion other than cancer. Another suggestive cause for massive hemorrhage is a rupture of an esophageal or gastric varix. Clinically the liver was thought enlarged, and this associated with the history of chronic alcoholism, hemorrhoids, dilated superficial abdominal veins, made a bleeding varix a possibility. This, however, was not borne out at autopsy. It is difficult to conceive of a perforating ulcer, such as was found here, not giving rise to a more definite clinically picture before the fatal hemorrhage.

In the treatment there was an attempt to observe certain fundamental considerations: (1) A clot of clots must be permitted and encouraged to form at the site of the bleeding. (2) The pressure of the blood in the vessels, lowered as a result of the hemorrhage, must not be raised so suddenly as to blow out the clots. (3) Shock must be combated, but not over-treated, too much stimulation often resulting in recurrent hemorrhage. (4) The digestion of the edges of the exposed blood vessel wound by the gastric juice must be prevented if possible.

X-ray study and stomach analysis was of course withheld, and absolute bed rest on a semi-soft diet was instituted until the patient could be submitted to surgery. Unfortunately he died before operative relief of the hemorrhage was deemed possible.

*Discussion by Dr. Shuman:* Surgery is a questionable factor in this instance. There is some dispute about the treatment of gastric hemorrhage *per se*. The majority of surgeons like Moynihan, Walton and W. J. Mayo avoid surgical treatment of acute massive gastric hemorrhage, regardless of its cause, because it is attended by a higher mortality than non-surgical treatment. Death from a single massive hemorrhage from peptic ulcer is rare.

520 West Seventh Street.

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#### THE OLD DRUG STORE AND THE OLD FARM

THE drug store is no longer an apothecary shop. A man setting up an old-fashioned drug store, though the most skillful compounder of prescriptions in the world with a stock embracing the entire pharmacopoeia would be but opening the door to the wolf of starvation. The drug store has changed from the time of our fathers when the window displays consisted of ornate receptacles filled with red, green and blue liquids. The drug store is now an emporium of everything. Drugs are served as well as ever, but the profits from the sale of them are but a small part of the income of the druggist.

The druggist has adopted diversification of business as the progressive farmer practices diversity of crops. The druggist has adopted rotation of stocks as the forward looking farmer who is not bound to the same crops year after year and is therefore in less need of legislative relief than the farmer who sticks to the old-time methods or who has not come far enough away from them.

The Council of Physical Therapy, A. M. A., as now organized, comprises physicists, physiologists, pathologists and clinicians.



not always due to pressure but that they may constitute menopausal symptoms which are improved by a few injections of ovarian extract. Werner claims that these symptoms occur in women with normal genital organs as well as in the presence of pelvic tumor. Those patients in whom actual pressure exists may relate that a few days before the menses the act of micturition requires more force and finally becomes impossible. Later, when the period has been established, the patients can again urinate spontaneously. In these cases, the myoma often fills out the lower pelvis completely. The premenstrual swelling causes an increased pressure upon the urethra which is lessened when the hyperemia goes down. In these women, radiation treatment would be of no use. In fact, it might happen that spontaneous micturition becomes impossible for a considerable period of time. This would be due to the swelling of the myoma which is the first effect of radiation and it does not change to atrophy for several weeks.

5. Every form of secondary degeneration of myoma demands operation. In these patients, there is usually fever, copious discharge, pain, all of which cannot be influenced by radiation.

6. Cases in which the myoma is complicated by inflammatory disease of the adnexa or by adhesions should not be subjected to radiation treatment.

7. Excessive size of the myoma forms a contraindication, and this affects tumors that extend above the umbilicus. In these cases, the success is uncertain for several reasons, especially because the exact location of the ovaries is uncertain and, therefore, it is impossible to insure their exposure to the rays.

Although the number of contraindications is high, Werner claims that it is possible to treat about 50 per cent of all cases of myoma by X-ray. A careful study of the patients may make it possible to treat some with apparent contraindications successfully, but these will always be special cases in which the treatment is administered in deference to the expressed wish of the patient.

#### COURTESY

The poet Cowper wrote:

"A moral, sensible and well-bred man  
Will not affront me, and no other can."

The philosopher Emerson wrote: "Life is not so short but that there is always time enough for courtesy."

And James T. Fields wrote:

"How sweet and gracious, even in common speech,  
Is that fine sense which men call courtesy!  
Wholesome as air and genial as the light,  
Welcome in every clime as breath of flowers,  
It transmutes aliens into trusting friends,  
And gives its owner passport round the globe."

## CLINICAL STUDY AND USE OF NEON MERCURY LIGHT

By FREDERICK FINCH STRONG, M. D.

SOME years ago the writer perfected a series of filters for use with a quartz Mercury arc, with which he was able to isolate the different lines in the visible Mercury spectrum as well as certain groups in the longer ultraviolet region. Many of these filters were of colored gelatine and did not stand up well under the heat produced by the Mercury arc. This led to the study of the so-called "Cold Mercury Light," which is emitted from vacuum tubes containing small amounts of Neon gas, together with metallic Mercury. Such a tube when excited by an alternating current of 14,000 volts emits an almost pure Mercury spectrum, practically free from heat and infra-red rays. Filters such as those designed by the writer have been used with this source of light for several years without showing any signs of deterioration.

At the present time the writer has equipped his offices with a variety of cold light units, not only those of the Neon Mercury type but others containing pure Neon. Nagelschmidt has reported surprising results with Neon light in relief of pain and reduction of fever. The writer is at present studying this source in connection with filters which transmit respectively a pure red group of wave-lengths and a pure orange group. Clinical results with these two groups will be reported in a subsequent article.

A large number of cases have been treated with rays emitted from Neon Mercury units, and some very surprising results obtained. The first experiments demonstrated the decided anodyne effects of a group of rays transmitted with the writer's No. 1 filter (a crystal violet gelatine). He has called this group the "Blue Ultraviolet," as it consists of three wave-lengths in the following proportions: Blue 4358 A. U. 45 per cent, Violet 4047-78 A. U. 20 per cent, Ultraviolet 3663-55-50 A. U. 35 per cent. A few brief case reports may be cited to illustrate this action.

#### (1) *Tri-Facial Neuralgia.*

Mrs. L., age 48. Tic-doloreux for twelve years. Left for eight years after removal of Gasserian Ganglion, but reappeared worse than ever two years before treatment. When first seen patient was almost insane from lack of sleep and pain. Large doses of morphine had given no relief. Other physio-therapeutic modalities had been tried before she came to the writer, but unsuccessfully. She was treated over the face and head with Mercury Neon unit, consisting of a grid ten inches square, formed of about five feet of radiant tubing. No immediate relief of pain followed the first treatment, but the patient slept five hours that night. Gradual improvement followed successive daily treatments of one hour each for several months. Patient has gone back to work and has been,

Written especially for the Medical Herald and Physiotherapist.



at the present time for over a year, free from neuralgia. No other treatment was given other than the Cold Mercury Light.

(2) *Gastric Neuralgia.*

Mrs. L., age 21. Gave the following history: Every day for over four months at about six p. m. experienced violent pain in the region of the stomach, which usually continued for several hours, sometimes up to four o'clock the following morning. Internal treatment, dietetic and medicinal, had given no relief. Patient was losing weight and strength from the pain. Systolic was 90, diastolic 65, haemoglobin 75%.

Treatment with Cold Mercury Light, with filter No. 1, applied close to epigastrium, for one hour. Patient reported the next day, in great excitement, that she had been free from pain for the first time in four months.

Was given daily treatments for three weeks, then twice a week for one month. Pain entirely ceased after the third treatment. When discharged systolic was 119, diastolic 70, haemoglobin 82 per cent. Patient had gained ten pounds. No treatment whatever except the Cold Mercury Light.

Patient was in good health and no recurrence of pain one year after last treatment.

(3) *Lumbago.*

Mrs. P., age 80. Suffered for four years with dizziness, ringing ears, constipation, lumbago, fainting spells in the morning. Heart intermitted frequently. Had been running a systolic pressure of over 200 for three years. Could not work or get about on account of pain in back.

Before treatment, systolic 220, diastolic 90, P. P. 130.

Treatment: Cold Mercury Light, with filter No. 1, over spine thirty minutes, thirty minutes over head and thorax. After treatment, systolic 205, diastolic 90. Pain was very much relieved.

After the third treatment systolic was 180, diastolic 100. Pain entirely gone. After two weeks' treatment she was able to get about and do her housework. After one month dizziness and fainting spells ceased. Heart normal and no pain. Systolic 156, diastolic 90.

No other treatment except the Cold Mercury Light.

Six months after last treatment patient was examined and found to be normal and has been active in the interim. Systolic 150, diastolic 90.

THE above reports are selected from a large number in which pain has not only been relieved, but the condition which caused it entirely corrected by this treatment.

Case No. 3 was the first in which the writer's attention was called to the effect of this new light on hypertension. This led him to use this treatment in similar cases, with most gratifying results. Over thirty cases have been treated, all of which showed a systolic of over 200, and with one exception a series of treatments, averaging about fifty, have entirely restored the patients to health, the average systolic when they report monthly for observation after the completion of the series of treatments being about 155. The exception was a case of heart block, every other beat being suppressed. The patient had had a pulse of 38 for some years. The systolic, which was 230, was not reduced with the Cold Light treatment. This is significant for it shows that this new modality induces an endocrine balance which would reduce the blood pressure to normal in the average case but would have no effect on

a purely compensatory hypertension, as in the case just cited.

While the first few cases were treated with the small unit above described, later cases were treated with a "bath" arrangement consisting of ten parallel tubes, each six feet long, covered with the appropriate filter, and suspended about two feet above the couch on which the patient reclined, all clothing being removed.

Another form of unit which has proved particularly efficient in hypertension cases, consists of three sections arranged in the form of a hollow square, each section containing about twelve feet of tubing. It was noticed that gradual improvement followed the use of these rays in many cases showing marked hypotension, as well as cases of hypothyroidism, which seems to confirm the writer's theory that this agent acts by inducing an endocrine balance.

Recently comparative tests have been made with rays emitted from the quartz Mercury arc with the No. 1 filter, the light transmitted being the same as that with the Neon Mercury unit. Some relief of pain and some vitalizing and sedative effects have been obtained in this way, but the writer has been unable to influence hypertension or hypotension. This would indicate that there are elements at work in the Neon Mercury treatment peculiar to this method of generation.

Careful experiment has shown that in addition to the light from the Mercury lines there are the following unique factors: First, the light comes in interrupted pulses synchronous with the frequency of the current (100 to 120 per second). This would seem to produce a vibratory light massage on the nerve endings, producing not only local effects, but which perhaps travel through the sensory nerves to the spine and across the ramificantes affecting the sympathetic and para-sympathetic systems. Second, radiating from the Neon Mercury unit are two forms of electrical waves; (a) the low frequency waves synchronous with the alternations of the current; (b) superimposed high frequency currents of extremely short wave-lengths. The latter seem to be generated by the oscillations of the gas body in the vacuum tubes. They are being studied in the writer's laboratory, and also in the Claude laboratories in Paris where the phenomenon was first noticed.

With the large "bath" unit, or with the triple unit above described, the electrical charges imparted to the patient are so great that a Neon tube may be illuminated if held in contact with the patient's skin, small sparks may be drawn from the patient's body and a telephonic detector be made to buzz loudly.

The question arises: How much of the effect on the endocrines observed in patients treated with Neon mercury light is due to the



electrical effect, and how much to the light rays? The writer has made a series of experiments in an attempt to answer this question. Opaque paper screens were placed over the lights and the patient given the treatment as usual. Hypertension cases so treated showed about one-half the drop that was obtained when the light was unscreened. The previously cited experiments with the quartz lamp with the violet filter would seem to prove that Mercury light alone will not produce the effect. Therefore it appears that a happy combination of physical forces are simultaneously produced with the writer's Cold Light system which appear mutually to reinforce each other.

The treatments with the writer's original small unit were always given for one hour. With the larger units now employed a maximum effect is often secured in fifteen to twenty minutes, although no harmful effects result if the treatment is continued for an hour or more.

In addition to the types of cases in which the benefit appears to be due to the induction of endocrine balance, the writer has accumulated clinical data showing the effects of the Cold Light in a variety of other conditions. For example: in cases of burns of all degrees, many acute skin infections such as poison oak, herpes facialis and furunculosis, striking results have been obtained by the use of the Cold Light, with the No. 2 filter, which transmits a three-wave group of a dominant turquoise color, consisting of three wave-lengths, Mercury-Green 5461 A. U., Blue-Green 4916 A. U., Blue 4358 A. U. This ray-group has also given excellent results in the treatment of acute fevers and as a routine post-surgical treatment to promote the healing of wounds. In all these cases there is usually a marked anodyne effect, although occasionally, for some unknown reason, we meet with a case in which pain is not relieved at all.

Other types of cases have been treated successfully with the No. 3 filter which transmits no ultraviolet but only the yellow line, 5790 A. U., and the green line, 5461 A. U. The No. 4 filter transmits only the yellow line. Data is accumulating indicating the specific uses for these two ray-groups, which will be given in a subsequent article.

Very remarkable results have been obtained in organic cardiac cases, the blue-ultraviolet group being used for the most part. Anasarca subsides almost invariably after a few treatments and the cardiac muscles seem to be strengthened and the murmurs become less noticeable. Excellent results have been obtained in several cases after acute endocarditis, the rays being very helpful in establishing an adequate compensation.

Other physicians who are now using the writer's methods are reporting some very interesting results. Three cases of osteomyelitis have

recovered under the treatment, and in each case the morphine was discontinued after the Cold Light was used. All made uninterrupted recoveries. A prominent surgeon in Los Angeles states that he has reduced his hypnotics and narcotics in his surgical practice by about 20 per cent since employing Cold Mercury Light as a routine post-surgical measure.

The writer believes that in introducing this new modality he has given the profession an agent having greater therapeutic value than any heretofore used in physio-therapeutic practice.

*Hollywood, October, 1928.*

## California Medicine

JOHN WM. SHUMAN, M. D., F. A. C. P.

### HEMATEMESIS

By SAMUEL J. GLASS, M. D.,  
LOS ANGELES

**H**OSPITAL No. 31050: A 71-year-old laborer, was admitted 9/13/28 after vomiting a pint of black clotted blood. His stools were black and tarry. The vomiting was preceded by faintness and dizziness.

Until two weeks prior he felt fairly well, then he noticed a vague heaviness in the upper abdomen following meals. His appetite was good. He became weaker and less energetic. There was a slight unproductive cough but no dyspnoea nor any edema. Nocturia two to three times daily for the past few years.

His past history indicated hard work and chronic alcoholism. Hemorrhoidectomy in 1910. Tenosynovitis with ganglion formation of right wrist in 1925.

Patient left the hospital against advice 9/17/28 to return 10/2/28 with the statement that on 9/19/28 he vomited over a quart of bright red blood. On the day of readmission he had another hemorrhage of about 300 c.c.

Examination revealed an elderly, very anaemic and emaciated male. Heart slightly enlarged to left; sounds distant. Blood pressure 118/84. Impairment of resonance over both apices especially the left where breath sounds were bronchovesicular followed by occasional crepitations. Abdomen scaphoid with dilated cutaneous veins. Liver one finger breadth below costal margin. There was a first degree bilateral inguinal hernias.

On 10/8/28 he had another hematemesis of 500 c.c., bright red blood. He became very restless, blood pressure fell, and pulse increased and two hours later he vomited some blood clots, said he felt stronger and warmer, but died shortly afterwards.

Clinic No. 3, from the medical service of John W. Shuman, M. D. Ward 155, Los Angeles General Hospital.



Laboratory findings: blood showed a marked secondary anaemia; blood chemistry was negative; electrocardiograph indicated a left ventricular preponderance. Active hemorrhage contraindicated any Roentgen-ray study of the gastro-intestinal tract and other gastric tests.

Clinical diagnoses: (1) Secondary anaemia, (2) Peptic ulcer, (3) Hepatic cirrhosis, (4) Chronic pulmonary tuberculosis.

Postmortem diagnosis: Cause of death—gastric ulcer with erosion into the splenic artery.

*Comment:* Here we have an elderly male who presents a history of well being until a very recent date. There was a complete absence of any suggestive gastro-intestinal complaint except for a vague abdominal discomfort following meals. Hemorrhage is the first symptom for which he sought relief. It is a wonder that he survived the bleeding vessel as long as he did.

Some of the more important postmortem findings might be mentioned here: The left lung showed an apex rather nodular, and the appearance of an old tuberculous process, some of which is active. There was slight hypostatic pneumonia at both bases. The abdominal cavity contained no blood nor ascitic fluid and no evidence of peritonitis. On opening the stomach it was found to contain about 1200 c.c. clotted blood. On the greater curvature about 3 inches from the cardiac end there is a shallow ulcer the size of a nickel in the center of which is a perforation about 3 m.m. in diameter, walled off by firm adhesions to the pancreas. A probe is readily passed through this perforation into what appears to be the splenic artery. It appears to be at a definite erosion into the artery, readily accounting for the severe hemorrhages. The blood vessel in question shows very little sclerosis or abnormality. The pancreas was negative. The liver is slightly smaller than normal and is of a pale tan color. It shows no evidence of cirrhosis. The gastric ulcer shows no evidence of malignancy.

Gross hemorrhage from primary gastric cancer is rare. Microscopic hemorrhage is common. A neoplasm in the location of the ulcer found at autopsy, being practically symptomless, is seldom diagnosed before it becomes inoperable. Gross bleeding *per se* suggests a lesion other than cancer. Another suggestive cause for massive hemorrhage is a rupture of an esophageal or gastric varix. Clinically the liver was thought enlarged, and this associated with the history of chronic alcoholism, hemorrhoids, dilated superficial abdominal veins, made a bleeding varix a possibility. This, however, was not borne out at autopsy. It is difficult to conceive of a perforating ulcer, such as was found here, not giving rise to a more definite clinically picture before the fatal hemorrhage.

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X-ray study and stomach analysis was of course withheld, and absolute bed rest on a semi-soft diet was instituted until the patient could be submitted to surgery. Unfortunately he died before operative relief of the hemorrhage was deemed possible.

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### THE OLD DRUG STORE AND THE OLD FARM

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# WHO IS THIS EINSTEIN? TO BE SUBJECT OF LECTURE

By FLORENCE PIERCE REED

The local pot-pourri of scientists, mathematicians and philosophers who are studying life in the light of recently propounded "Theory of Relativity" and have had their school work on "time," "space," "force," "matter," "geometry" and "physics" knocked to philosophical smithereens, will hear a lecture by Frederick Finch Strong, philosopher, dealing with Einstein, founder, next Friday evening at Blanchard hall.

"Who Is This Man Einstein?" will be his topic, and he will discuss at length many phases of the philosophy and its discoverer or creator, as well as giving a bird's-eye view of his character. Dr. Strong, who perfected the violet ray, which has been such a blessing to thousands, is not only a medical doctor and a widely known authority on orthodox science, but is also a leader among occult scientists. He is one of the few scientists in the world whose occult demonstrations have been made before orthodox scientists in the great universities and have been accepted as possible. As a speaker he is unusually interesting, and already the theosophists and many others in the city who are keeping up with contemporary thought and religion, have signified their intention of being present.

## MAKES PEOPLE THINK

"Whatever the name Einstein means, or is," says Dr. Strong, "he makes people think. Many who have been content to have their thinking done for them are aiding in the regeneration of the world by thinking independently."

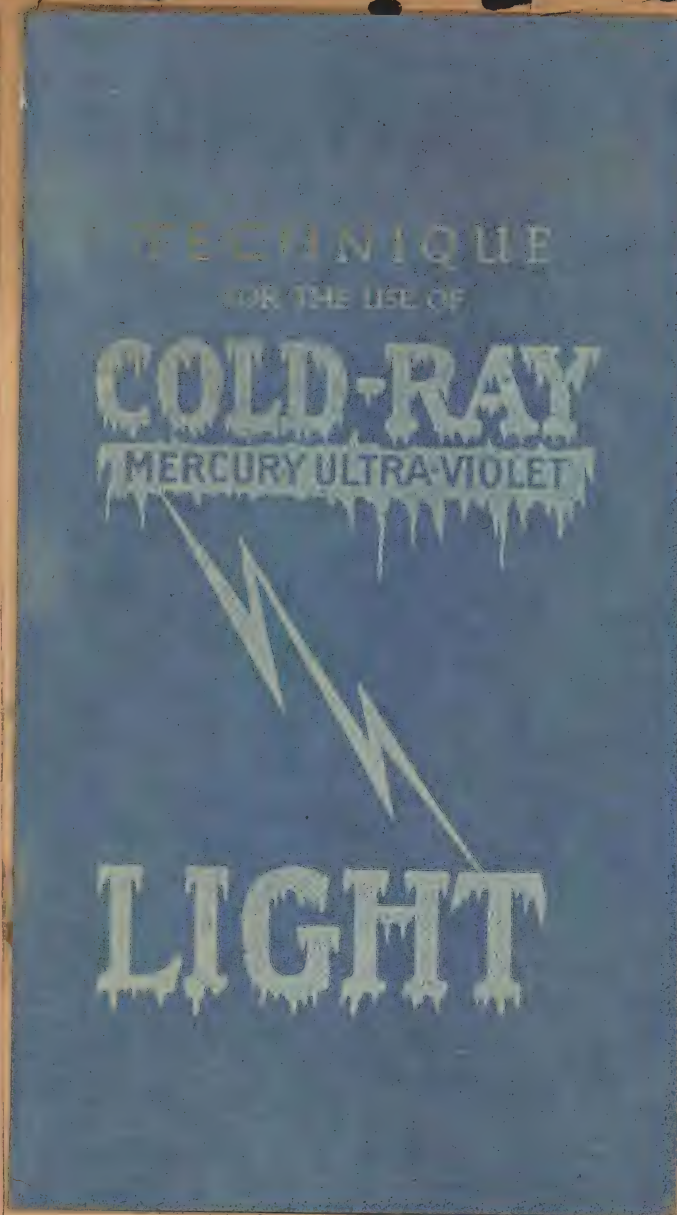
"Einstein is a thought provoker. He is still more a thought compeller. Whether or not we prove or disprove Einstein's theories, it is true that educators and clergy and public speakers are compelled to study the 'theory of relativity' either for the purpose of refuting it if it is hostile to their accepted dogma or religion, or accepting it; or at least being able to know something of the sub-

ject which now has an important place in conversation of drawing-room, lecture hall, schools and places of worship."

It has been jocosely stated in various mediums that Einstein is a celebrated Hebrew banker who rose from a pawnbroker to a leader of world finance through the purely "relative value" such as the American dollar. Some called him a "bolshvist," "anarchist," international food distributor, "a Jew who has been persecuted by Henry Ford," a "psychoanalyst," a "prize fighter who knocked out an English guy, like Newton," and "Zionist."

What's this world coming to? is an important question.

Where has this world been? is also important.









# WHO IS THIS EINSTEIN? TO BE SUBJECT OF LECTURE

By FLORENCE PIERCE REED

The local pot-pourri of scientists, mathematicians and philosophers who are studying life in the light of recently propounded "Theory of Relativity" and have had their school work on "time," "space," "force," "matter," "geometry" and "physics" knocked to philosophical smithereens, will hear a lecture by Frederick Finch Strong, philosopher, dealing with Einstein, founder, next Friday evening at Blanchard hall.

"Who Is This Man Einstein?" will be his topic, and he will discuss at length many phases of the philosophy and its discoverer or creator, as well as giving a bird's-eye view of his character. Dr. Strong, who perfected the violet ray, which has been such a blessing to thousands, is not only a medical doctor and a widely known authority on orthodox science, but is also a leader among occult scientists. He is one of the few scientists in the world whose occult demonstrations have been made before orthodox scientists in the great universities and have been accepted as possible. As a speaker he is unusually interesting, and already the theosophists and many others in the city who are keeping up with contemporary thought and religion, have signified their intention of being present.

## MAKES PEOPLE THINK

"Whatever the name Einstein means, or is," says Dr. Strong, "he makes people think. Many who have been content to have their thinking done for them are aiding in the regeneration of the world by thinking independently."

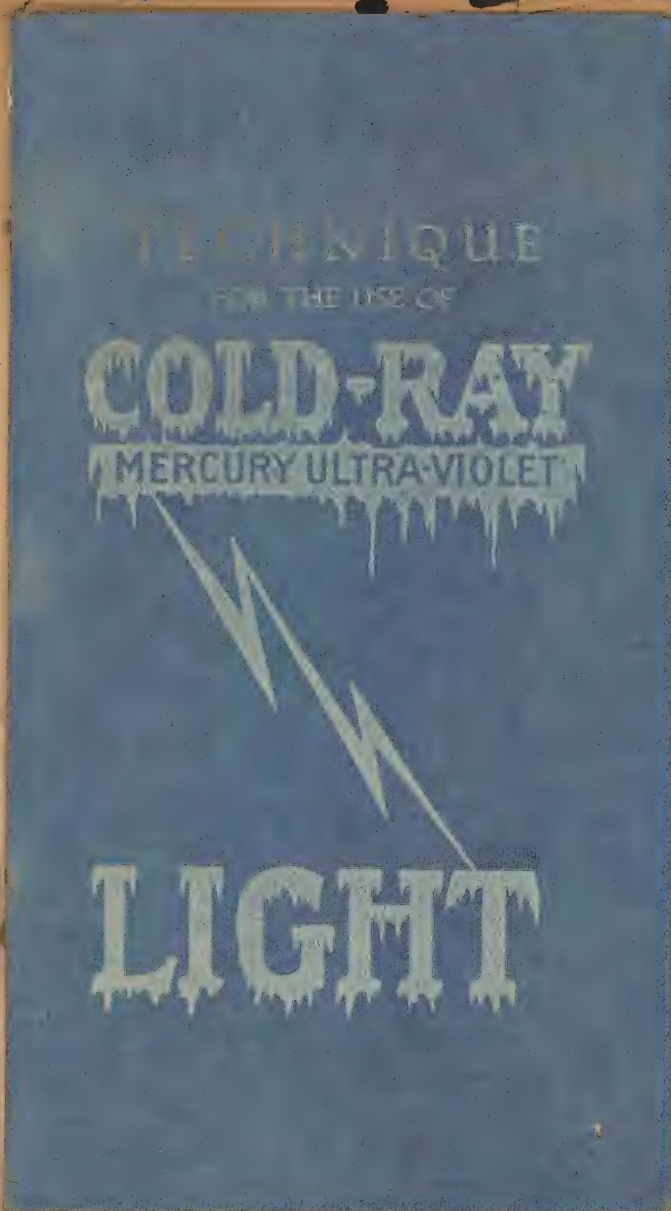
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ject which now has an important place in conversation of drawing-room, lecture hall, schools and places of worship."

It has been jocosely stated in various mediums that Einstein is a celebrated Hebrew banker who rose from a pawnbroker to a leader of world finance through the purely "relative value" such as the American dollar. Some called him a "bolshevist," "anarchist," "international food distributor," "a Jew who has been persecuted by Henry Ford," a "psychoanalyst," a "prize fighter who knocked out an English guy, Ike Newton," and "Zionist."

What's this world coming to? is an important question.

Where has this world been? is also important.





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DETAILED SUGGESTIONS FOR  
THERAPEUTIC USE OF  
COLD-RAY

Compiled from Clinical Data received up to  
January 1, 1929, by  
FREDERICK FINCH STRONG, M.D.

There are certain therapeutic factors inherent in the COLD-RAY, irrespective of which filter is used, or in other words, common to them all. These factors are due to the pulsatory nature of the light and the electrical charges induced in the patient synchronously with the light pulses. In general, these effects may be grouped under the following headings:

- (a) ANODYNE
- (b) METABOLIC STIMULANT
- (c) CIRCULATORY STIMULANT
- (d) ENDOCRINE BALANCER

In order to get results from the specific wave lengths transmitted by COLD-RAY filters, it is obviously necessary to exclude all extraneous light in so far as possible.

With the exception of the Infra-Red (which should precede Cold-Ray in certain cases as specified) no other electrical modality should be employed on the day of treatment, otherwise the beneficial action may be entirely neutralized.

GENERAL BATH

For general treatments patients should be stripped to the waist. Arrange Cold-Ray lamp twelve inches from body. Treat one-half hour over face and chest, and one-half hour over spine, daily, if possible. (It is not necessary to have the lamp directly over body).

LOCAL TREATMENTS

Expose as much of body as convenient around the affected area. Arrange Cold-Ray lamp about six inches from part to be treated. Treat from fifteen to thirty minutes or until relieved. (See alphabetical list.)

( 3 )

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#### FILTER No. 1

Combines the anodyne, sedative, antiphlogistic and hemostatic action of the blue wave, 4358-59 A.U., with the restful and recuperative violet lines, 4047-78 A.U., and the highly vitalizing, blood-building, tissue energizing, reconstructive ultraviolet group, 3663-55-50. While there appears to be little direct chemical action on the cholesterol of the skin, recent case reports with X-ray show a remarkable action of the No. 1 Cold-Ray group in increasing available blood calcium in bone building. This is especially noticed in the healing of fractures and the bone rebuilding in cases of osteomyelitis. The action appears to be biological rather than chemical.

#### FILTER No. 2

Turquoise (green-blue). Wave-lengths 4358, 5461 A.U. Reduces fever in acute disease. Acts energetically in promoting growth of new skin and mucous membrane in injured areas. More anodyne than filters No. 3 and No. 4; less so than Filter No. 1. Indicated as a general alternative in acute disease.

#### FILTER No. 3

Yellow-green two-wave. Wave-lengths 5461, 5759, 5790 A.U. Cerebral stimulant and balancer. Promotes general cell and tissue building. Acts as a germicide by augmenting action of the leucocytes and prompting antitoxin formation. Respiratory stimulant and expectorant; general alternative in chronic disease.

#### FILTER No. 4

Monochromatic yellow. Wave-lengths 5759, 5790 A.U. The general action seems to be through the parasympathetic nervous system (the pneumogastric, vaso-dilator and secretory nerves). It appears to promote rebuilding and improve tone in unstriated muscle. (Laxative and stomachic). Stimulates action of thyroid, pancreas and liver). Motor and secretory stimulant to alimentary tract.

(4)

#### SUGGESTIONS FOR THE USE OF MONOCHROMATIC FILTERS WITH THE COLD-RAY (Compiled from clinical data)

FREDERICK FINCH STRONG, M.D.  
Hollywood, California

**ABCESS**—No. 1 fifteen minutes for anodyne effect. Followed by No. 2 filter for thirty minutes. Lamp close to area. Daily treatments.

**ACNE**—No. 2 and No. 3 on alternate days, locally, one hour daily. Precede treatment with infra-red. General baths with No. 1 twice weekly for tonic effect.

**ADENOMA**—No. 1 daily, one-half to one hour, locally.

**ADENITIS**—No. 1, one-half hour daily, locally. Acute—No. 2, one-half hour daily, locally.

**ADHESIONS (Visceral)**—No. 4, one hour daily, lamp close to body over abdomen.

**ALOPECIA**—No. 4, one-half hour daily, preceded by infra-red, and scalp massage.

**ALCOHOLISM**—No. 1, half-hour general treatments, several times daily if possible.

**AMENORRHEA**—No. 1, one hour, daily general bath; alternate every other day with No. 4 one-half hour over sacrum region and one-half hour over pelvis.

**ANAL FISSURES**—No. 2, one-half hour daily, locally.

**ANASARCA**—No. 1, general treatments, one-half hour front and one-half hour on back of body. Local treatments in addition, same day, often very desirable.

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**ANEMIA** (Secondary)—No. 1, general bath, one hour daily.

**ANKYLOSIS**—No. 4, one hour daily, locally, preceded by infra-red.

**APPENDICITIS** (Chronic)—No. 1, locally, one-half hour daily.

Acute—No. 2, locally, one-half hour, repeated every few hours.

**ARTERIOSCLEROSIS**—No. 1, one hour general treatment.

**ARTHRITIS**—No. 1, one hour daily, locally, preceded by infra-red.

**ASCITES**—General treatments No. 1 as for Anasarca, followed by one-half hour with lamp close to abdomen.

**ASTHMA** (Cardiac)—No. 1, one-half hour over base of brain, and one-half hour over heart, daily, 6 inches from body.

Bronchial—No. 4, one-half hour treatment, over head and chest; repeated every two or three hours if necessary during paroxysms.

**BELL'S PARALYSIS**—No. 1, locally, one-half hour daily, alternate every other day with No. 3.

**BOILS**—No. 2, half-hour local treatment, frequently repeated. If pain is severe, use No. 1 occasionally.

**BRONCHITIS** (Acute)—No. 3, one hour, over thorax, preceded by infra-red, daily.  
Chronic—No. 1 and No. 4, one hour on alternate days.

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**BURNS**—Use No. 1 locally for one hour for the pain, and then No. 2 one-half hour every two hours, if possible.

**BURSITIS**—No. 1, one-half hour daily, locally.

**CARBUNCLE**—No. 1 and No. 2 locally, one-half hour each, alternate every few hours.

**CARCINOMA**—No. 1, locally, one hour, for relief of pain, daily; oftener if necessary. In early stages alternate with No. 4, locally.

**CATARRH** (Nasal)—No. 3, one hour daily, over face, close to lamp.

**CHILBLAINS**—No. 1, locally, until relieved, one hour or more.

**CHLOROSIS**—No. 1, one hour daily, over pelvis.

**CHOLECYSTITIS** (Acute)—No. 1 and No. 2, on alternate days, one hour; the lamp close to the abdomen.  
Chronic—No. 4 daily.

**CHOREA**—No. 1, general bath, one hour daily, if possible.

**CLIMACTERIC**—No. 1, general bath, one hour daily to promote endocrine balance. For hot flashes use No. 4 one-half hour over solar plexus, the lamp close to the body.

**COLITIS**—No. 3, one hour daily, with lamp close to the abdomen.

**CONSTIPATION**—Alternate No. 1 and No. 4, one hour daily, close to abdomen.

**CONTAGIOUS DISEASES** (Exanthemata)—No. 2, general bath, one-half hour. Frequent treatments will greatly lessen the severity of the disease.

(7)

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**CORYZA**—No. 2, one-half hour daily, close to face.

**CYSTITIS**—No. 2, one-half hour daily. Close over bladder.

**DEAFNESS (Catarrhal)**—No. 4, one-half hour over each ear. In some cases No. 1 gives better results.

**DIABETES MELLITIS**—No. 4, one hour daily, with lamp applied close over abdomen.

**DROPSY**—See Anasarca.

**DUCTLESS-GLAND DYSFUNCTIONS**—(Endocrine imbalance). No. 1, one-half hour front and back daily.

**DUCTLESS-GLAND HYPOTHYROIDISM**—No. 4, one-half hour daily over throat.

**DUODENAL ULCER**—No. 1 and No. 2, one-half hour locally, alternate days, with lamp close to abdomen.

**DYSMENORRHEA**—No. 1, over sacrum one-half hour, front of pelvis one-half hour. Precede with infra-red.

**DYSPEPSIA**—No. 4, one-half to one hour daily. Lamp close to epigastrium.

**DYSENTERY**—No. 2, one-half hour daily, lamp in contact with abdomen.

**ECCHYMOSIS**—No. 2, locally, one-half hour daily.

**ECZEMA**—No. 1, locally and generally, one hour or more daily. If not relieved, use No. 2 alternately.

**EDEMA**—If acute and local, use No. 2 daily, one-half hour locally.  
Systematic—See Anasarca.

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**EMPHYEMA**—No. 3, locally, one-half hour daily.

**ENDOCARDITIS (Chronic)**—No. 1, one-half hour, front and back daily.

Acute—No. 2, with lamp close over heart, one-half hour daily.

**ENURESIS**—No. 4, one-half hour over bladder and one-half hour over sacral region, daily.

**EPITHELIOMA**—No. 2 and No. 4, one-half hour, locally, on alternate days. If gain is severe use one-half hour of No. 1 between treatments.

**ERYSIPELAS**—No. 2, close to affected area one-half hour daily. Alternate with No. 3 if not relieved.

**ERYTHEMA**—No. 1, locally, one-half hour daily

**EYE, Diseases of the—**

**IRRITATION, EXCESSIVE WEEPING and CONGESTION**—Alternate No. 1 and No. 2 one-half hour daily. Lamp about one foot from the eye. Eyes open.

**CATARACTS**—Local treatments, with No. 3, one-half hour daily. If hypertension is present use general treatments with No. 1, about every third day. Eyes open.

**OPTIC NEURITIS and OPTIC NERVE ATROPHY**—No. 2, one-half hour treatments daily. Several cases have shown decided improvement. Eyes open.

**IRITIS**—Alternate half-hour treatments over eyes, No. 1 and No. 3 daily. Eyes open.

**GLAUCOMA**—No. 1, generally, over face, one-half to one hour daily. Eyes open.

**FATIGUE**—No. 1 and No. 3, on alternate days, one hour, general treatment.

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FELON—No. 2, half-hour treatments, locally, several times daily.

FISTULA—No. 1 and No. 2, on alternate days, one-half hour, locally.

FURUNCULOSIS—No. 2, half to one hour, locally and generally, daily.

GANGRENE—No. 1, locally, one hour treatment as an adjuvant, daily.

GASTRIC ULCER—No. 1 and No. 2, one-half hour, locally, alternate days, with lamp close to abdomen.

GASTRALGIA—No. 1, one-half hour or longer, lamp close to epigastrium, daily treatments.

GASTRITIS—No. 1, one-half hour daily, lamp close to body, locally.

GOITER (Exophthalmic)—No. 4, one hour over head and face, daily.

Other varieties—No. 1, with lamp close to neck, one-half hour, daily.

GONORRHEA—No. 2, locally, one-half hour daily.

GONORRHEAL ARTHRITIS—No. 1, locally, one-half hour daily, preceded by infra-red.

GOUT—No. 3, locally, one hour daily.

GRANULATION TISSUE—No. 3, locally, one hour daily.

HAY FEVER—No. 1 and No. 4, one-half hour, with lamp close to face, on alternate days.

HEART DISEASES—See Endocarditis.

HERPES LABIALIS and FACIALIS—No. 2, one-half hour daily, lamp close to face.

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HERPES ZOSTER—No. 1 and No. 3, on alternate days, one-half hour local treatment.

HEMORRHOIDS—No. 1 and No. 2, on alternate days, one-half hour, with lamp close to anus.

HODGKIN'S DISEASE—No. 1, generally and locally, one-half to one hour daily, or twice daily.

HYPERTENSION—No. 1, one-half hour, with lamp close to cervical spine; one-half hour with lamp over thorax, daily.

HYPOTENSION—No. 1, one-half hour, with lamp close to cervical spine; one-half hour with lamp over thorax, daily. Every third treatment give No. 4 with lamp close to epigastrium.

HYSTERIA—No. 1 and No. 3, on alternate days, one-half hour, general treatments. For paroxysms use No. 1 over head and face, one hour or more.

INFLUENZA—General bath, No. 1, one hour or more daily, or more often. If pneumonia is present use No. 2 lamp applied close to thorax.

Intestinal—No. 1, applied over epigastrium, one hour daily.

INFECTIONS—No. 1 and No. 2, alternately, half-hour local treatment once or twice daily.

INSOMNIA—No. 1, over head and face, one hour daily. If persistent, use screen No. 1 at night for one hour to induce immediate sleep.

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LARYNGITIS (Acute)—No. 1 and No. 2, on alternate days, one-half hour, locally.  
Chronic—No. 3, local treatment, one-half hour, daily.

LEUKEMIA, MYELOID—No. 1, general treatment, one hour daily.

LEUKEMIA, LYMPHOID—Same as for myeloid.

LEUKORRHEA—No. 3, locally, one-half hour daily. Occasional general treatment with No. 1 should be given.

LICHEN SIMPLEX—No. 1, one-half hour treatment, locally, daily.

LICHEN PLANUS—No. 3, half hour treatment, locally, daily.

LUMBAGO—No. 1, one hour treatment, daily, over spine, preceded by infra-red.

LUPUS VULGARIS—No. 1 after desiccation to relieve pain and promote healing. Half hour daily, locally.

LYMPHADENITIS—No. 1, locally, one-half hour daily.

MASTOIDITIS—Relieve pain by No. 1 applied close to affected area, one-half hour, and follow immediately by No. 2, one-half hour. Use No. 2 twice daily subsequently.

NEPHRITIS—No. 4, with lamp close over renal region, one-half hour daily. If hypertension is present correct with frequent general treatments with No. 1

NEURALGIA—Alternate treatments No. 1 and No. 2, once or twice daily, one-half hour, locally.

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NEURASTHENIA—General daily treatments, No. 1; every third day No. 4 one-half hour; over dorsal spine.

NEURITIS—Local treatment No. 1, one-half hour daily for relief of pain; supplemented by forty-minute general treatment in addition to local treatment every other day.

OEDEMA—See Edema.

ONYCHIA—No. 2, one-half hour, locally, daily.

ORCHITIS—No. 1, locally, one-half hour daily.

OSTEOMYELITIS—General treatments with No. 1, one hour daily. Local treatments with No. 2 one-half hour daily.

PHLEBITIS—No. 2, one-half hour treatments, locally.

PLEURITIS—No. 1, locally, one-half hour, frequently repeated.

PLEURODYNIA—No. 1, one-half hour, locally, frequently repeated, preceded by infra-red.

PNEUMONIA (1st stage)—Half-hour treatment, No. 1, preceded with infra-red.

2nd stage—One hour daily treatments, No. 1, over thorax.

POLIOMYELITIS (Acute stage)—No. 2, one-half hour frequent treatments over spine, lamp close to body.

Later stages—No. 1, general treatments daily.

POTT'S DISEASE—No. 1 and No. 2, half-hour treatments on alternate days, locally, over spine.

(13)

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PRURITIS—No. 1, with lamp close to affected part, one-half to one hour daily.

PSORIASIS—General treatments, No. 1, one hour daily. Every third day use No. 3 one hour, with lamp close to affected areas of skin.

PYOSALPINX—No. 2, with lamp applied close to ovarian region.

RHEUMATISM—No. 1, locally, one-half to one hour daily, preceded by infra-red.

RHINITIS (atrophic)—No. 3, with face close to lamp, one-half hour daily.  
(hyper)—No. 1, over face with lamp close, one-half hour daily.

SALPINGITIS—No. 2, one-half hour daily, applied over ovarian region, lamp close to body.

SCAR TISSUE (to absorb redundant)—No. 3, locally, half-hour treatments daily. Remarkable results have been obtained in this type of cases where the treatment has been persisted in for six weeks or more.

SCIATICA—No. 1, locally, one-half to one hour daily, preceded by infra-red.

SEPTICEMIA—No. 1, general treatments, one-half hour, frequently repeated to promote vital resistance.

SINUS INFECTION—No. 1 and No. 2, one hour treatments on alternate days, locally.

SPRAINS—No. 1, locally, one-half to one hour daily, or more often.

(14)

TONSILITIS (Acute)—No. 2, applied close to face, one-half hour daily.

Chronic—No. 1, one hour daily, applied close to face.

TRI-FACIAL NEURALGIA—Usually responds to No. 1, one-half hour treatment, locally, over affected side of face, daily; also general baths every three days, Filter No. 1.

TUBERCULOSIS (Early Stage)—General bath, one hour, daily, No. 1 and No. 4, on alternate days.

TUBERCULOSIS of BONES and JOINTS—No. 1, general bath, one hour; on alternate days use No. 2, locally, one-half hour treatments, with lamp close to body.

ULCERS, GASTRIC and DUODENAL—No. 1 and No. 2, one-half hour, locally, alternate days, with lamp close over epigastrium.

ULCERS, VARICOSE—No. 2, locally, one-half hour daily, with lamp close to affected area. Oftentimes infra-red before treatment is advisable, but in some cases it will be found very irritant and should not be used.

VEINS, VARICOSE—Same treatment as Varicose Ulcers.

WHOOPIING COUGH—No. 3, over face and chest, one-half hour, frequently repeated, twice a day or more. If fever is high alternate with No. 2.

(15)

universities and have been accepted as possible. As a speaker he is unusually interesting, and already the theosophists and many others in the city who are keeping up with contemporary thought and religion, have signified their intention of being present.

#### MAKES PEOPLE THINK

"Whatever the name Einstein means, or is," says Dr. Strong, "he makes people think. Many who have been content to have their thinking done for them are aiding in the regeneration of the world by thinking independently."

"Einstein is a thought provoker. He is still more a thought compeller. Whether or not we prove or disprove Einstein's theories, it is true that educators and clergy and public speakers are compelled to study the 'theory of relativity' either for the purpose of refuting it if it is hostile to their accepted dogma or religion, or accepting it; or at least being able to know something of the sub-

ject which now has an important place in conversation of drawing-room, lecture hall, schools and places of worship."

It has been jocosely stated in various mediums that Einstein is a celebrated Hebrew banker who rose from a pawnbroker to a leader of world finance through the purely "relative value" such as the American dollar. Some called him a "bolshivist," "anarchist," international food distributor, "a Jew who has been persecuted by Henry Ford," a "psychoanalyst," a "prize fighter who knocked out an English guy, Ike Newton," and "Zionist."

What's this world coming to? is an important question.  
Where has this world been? is also important.



WOUNDS, To promote healing of — Alternate No. 1 and No. 2, one-half hour, locally, daily or twice daily.

Filter No. 1—Blue, Violet, Ultraviolet.  
Filter No. 2—Turquoise (green-blue).  
Filter No. 3—Yellow-green (2-wave).  
Filter No. 4—Monochromatic yellow.



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Filter No. 3—Yellow-green (Zinc).  
Filter No. 4—Monochromatic yellow.

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## TREATMENT FOR DEAFNESS WILL BE EXPLAINED

More than 200 members of the visiting staff of Monte Sano Hospital and their friends have been invited to the hospital tonight to hear an address on electrical vibrations and radiant energy in application to disease and see a demonstration of a new treatment for deafness—the "photosonic synchronizer" recently invented by Dr. Frederick Finch Strong of Hollywood. Dr. James M. Watson, pediatrician of the hospital, will be on the program to discuss Dr. Strong's inventions and the practical application of his theories, particularly in connection with children's ailments.

Believing that every organ and cell responds to definite vibrations or key-notes and that disease and discord are closely related terms, Dr. Strong for more than 30 years has tested all available forms of vibratory and radiant energy in the attempt to evolve a truly scientific system of physical therapeutics.

Tonight for the first time he will explain ultra-violet technic which has enabled him successfully to regenerate the skin in faces pitted by small-pox or similar pustular diseases hitherto impossible of correction.

## NEW MEANS TO AID DEAF ON DISPLAY

*L.A. Times of 18.*  
Monte Sano Hospital's  
Staff to See Dr. Strong  
Invention Demonstrated

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*Dear Doctor: I have faithfully tried three*

*treatments and have*

TO THE MEDICAL PROFESSION

*Wonderfully helpful*  
Announcing

## THE STRONG THERAPEUTIC INSTITUTE

BY

FREDERICK FINCH STRONG, M.D.

Former Lecturer on Electrotherapeutics, Tufts Medical College, Boston (1903 to '15)

Member American Editor's and Author's Association, Pacific Physiotherapy Association, Etc.

Author of

"HIGH FREQUENCY CURRENTS" (Rebman, N. Y., 1908)  
"MODERN ELECTROTHERAPEUTICS" (Rebman, 1908 and '16)



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HOLLYWOOD, CALIFORNIA  
Phone GRanite 2883



# TREATMENT DEAFNESS BE EX

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IT is conservatively estimated that there are over three million persons in the United States who are suffering with what is popularly known as "High Blood-pressure" (Arterial Hypertension, Hyperpiesis, Arteriosclerosis, etc.). In the ordinary course of events these persons will die of Apoplexy (Cerebral Hemorrhage), Nephritis, or organic disease of the heart or arteries. At the present time this group accounts for more deaths than Cancer and Tuberculosis combined.

The importance, therefore, of a new method which offers certain palliation, and, in many instances symptomatic cure in high blood-pressure cases can scarcely be overestimated. For this reason the writer is issuing this little brochure to his medical colleagues to acquaint them with the truly remarkable clinical results obtained in his offices during the past three years.

The usual treatment of hypertensive cases by rest, restricted diet, Nitrites and Sulphocyanates, results only in temporary palliation and is admittedly inadequate.

Autocondensation with a modern Tesla High-frequency apparatus has been, perhaps, the best means for treating Hypertension; in the hands of such an eminent authority as Dr. Burton Grover, excellent results are reported in the majority of cases, but great skill must be used in determining dosage, voltage and frequency, otherwise actual harm may result.

About four years ago the writer discovered that certain of the electrical and radiant emanations of *cold Mercury Gas* (Argon-ionized in vacuum tubes excited by 10,000

volts A.C.) have a positive and progressive effect in reducing abnormal high blood-pressure, and inducing in the organism regenerative changes tending to correct the Cardiovascular pathology. The method has been perfected and is now known as "The Strong Cold Ray System of Physical Therapy."

Thousands of treatments have been given in our offices, and so successful have been the results that patients are coming here from all parts of the United States.

This has necessitated the expansion of "The Cold Light Research Laboratory and Offices" into "THE STRONG THERAPEUTIC INSTITUTE."

The present equipment includes twelve commodious treatment rooms, each containing a therapeutic unit composed of forty feet of Mercury vacuum tubing with appropriate ray-filters and transformer. This gives an active radiating surface about three by six feet, entirely covering the couch upon which the patient reclines. These "long-wave" units used in treating hypertension cases emit not only wave-lengths from the mercury spectrum from the 4358 blue line to 3126 in the ultraviolet—but give out definite electrical charges inducing in the patient a mild "Autocondensation" in which both high and low frequencies are present. Although the patient is not electrically connected, neon vacuum tubes light when brought in contact with the body and wave-detectors are strongly activated. The therapeutic effects are due to the combined action of the specific visible and ultraviolet rays plus the electrical oscillations.



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This system is relatively new and has been evolved solely through the researches of the present writer. The great expense of the treatment units, the large office space required, and the time necessary for treatment (about one hour), renders the system unsuited to the use of physicians in general: this is one of the reasons for the expansion of our equipment in order to be able adequately to handle all referred cases.

The value of the method rests solidly upon over three years' successful use in the treatment of hundreds of patients. A single patient referred for treatment will do more to convince the individual physician of the importance of the new system than would scores of clinical reports and technical data. Those desiring the latter, however, are referred to the writer's eight articles published during the past two years in "*The Medical Herald and Physiotherapist*."

Many prominent physicians and scientists have visited the Strong Therapeutic Institute; among them such eminent authorities as Dr. Burton Grover, Dr. Edward Kime, Dr. David Wilmoth, Dr. Joseph Waddington and Dr. Richard Kovacs. Their interest and suggestions have been no small factor in the success of our researches.

### "WHAT MAY BE EXPECTED OF THE COLD-RAY TREATMENT IN HIGH BLOOD-PRESSURE CASES?"

This is a pertinent question and will be answered on the basis of average results obtained during the past three years.

1. Cases of so-called "Essential Hypertension" (Hyperpiesis), with no apparent Cardio-vascular pathology, running systolic

pressures not over 200mm; diastolic not over 120. In this class of cases pressure is usually reduced to normal (systolic not over 145mm, diastolic under 100mm) in about twenty-five treatments. In many of these cases pressures have remained normal for over two years since their last treatment.

2. Cases showing definite indications of sclerotic changes in the arteries, with systolics 200mm to 300mm, diastolics 120mm to 160mm. These cases are much more difficult, but in the majority of instances the pressure can be brought within the "safety zone" (systolic not over 185mm; diastolic under 110mm) in a few months' treatments. After this, weekly treatments will maintain this condition and allow nature to bring about regenerative changes in the arteries. Despite statements to the contrary by many so-called "authorities" who have not followed the work of Physiotherapists, Arteriosclerosis is not an incurable condition. Dr. Burton Grover endorses this last statement on the basis of his results with Autocondensation.

Advanced Arteriosclerosis where cerebral hemorrhage has occurred is, however, practically incurable, but Cold-Ray treatment will do much to prolong life and relieve distressing symptoms.

3. Hypertension cases with Myocardial degeneration ("Heart-failure" cases). A number of extreme instances of this type have been successfully treated. These include patients suffering with Dyspnoea, Cardiac Asthma, Dropsy and Ascites, Arrhythmia, heart-block, and failing compensation in valvular disease. So remarkable has been



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the improvement in some of these cases that the writer has hesitated to report them in the medical journals.

4. High tension cases with renal degeneration. This is another class of so-called "hopeless" cases in which positive results have been obtained. Many patients who came with high blood-pressures and urine loaded with granular casts and albumen, are at the present time, running pressures in the "safety zone" and no trace of renal pathology shown by uranalysis.

(It is scarcely necessary to add that, in the treatment of all cases, infected foci are looked for and removed, proper diet instituted, constipation corrected and proper means used for normalizing the colonic flora.)

While the bulk of our work is done in connection with hypertension cases a separate department is devoted to the treatment of cases in which very short ultraviolet rays are indicated. A number of the recently perfected "Strong Cold Quartz Mercury Ultraviolet" generators are available, as well as the usual high-frequency and other physical therapy apparatus. The high germicidal action of the "Cold Quartz" apparatus has been determined by Dr. T. D. Beckwith, Assoc. Prof. Bacteriology, University of California. His culture tests showed that ordinary bacteria are killed in fifteen seconds, while spore-formers (tetanus, for example) which resist an hour's boiling are killed by the new apparatus in two minutes.

There being no heat to the Cold Quartz apparatus the generators may be applied

directly to the affected tissues, thus avoiding losses from air absorption; this opens an entirely new field in ultraviolet therapy.

The local units are being successfully used in the treatment of hemorrhoids, fissures, prostatitis, cervical erosions, functional impotence and other orificial conditions. The larger units are used in increasing vital resistance, normalizing blood calcium and phosphorus, and treating skin diseases. Old Acne cases with faces pitted and scarred as in smallpox have been permanently cured. By repeated "peeling" with the Cold Quartz rays—a new, and relatively painless process—even old scars and pits can be eradicated and replaced with healthy "baby skin." Some of our happiest results have been in this type of cases. Eczemas and other skin cases are similarly treated. Complete food allergy tests are made when indicated.

Mention should also be made of the work being done in certain eye cases. We discovered that the 3660 A. U. ultraviolet wave-group from the long-wave apparatus induces brilliant yellow fluorescence in the crystalline lens, releasing active secondary waves and thus effecting a molecular "massage" of the lenticular structure. (See "Entoptic Fluorescence and Allied Ultraviolet Phenomena" by F. F. Strong, Medical Herald, April, 1929.) This new treatment has been successfully used in treating incipient cataract, vitreous opacities, retinal congestion, and visual fatigue. Many eye specialists are referring patients.

Physicians are invited to visit the Institute and inspect the equipment. All treatments and examinations are by appointment.



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While the connection with the department cases was indicated, "Strong C" generators, high-frequency apparatus, the "Cold C" mined by the Bacteriology culture tests are killed by the former (to an hour's bath) apparatus in the apparatus.

Hours: 9:00 A.M. to 5:00 P.M. No treatments are given on Saturdays or Sundays except in emergency cases.

As a rule, hypertension cases are treated three times weekly, the intervals between treatments being extended as the patient approaches a normal condition. In some cases daily treatments are advised.

If requested, physicians referring cases will receive weekly reports of pressure readings and the general progress of the patients.

The Strong Therapeutic Institute is beautifully located amid flowers and orange trees on the corner of El Cerrito Place and Yucca street, one block north of Hollywood Boulevard, two blocks west of the Chinese Theatre. The atmosphere is that of a pleasant home, everything being done to avoid the suggestion of a hospital or sanitarium. Only ambulant cases are treated and the clientele is of an unusually high and refined class.

Further information will gladly be furnished, but it is hoped that physicians will call in person and make their own inspection. There is no other Institution of this kind in the world.

For appointments phone GRanite 2883



☐ Thorough scholastic physical therapy instruction.

\* \* \*

☐ Modern educational methods-fundamentals to advanced technical application.

\* \* \*

☐ Intensive instruction—equal in semester hours to a 3-month University program.

\* \* \*

☐ New and important phases of physical therapy not hitherto announced in any school.

\* \* \*

☐ Organized ten years ago in Kansas City, this school has taken a foremost position among the exponents of scientific physical therapy, with a definite purpose of keeping its work in ethical channels, and demanding recognition at the hands of the regular profession. Its high standards seem to have been recognized and appreciated.

\* \* \*

☐ The class will be limited, as usual, to regular physicians, and technicians, properly sponsored.

\* \* \*

☐ The staff will consist of Dr. B. B. Grover, president and founder; Dr. J. E. G. Waddington, Dr. Edwin N. Kime, and Dr. A. David Willmoth, all of whom have been identified with the school since its inception.

\* \* \*

☐ The fee for the entire course is but \$15.00 to cover the expenses.

\* \* \*

☐ No session of the school will be held in Kansas City this year

\* \* \*

☐ The enrollment has commenced. Application blanks may be obtained by addressing Dr. Chas. Wood Fassett, Secretary, 506 Detwiler Building, Los Angeles, California.

## THE SUCCESSFUL TREATMENT OF ARTERIAL HYPERTENSION

(Written especially for "The Medical Herald and Physiotherapist")

By FREDERICK FINCH STRONG, M. D.

### GENERAL CONSIDERATIONS

ARTERIAL hypertension which was formerly considered a natural compensatory adjustment of the organism in the presence of certain cardiac and renal disease, is now regarded as almost invariably pathological. In many years' experience in the treatment of this condition the writer has seen but two cases in which the hypertension could properly be called compensatory. These were both cases of heart-block and will be described later in this article.

Authorities do not agree as to the cause of hypertension, some believing it to be hereditary, while most physicians agree that infected foci, and more especially, the toxæmia resulting from intestinal putrefaction are contributory causes in a large percentage of cases. That the condition leads to grave pathological changes in the heart, kidneys and blood vessels is an established fact. The term "essential hypertension" is generally used to define the condition before it has produced its secondary pathological effects, although the term "Hyperpiesis," introduced by Sir Clifford Allbutt and adopted by Dr. Burton Grover in his admirable "Epitome on Blood Pressure," is perhaps the better term. Alcohol, coffee, tobacco, and excessive meat eating are not at present regarded as causative factors in hypertension, but they undoubtedly aggravate the condition and should be largely eliminated if it is to be successfully treated.

It is estimated that there are in America several million cases of hypertension and that the condition is responsible for the majority of deaths from apoplexy, organic heart disease and nephritis. The importance of any treatment which will relieve or even palliate hypertension is, therefore, evident, yet it is a fact that the majority of physicians know of practically no means of combatting it. Fasting and absolute rest reduces it to what has been called "Basal hypertension," but there is almost invariably a return of the high pressure when the normal activities of life are resumed.

If allowed to continue, about 50 per cent of hypertension cases die from organic heart disease; 35 per cent from apoplexy; 10 per cent from uræmia, and 5 per cent from other causes.

Medicinal treatment offers little help in hypertension. All kinds of diets have been advocated but none of them have proved to be of any specific value. It may be said, however, that a restricted diet, with a minimum of starch and animal protein, and the partial elimination of salt, is a routine that should be prescribed in all cases.

Excitement, worry, overwork, lack of emotional control, and intense mental concentration are contributory factors, the control of which must obviously be left to the patient himself, the physician acting only in an advisory capacity. Moderate exercise is probably good, but all excesses should be avoided.

Autocondensation has long been recognized by physiotherapists as the best therapeutic measure known up to the present time for the treatment of hypertension. The technique of its use is given in detail in the works of Dr. Burton



Grover and in the writings of Dr. Frederick De Kraft, Dr. William Benham Snow, and other prominent physiotherapists. The modern technique, using the Tesla apparatus, is a perfected form of that introduced by the present writer in 1898.

The latest, and it is believed, the most universally successful treatment for hypertension is by the use of the writer's Cold Mercury Light apparatus which has been introduced to the profession under the commercial name of the "Cold-Ray." A report of its use in a large number of hypertension cases is given in this present article.

### Methods of Taking Blood Pressure

While the sphygmomanometer has been used for many years, its technique is not so simple as might be supposed and there are many sources of error which have not been stressed by those who have written on this subject. Two forms of instrument are generally used, the "Tycos" type, which works on the aneroid barometer principle, and the Mercury apparatus, of which the "Baumanometer" is perhaps the best. Mercury instruments cannot get out of order, but those involving the aneroid principle require frequent recalibration with a standard Mercury apparatus. Readings are obtained by three methods, the visual, tactual, and auscultatory. Of these only the last may be considered as suitable for accurate work. No attempt will be given here to repeat the ordinary details of technique, but several points should be stressed.

The pressure should invariably be taken from both arms, whereas probably 95 per cent of all physicians use the left arm only. Even Dr. Grover states: "The artery in the left arm is the one of choice." This is a fallacy as has been demonstrated by the present writer in the course of over ten thousand readings; the left arm, more especially in hypo- or hypertension cases, is from 5 to 25 millimeters lower than the right; this was true in 70 per cent of all readings taken; in 20 per cent the left arm registered higher while in only 10 per cent was there a perfect balance in the readings. This imbalance is of extreme importance, as can readily be seen.

For example: a patient was examined by the writer some weeks ago who had recently passed an examination for life insurance, the systolic on the left arm registering 148. The writer's readings showed the left systolic 150, the right systolic 185, which is significant. In lecturing to a group of Los Angeles physicians who visited his laboratory several months ago, the writer asked if any of them had ever noticed this imbalance between the readings

of the two arms. No one replied, but one physician grinned broadly, and on being questioned admitted that he had noticed this imbalance in examining his patients for over a year but had said nothing about it, thinking that there must be something wrong with his technique. In a previous article the writer has stated certain speculations which have occurred to him, which may account for the existence of this imbalance. It is unquestionably pathognomonic as it does not occur in the average normal person, a difference in pressures of from 5 to 10 millimeters being not considered abnormal by the present writer. In taking the systolic pressure, it is well to repeat it at least twice as the first, and sometimes the second, reading will give irregular pulsations from 10 to 15 millimeters higher than the actual systolic. The air should be released from the check valve very slowly, allowing time for the inertia of the Mercury.

### Interpretation of Results

The diastolic pressure, of course, indicates the constant heart load and some authorities state that a continued diastolic over 120 millimeters indicates death within two years (Palmer).

The systolic gives the intermittent strain on the heart and circulatory system. Barach has devised a method by which we may determine the total amount of energy. This has been well described in Dr. Grover's book on blood pressure. The energy index is obtained by multiplying the sum of the systolic and diastolic pressures by the pulse rate. 20,000 is given as a maximum and 13,000 as a minimum normal reading. The writer suggests that energy indices be computed only after treatment or after the patient has rested to give an opportunity for the pulse rate to become normal.

### Reports of Cases of Hypertension Treated With the Cold-Ray Apparatus

These cases have been treated during the past three years. In his earlier work the writer used a small apparatus of which the modern "Cold Ray Lamp" is a perfected form and while some surprising results were obtained in certain hypertension cases, others showed little effect from the treatment so far as the reduction of blood pressure was concerned. Over 90 per cent of the following cases have been treated with the large bath unit, containing forty feet of vacuum tubing, or with the hollow square apparatus (\*). In various ray-groups transmitted from the cold Mercury apparatus in connection with the writer's selective filters, the blue-ultraviolet group has been employed in all his hypertension work. This is transmitted by the No. 1

filter and consists of the blue line, 4358 Å, the violet doublet, 4047-78 Å. U., and ultraviolet triplet 3650-55-63 Å. U. In addition to these wave-lengths the body of the patient is subjected to electrical impulses synchronous with the alternations of the current, as well as short wave high-frequency impulses superimposed on the former. While the patient is under treatment small sparks may be drawn from the skin and a vacuum tube lighted by contact therewith without any direct electrical connection between the apparatus and the patient's body. The general action of the treatment is given in the following summary, the cases have been divided into several classes. (The average duration of each treatment was 15 minutes.)

### CLASS I

(Hypertension of not over three years standing.)

Number of cases treated.....

Average number of treatments.....

Average duration of course of treatment..... months.

Readings before first treatment:

|               | Systolic | Diastolic |
|---------------|----------|-----------|
| Highest ..... | 190      | 110       |
| Lowest .....  | 160      | 90        |
| Average ..... | 183      | 103       |

Readings at the end of the course of treatment:

|               | Systolic | Diastolic |
|---------------|----------|-----------|
| Highest ..... | 155      | 95        |
| Lowest .....  | 120      | 80        |
| Average ..... | 138      | 88        |

### CLASS II

(Cases of long standing; five years or with no renal or valvular disease.)

Number of cases treated.....

Average number of treatments.....

Average duration of course of treatment..... 4 months.

Readings before first treatment:

|               | Systolic | Diastolic |
|---------------|----------|-----------|
| Highest ..... | 270      | 140       |
| Lowest .....  | 200      | 100       |
| Average ..... | 220      | 110       |

Reading at the end of the course of treatment:

|               | Systolic | Diastolic |
|---------------|----------|-----------|
| Highest ..... | 175      | 95        |
| Lowest .....  | 135      | 80        |
| Average ..... | 153      | 83        |

### CLASS III

(Hypertension cases showing renal dysfunction, casts, albumen, low urea, etc.)

(\*) See the writer's article in the Medical Herald for December, 1928.



filter and consists of the blue line, 4358 A. U., the violet doublet, 4047-78 A. U., and the ultraviolet triplet 3650-55-63 A. U. In addition to these wave-lengths the body of the patient is subjected to electrical impulses synchronous with the alternations of the current, as well as short wave high-frequency impulses superimposed on the former. While the patient is under treatment small sparks may be drawn from the skin and a Neon vacuum tube lighted by contact therewith without any direct electrical connection between the apparatus and the patient's body. The general action of the treatment is given in the following summary, the cases having been divided into several classes. (The average duration of each treatment was forty minutes.)

## CLASS I

(Hypertension of not over three years' standing.)

Number of cases treated.....32  
Average number of treatments.....30  
Average duration of course of treatment—2 months.

Readings before first treatment:

|               | Systolic | Diastolic |
|---------------|----------|-----------|
| Highest ..... | 190      | 115       |
| Lowest .....  | 160      | 80        |
| Average ..... | 183      | 92        |

Readings at the end of the course of treatment:

|               | Systolic | Diastolic |
|---------------|----------|-----------|
| Highest ..... | 155      | 98        |
| Lowest .....  | 120      | 60        |
| Average ..... | 138      | 80        |

## CLASS II

(Cases of long standing; five years or more, with no renal or valvular disease.)

Number of cases treated.....18  
Average number of treatments.....60  
Average duration of course of treatment—4 months.

Readings before first treatment:

|               | Systolic | Diastolic |
|---------------|----------|-----------|
| Highest ..... | 270      | 140       |
| Lowest .....  | 200      | 80        |
| Average ..... | 220      | 115       |

Reading at the end of the course of treatment:

|               | Systolic | Diastolic |
|---------------|----------|-----------|
| Highest ..... | 175      | 100       |
| Lowest .....  | 135      | 65        |
| Average ..... | 153      | 85        |

## CLASS III

(Hypertension cases showing renal dysfunction, casts, albumen, low urea, etc.)

(\*) See the writer's article in the Medical Herald for December, 1928.

Number of cases treated.....10  
Average number of treatments.....40  
Average duration of course of treatments—3 months.

Reading before the first treatment:

|               | Systolic | Diastolic |
|---------------|----------|-----------|
| Highest ..... | 230      | 130       |
| Lowest .....  | 180      | 95        |
| Average ..... | 205      | 110       |

Reading at the end of the course of treatment:

|               | Systolic | Diastolic |
|---------------|----------|-----------|
| Highest ..... | 176      | 98        |
| Lowest .....  | 120      | 60        |
| Average ..... | 150      | 85        |

In nine of these cases the urine was normal after the course of treatment, one case still showed a few hyaline casts and a trace of albumen.

## CLASS IV

(Hypertension cases accompanied by organic heart disease.)

Number of cases treated.....11  
Average number of treatments.....40  
Average duration of course of treatment—4 months.

Readings before first treatment:

|               | Systolic | Diastolic |
|---------------|----------|-----------|
| Highest ..... | 240      | 135       |
| Lowest .....  | 170      | 70        |
| Average ..... | 195      | 100       |

Reading at the end of course of treatment:

|               | Systolic | Diastolic |
|---------------|----------|-----------|
| Highest ..... | 200      | 120       |
| Lowest .....  | 120      | 60        |
| Average ..... | 148      | 80        |

These cardiac cases were of many different types, several of them may be briefly described.

Case 1. Man, aged 40. Had been gassed and wounded in the war, and for the past nine years the heart had been enormously dilated, involvement of all the valves, incipient aneurisms in both axillae and both carotids, the arteries bulging out like eggs at each cardiac systole. The systolic before treatment was 230, diastolic 135. After the course of treatment the pulsations in axillae and carotids were scarcely visible, the murmurs reduced 50 per cent, and the cardiac area was decidedly smaller. Except for some digestive disturbance patient was in fairly good health when discharged, but the systolic was still 200 and the diastolic 120.

Case 2. Woman, aged 52. History of organic heart disease, slight cerebral hemorrhage, systolic of over 200 for four years, ascites and oedema of the lower limbs for nearly a year. When first seen, the legs were twice their normal size and covered with



dropsical ulcers, the abdomen filled with fluid, heart exceedingly irregular, pulse 140, systolic 230, diastolic 110; so many murmurs that it was impossible to separate them. After the first treatment the heart was steadier, and the anasarca somewhat less. Three months after the end of the course of treatment the patient reported with a reading of 135-80, pulse 85, murmurs much reduced, no tachycardia, no recurrence of the dropsy or ascites. Patient was actively engaged in business and had driven a car many thousand miles since the last treatment.

#### CLASS V

This includes two cases, both of heart-block.

Case 3. Woman, aged 65. Was first seen in consultation with her physician. She was in fairly good health, but for ten years the pulse rate had been from 36 to 38, the systolic averaging about 225. One experimental treatment was given with the Cold-Ray without any effect whatever on the reading or the pulse.

Case 4. Woman, aged 54. Gave a history of having fallen off a cliff in an automobile and sustained internal injuries. Later recovered somewhat, but fainted on the street and was taken into the hospital in a supposedly dying condition. After eleven days was taken from the hospital, very weak, with a systolic of 220, diastolic 80, pulse 30. Gradually regained her strength to some degree during the ensuing year. Has been under the writer's treatment at the present time for about three months. The systolic is now running about 205, diastolic 90, pulse 36. Her general health is much improved, dyspnoea has disappeared, heart-beat is strong and regular and the myocardium seems much improved. She is living a moderately active life, able to do her housework and take long motor trips, but not able to drive a car.

These cases are significant as they are the only two in the writer's experience where the hypertension is obviously compensatory. It is interesting to note that the Cold-Ray treatment produced no effect other than the general increase in strength and vitality, the hypertension being unaffected. The last case had had one treatment with autocondensation from another physician which had aggravated the condition to such an extent as to necessitate her remaining in bed for a fortnight.

#### General Conclusions and Comments

The majority of cases showed an average drop in the systolic of 10 millimeters after each treatment, the pressure rising about 5

millimeters in the interim between treatments. In some of the cases, however, and at certain times in the majority of the cases, the systolic would go up ten points during treatment. This is quite different from autocondensation where, in the writer's experience, we almost invariably get at least a slight drop during the treatment.

Up to the present time the writer has had only three cases return for additional treatment, although most cases report every three months to have the blood pressure checked. Many of them are running normal after two years' treatment. In the three cases above referred to a few weeks' treatment quickly brought the pressure down to normal, and in none of them had there been any recurrence of the symptoms associated with the original hypertension.

The only routine treatment which the writer has employed in his hypertension cases is to change the intestinal flora to eliminate colonic auto-intoxication. For this purpose he uses three *Acidophilus* preparations after testing practically all of those on the market. These are the Vitelait Culture, the Miller Fat-Free Culture, and Mulford's *Acidophilus* Blocks. He has had no success with *acidophilus* milk. Cultures are given orally or by colonic implantation. Permanence of the growth is assured by prescribing "Colactin" or "Lactodextrin," to be continued indefinitely in small doses.

A unique feature of the Cold-Ray treatment is the absence of any necessity for graduation of dosage or supervision of the patient during the treatment; no bother with electrodes, and no danger of over-treatment. In several chronic cases an apparatus has been permanently installed in the patient's home.

After giving thousands of treatments with the Cold-Ray, the writer has yet to see any evidence of conditions in which its use would be contra-indicated, or where it could possibly do harm if used excessively. This can be said of no other physio-therapeutic modality.

In conclusion, it is interesting to note that in the just-issued 1928 edition of "Nelson's Loose Leaf Living Medicine," which is supposed to embody the latest advances in medical science, the articles on "Blood pressure," and "Diseases of the Arteries" by Dr. Herman O. Mosenthal make no mention whatever of physiotherapy in the treatment of hypertension or arterial disease. The articles include, however, a most excellent bibliography on the subject of hypertension to which the reader is referred.

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\* \* \*

☐ The enrollment has commenced. Application blanks may be obtained by addressing Dr. Chas. Wood Fassett, Secretary, 506 Detwiler Building, Los Angeles, California.

## THE SUCCESSFUL TREATMENT OF ARTERIAL HYPERTENSION

(Written especially for "The Medical Herald and Physiotherapist")

By FREDERICK FINCH STRONG, M. D.

### GENERAL CONSIDERATIONS

ARTERIAL hypertension which was formerly considered a natural compensatory adjustment of the organism in the presence of certain cardiac and renal disease, is now regarded as almost invariably pathological. In many years' experience in the treatment of this condition the writer has seen but two cases in which the hypertension could properly be called compensatory. These were both cases of heart-block and will be described later in this article.

Authorities do not agree as to the cause of hypertension, some believing it to be hereditary, while most physicians agree that infected foci, and more especially, the toxæmia resulting from intestinal putrefaction are contributory causes in a large percentage of cases. That the condition leads to grave pathological changes in the heart, kidneys and blood vessels is an established fact. The term "essential hypertension" is generally used to define the condition before it has produced its secondary pathological effects, although the term "Hyperpiesis," introduced by Sir Clifford Allbutt and adopted by Dr. Burton Grover in his admirable "Epitome on Blood Pressure," is perhaps the better term. Alcohol, coffee, tobacco, and excessive meat eating are not at present regarded as causative factors in hypertension, but they undoubtedly aggravate the condition and should be largely eliminated if it is to be successfully treated.

It is estimated that there are in America several million cases of hypertension and that the condition is responsible for the majority of deaths from apoplexy, organic heart disease and nephritis. The importance of any treatment which will relieve or even palliate hypertension is, therefore, evident, yet it is a fact that the majority of physicians know of practically no means of combatting it. Fasting and absolute rest reduces it to what has been called "Basal hypertension," but there is almost invariably a return of the high pressure when the normal activities of life are resumed.

If allowed to continue, about 50 per cent of hypertension cases die from organic heart disease; 35 per cent from apoplexy; 10 per cent from uræmia, and 5 per cent from other causes.

Medicinal treatment offers little help in hypertension. All kinds of diets have been advocated but none of them have proved to be of any specific value. It may be said, however, that a restricted diet, with a minimum of starch and animal protein, and the partial elimination of salt, is a routine that should be prescribed in all cases.

Excitement, worry, overwork, lack of emotional control, and intense mental concentration are contributory factors, the control of which must obviously be left to the patient himself, the physician acting only in an advisory capacity. Moderate exercise is probably good, but all excesses should be avoided.

Autocondensation has long been recognized by physiotherapists as the best therapeutic measure known up to the present time for the treatment of hypertension. The technique of its use is given in detail in the works of Dr. Burton



## FROM THE SCIENCE DEPARTMENT

### THE NEW SCIENCE OF HEALING

"Nothing useless is or low,  
Each thing in its place is best;  
And what seems but idle show  
Strengthens and supports the rest."  
—LONGFELLOW.

The most stubborn fact in life is pain: disease, of which it is an indication, is a problem which we all have to face; hence everyone is personally, vitally interested in HEALING,—the Treatment and Cure of Disease.

Probably more study and investigation have been devoted to this subject than to all others combined, yet it is a fact that up to the present time we have no generally-accepted Science of Healing. All scientists agree as to the general laws of chemistry and electricity: we have learned them and can prove them experimentally in the laboratory; but we are still more or less ignorant of the laws and principles of Life and their manifestations in health and disease.

In no class or profession do we find more disagreement, dogmatism and intolerance than among the physicians and healers. The "orthodox" or regular physician scoffs at Christian Science and Mental Healing, while the various "drugless schools" deny and bitterly oppose the principles and practices of the "Allopaths"; the latter, even today ridicule the Homeopaths, who have risen to a respectable legal standing despite nearly a century of persecution from their brethren of the "Old School."

Even in the study of pathology we have many conflicting opinions; although this is naturally more of a laboratory subject so far as the study of the results of disease are concerned. But when we come to causation the conflict still rages; but every one is quite sure that his particular pet theory is the only correct one.

In such a chaos of conflicting opinions the truth-seeker has a rather difficult task; yet it is obvious that before Healing can really become a science much of the present controversial matter must be done away with. To do this and to discriminate between the true and the false requires not only a tolerant, unbiassed and receptive mind, but also an actual detailed and per-

sonal knowledge of the many conflicting systems of healing that are exploited at the present day.

If we study the lives of the Great World Teachers we find that they all taught and practiced Healing,—healing of the body through Their Knowledge of the finer forces of Nature and the Law of Health,—healing of the Soul through the Divine Wisdom which They taught.

"Preach the Gospel, and Heal the Sick!" the Christ instructed his disciples. These two cannot be separated: the true Healer must be a spiritual teacher, and vice-versa. The failure of Medicine to become a true Science of Healing,—and of the Christian Church to more fully regenerate the world may be attributed largely to the fact that the physicians have worked exclusively from the "Form-side," from a basis of materialism,—while the churchmen have concerned themselves only with the "cure of Souls." The time has come to synthesize these two professions.

The writer believes that the occult teachings regarding the nature of man and his bodies offers the best working hypothesis upon which to proceed in the study of the science and art of healing. This Ancient Wisdom of the East is appearing under many names in the modern Ethical Movements, and has already done much to synthesize, harmonize and reconcile the differences between conflicting religions, philosophies and creedal systems: it has done much to amplify and enlarge the scope of science, and is destined to have a similar synthesizing and unifying effect when applied to the study of the various phases of the art of healing.

Briefly outlined, it recognizes man as a spiritual entity unfolding and evolving through forms or bodies, learning by many mistakes to more fully realize his real spiritual nature and to live "more abundantly."

It teaches that man has a composite three-fold body,—a physical body through which he acts, an emotional apparatus through which he feels and desires, and a mental mechanism through which he thinks:



this complex triple machine forms the whole body of man and determines his personality. Like any other machine it may get out of order and give trouble through the injury or misuse of any of its parts. The healer therefore, has to find out what and where the trouble is, repair the machine and prevent the recurrence of the trouble by the removal of its cause, (in medical parlance,—diagnosis, treatment, and prophylaxis).

We believe that in the future the most successful healers will be trained Occultists who can see clairvoyantly and who can therefore diagnose disease in the emotional and mental bodies as well as in the physical vehicle. Even today we have psychic and mediumistic clairvoyants who have what is popularly called "X-Ray Vision" and can use it in diagnosis. They are regularly employed in some hospitals in France.

The study of the "Aura" of the patient also affords clear indications for diagnosis and treatment if we have Etheric Vision and can see it. Dr. Kilner of London made it possible for people who are not clairvoyant to see the coarser part of the aura and to diagnose therefrom. A most remarkable system has been devised and perfected by Dr. Geo. Starr White in which disease is diagnosed from its auric emanations by accurate and demonstrable methods of a purely physical nature. Dr. White's discoveries have inaugurated a new era in the science of diagnosis. Only those scoff at his methods who have never personally tested them or mastered his technique.

One who wishes to heal intelligently will not neglect, of course, the purely physical methods of determining disease, such as the X Ray, chemical and microscopic examinations, etc.

Diagnosis of diseases which have their seat in the emotional and mental vehicles, (not diseases of the brain, for these are usually physical),—are being made possible with an ever-increasing degree of accuracy by the newer schools of Psychoanalysts and Psychopathologists. The methods of psycho-therapeutics which have grown out of their investigations are rapidly bridging the gap between the methods of the practitioners of medicine and those

of the metaphysical and mental healers.

From the broad synthetic viewpoint it is possible to classify the more prominent healing systems as follows:

A.—THOSE WHICH ACT MAINLY UPON THE PHYSICAL BODY, which include

1. MECHANICAL METHODS, as Surgery, Massage, Osteopathy, Chiropractic. These methods have an important place in modern therapeutics; as a rule they are palliative rather than curative.
2. "NATURE-CURE" METHODS, as Sunbaths, hydrotherapy, Dietetics. When we learn to live in harmony with the laws of the physical plane many of the diseases of the present day will disappear. These methods tend to promote the absorption and specialization of the "Vital Force" and are of great importance hygienically as well as therapeutically.
3. MEDICAL TREATMENT, including,—
  - a. *Allopathy*, which uses drugs empirically for their chemical and physiological action.

For treating disease in physical bodies of the coarser type the use of crude drugs is, no doubt, often legitimate; as emergency remedies we recognize their value. But it is a fact that even in the Schools which use them the tendency is toward smaller doses, subtler remedies and the gradual elimination of the old "Blue-pill and Shotgun" methods.

- b. *Homeopathy*, which uses attenuated drugs according to the "Law of Similars," (acting largely through the subtle Etheric Body, the vehicle of vitality).

As bodies grow finer,—as the Egos which use them evolve,—they respond to more delicate stimuli. For the Occultist, who recognizes the existence of the etheric states of physical matter, the possibility of homeopathic drug action is plausible enough. Recent experiments with radioactive substances, and the study by trained clairvoyants of the auras of diseases and of



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OFFICIAL JOURNAL  
MEDICAL HERALD AND PHYSIOTHERAPIST

## Pacific Physiotherapy Association

Los Angeles, California

March 11, 1930

Cora Smith King, M. D.,  
HOLLYWOOD HOSPITAL,  
Hollywood, Calif.

Dear Doctor King:

I understand that several months ago you purchased a Cold Ultra-violet Generator. I am interested to know if such is the case, and, if so, will you please tell me your experience with it to date.

With kindest personal regards, I remain

Yours very sincerely,

*Herbert V. Mellinger.*  
Herbert V. Mellinger, M.D.

HVM/V

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PASADENA

CORA SMITH KING, M.D.  
HOLLYWOOD

March 12, 1930.

H. V. Mellinger, M. D., Secretary,  
Pacific Physiotherapy Association,  
Los Angeles, California.

Dear Doctor Mellinger:

Replying to your inquiry of March 11, I will say that I purchased a Cold-Quartz Ultra-violet generator some months ago. I am more than delighted with results to date, and I have sold my water-cooled lamp.

I find that the new lamp has the following advantages over the water-cooled type:

- (1) It is easily portable by hand, and can be taken into an automobile without hazard.
- (2) The Cold-Quartz burner does not develop a heat intense enough to injure the body tissues when actually contacting them.
- (3) Because the Cold-Quartz burner can be brought into close proximity with the tissues, the new lamp renders available wave-lengths of the Mercury spectrum shorter than the bactericidal wave-lengths obtainable from the water-cooled lamp.
- (4) Because of the relative intensity of its rays, the time of exposure with the Cold-Quartz light is cut down to one-sixth of the radiation time necessary with lamps of the water-cooled type. For instance, ten seconds with the Cold-Quartz burner will do more in the nostril than one minute will do with the water-cooled light through the nasal four-inch quartz rod.
- (5) Used in the lower orifices of the body the new lamp is incomparable. Hemorrhoids, fissures, ulcers, infections of the urethra, cervix, and of other mucosa, can be treated with the Cold-Quartz burner by direct contact. Blood vessels, nerves, and other tissues, are healthfully stimulated at the same time.
- (6) For skin lesions, a three-minutes contact with the Cold-Quartz light gives a peeling reaction. The skin cases praise the new lamp.

Yours very sincerely,

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**PASADENA**

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Pacific Physi  
Los Angeles,

Dear Doctor M

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CORA SMITH KING.



WHAT'S NEW IN SCIENCE • BY RANSOME  
SUTTON

HAVING been told that Frederick Finch Strong, M.D., inventor of the first gas-ionized mercury vacuum tube, is now working in cold light, I went over to Hollywood to see this "father of physiotherapy."

Fifty-six years old, with a forehead that rises to the back of his head, he told me about his first successful mercury vapor lamp. In a side-necked glass tube, he sealed two electrodes, put a pellet of mercury inside, cemented a quartz lens from an old pair of spectacles over the opening, sucked out the air, then passed a current of electricity between the electrodes and found he had created an ultra-violet flash-light. The current vaporized the mercury and gave off ultra-violet light, which could not go through the walls of the tube but steamed through the quartz lens. That experiment was made thirty-three years ago, in a laboratory of Tufts Medical College, Dr. Strong then being a member of the faculty.

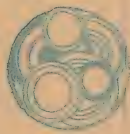
All substances affect light differently, he explained. In glass, mica, celluloid and gelatin, for example, the mesh of atoms and molecules is such that light of long wave-lengths, including visible light, goes through, whereas light of short wave-lengths gets tangled up and lost. In quartz, fluorite and selenite the mesh is different and all kinds of waves shine through.

Dr. Strong does not claim to be the inventor of mercury lamps. The Peter Cooper Hewitt lamp was patented in 1890. But he believes he was the first to use ionized gas in a mercury vacuum lamp, Georges Claude being the first to use ionized gas for illumination purposes.

Light from ordinary mercury vapor lamps is not cold light. Cold luminosity is the kind radiated by glowworms. There are said to be thirty-six orders of lowly animals, none being higher than fishes, that emit cold light. One can read by the light fireflies emit. In places fireflies light up the night, and in coves around Catalina Island infusorians light up mid-night waters. Dr. Strong has not learned the glowworm's secret, but has found a way to produce a half-dozen varieties of cold ultra-violet radiation.

Trying to make his method plain: "All light," he said, "comes cold to the earth. Upon striking anything, however, the infra-red rays add their energy to that of the molecules causing them to vibrate more rapidly, and molecular vibration means heat. If we start with one vibration a second, then double it up to the forty-ninth octave, we begin to see light. That is the usual method of producing light—to produce heat first. In an ordinary lamp using a quartz mercury arc the temperature at the arc is above 1000 degrees, whereas my cold-quartz gas-ionized arc is only 120 degrees—about 25 degrees warmer than blood. I

## Cold Light



take a quartz tube, coiled in any shape desired, and exhaust the air. Then I put certain rare gases in the vacuum—just as Georges Claude does to produce illuminating effects—but, in order to produce ultra-violet light, we add a small quantity of metallic mercury. The gases belong to what is known as the 'Nobles series,' called chemical snobs because they do not normally combine with other gases—in the way, for example, that oxygen and hydrogen unite to form water. These gases include helium, neon, argon, krypton, xenon and niton. I use mostly a mixture of argon and krypton, both of which are in the air we breathe. Now, if a current is sent through a tube containing such a mixture together with a small quantity of mercury, a curious phenomenon occurs: the electrified atoms of the gases begin kicking ions out of the mercury, thereby vaporizing it. Then, as soon as enough mercury vapor or gas has been produced to carry the current, it becomes luminous and radiates cold ultra-violet light. The reason vaporized mercury takes the current out of the hands of the argon-krypton mixture is because it is a better conductor. As soon as it begins to carry the current, the argon and krypton let go, and out of the electrified mercury light of short wave-lengths, called ultra violet, shines. Since the tubes are made of quartz, instead of glass, the light shines through."

Looking through a small made-in-Germany spectroscope when the current is sent through an argon-filled vacuum tube, the argon spectrum, with its peculiar bands, remains visible so long as the argon carries the current. But the spectrum pales as soon as the tiny quantity of mercury begins to ionize, then presently the argon spectrum disappears entirely and the mercury spectrum, with its broad ultra-violet band, takes its place.

Dr. Strong insists this light is not cooled by the presence of the gases. The gases in the tube with the mercury do not absorb the heat from the mercurial light, he says, because the light is not hot in the first place; it is generated cold, and certainly not enough heat is generated to warm the tubes. You can hold your hand against the tubes after they have been

in operation all day. Yet this light has an immediate effect upon life; it kills germs and is being used effectively on certain diseases. Dr. Strong demonstrated its effect upon paramecia, which are slipper-shaped animalcules almost large enough to be seen by naked eyes. A culture of paramecia was subjected for two minutes to cold ultra-violet rays, and twenty minutes later all the animalcules were dead. When the light generator was immersed in the culture itself, instead of being held over it, the paramecia died—all of them—in about two minutes. Under similar circumstances bacteria die almost instantly.

Cold light lamps are now a commercial commodity. Regarding the therapeutic value of such lamps, as compared with other kinds, is a problem many members of the American Physiotherapy Association are trying to determine.



## WHAT'S NEW IN SCIENCE BY RANSOME SUTTON

"THANKS for the books you loaned me," I said to Dr. F. F. Strong, the Hollywood worker in cold light.

"Come on in," he insisted. "I want to show you how living cells die."

He subjected a culture of paramecia to his cold light for about two minutes, then transferred a drop of the liquid, containing some of the irradiated paramecia, to a microscope slide, whereupon we watched these animalcules die. Death began as a slowing-down process. Instead of moving around rapidly, a paramecium would move more and more slowly, and finally come to a standstill. There it would lay, like a cast-off slipper. Nothing seemed to be happening, save that the two tiny contractile vacuoles—one near each end of its body—began to dilate. Growing larger and larger, the little bubbles presently burst, and that was the end. After the bursting of the vacuoles, the body was about as hard to find as the remains of an exploded toy balloon.

In all cases, life left their bodies with a pop, or what looked like a pop. The dying process seemed to be the losing of strength to keep the little vacuoles under control. "So they expand and finally burst and that is the end," said Dr. Strong. On the other hand, one might also argue that the expansion and final bursting of the vacuoles occurred after life (whatever it may be) had gone out of the body.

Anyway, we didn't solve the problem.



Dr. F. F. Strong watching life go out.

# Watching Life Go Out





## PHYSICAL THERAPY WEEK IN LOS ANGELES, JUNE 9 TO 14



## The Pacific Physiotherapy Association

meets in Los Angeles once each month except during July and August. Annual meeting in June. No initiation fee is charged. Dues are Five Dollars per year, including subscription to the official journal. New members are desired: Qualification: Any physician who is eligible to membership in his County Medical Association.

## President

WILLIAM W. WORSTER, M.D.  
205 South Mission Drive  
San Gabriel, Calif.

## Vice-President

CLINTON D. HUBBARD, M.D.  
6362 1/2 Pacific Blvd.  
Huntington Park, Calif.

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412 W. Sixth St., Los Angeles

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## The Medical Profession Cordially Invited to Attend Our Sessions

Meetings are held at the Alexandria Hotel, 5th and Spring, Los Angeles

All papers read before the Association will appear in the *Medical Herald* and *Physical Therapist*

## PACIFIC PHYSIOTHERAPY ASSOCIATION

Minutes of the meeting held November 20, 1929.

THE meeting was called to order at 8:05 P. M. by the president, Dr. Worster. Minutes of the previous meeting were read and approved. As there was no business to come before the society, the papers followed immediately. Both topics presented were very interesting and conveyed a good idea of the work done by other large associations. Dr. Davis said that he considered that the school which was held last year in Los Angeles gave the students more and better information than the Indianapolis school.

Only eighteen were present. It appears that a number of members do not like to have the meeting place on the east side. The meeting was adjourned.

Minutes of the meeting held December 18, 1929

THE meeting was called to order by the president, Dr. Worster. The minutes of the previous meeting were read and approved. At our annual meeting last June, our fiscal year was changed from the year ending December 31 to the year ending June 30. Members admitted since that meeting have paid for the fiscal year ending June 30. Because of this, on motion of Dr. Wehrly, seconded by Dr. King, the Association voted that members who paid for the year ending December 31, 1929, should now pay \$2.50 each as dues to June 30, 1930. The same motion carried a proviso that physicians admitted to membership during the first half of 1930 should pay only \$2.50 each to cover dues and subscription to the journal for this half year.

Before our annual meeting last June our secretary, on behalf of the Association, entered into a contract with the Western School of Physical Therapy to the effect that, should there be a surplus of funds after paying the lecturers their actual expenses only, such profit should be divided in the proportion of two parts to the Western School of

Physical Therapy and one part to the Pacific Physiotherapy Association. This proportion of division was made because the school occupied two-thirds of the week and the Association one-third of the week. There was a little profit. Our share, which we have now received, amounted to \$58.80.

Your secretary called attention to the fact that the National Research Council of Washington, D. C., sent him a questionnaire which he filled out and returned. Our Association will now be listed in the "Handbook of Scientific and Technical Societies and Institutions" of the United States.

Your secretary called attention further to an article in the September, 1929, issue of *Ars Medici*, the journal of the American Medical Association, of Vienna, Austria, printed in Vienna. The first article in this issue was a report of the proceedings of the Pacific Physiotherapy Association, of Los Angeles, at the meeting of December, 1928, which devoted itself to the consideration and results of Armstrong's Oxycatalyst. (This report was abstracted from our official journal, which is on file in the library of this Association.)

The secretary desired to know whether the members wished another convention next June. The consensus of opinion was for a convention.

In the first paper, Dr. Mellinger demonstrated a mask that he had devised, intended to supersede the gauze mask worn by surgeons and to be used as a protection against air-borne diseases, whenever necessary. On motion of Dr. King, seconded by Dr. Wehrly, the Association voted its felicitations to Dr. Mellinger.

Dr. Frederick F. Strong then gave a masterly report of extensive study and research concerning the generation of ultra-violet radiation and demonstrated a new Quartz Cold Mercury apparatus that he had devised.

The meeting was adjourned.

Herbert V. Mellinger, M. D.,  
Secretary-Treasurer.

HOTEL MIRAMAR  
SANTA MONICA, CALIFORNIA  
"WHERE THE MOUNTAINS  
MEET THE SEA"

FREDERICK FINCH STRONG, M. D., Los Angeles  
Electricity. What Is It?"  
PROF. D. M. DE MORANDINI, Physicist

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Surgical treatment of  
ALKER, M. D., Los Angeles

PHYSIOTHERAPY  
May 16, 1930

Chairman, Hollywood  
"amp," a portable unit sup-  
plies its uses and demonstrations



## Our Quiz Compend

H. N. J.

*Q. A patient, having pneumonia, gives birth to twins and dies twelve hours later. How would you make out her death certificate?*

A. This is answered rather startlingly by Dr. Wm. D. Chapmans, Illinois testimony in Washington in opposition to the Newton bill, and reported in the *Illinois Medical Journal*. He said, "I would report the cause of that death as pneumonia, but I would expect at the present time to be requested to change it. . . . I have received death certificates back from the registrar of Illinois with the request that I change the wording to make it conform to the international list of causes of death in order that Illinois may not be in conflict with its rights and privileges as a member of the national registrar area. Its figures are accepted as statistics by the Federal Bureau of Statistics. If it is not reported as instructed, then Illinois loses its standing on the Federal registration area. . . . The primary cause of death would be pneumonia and the secondary would be complication of labor, or childbirth, and I would expect it to be tabulated that way."

*Q. Why are people calling for cheap clinics?*

A. Well—probably they think the clinic will give them more thorough examination. It remains then for the general practitioner to be more thorough and conscientious in his examinations. It would seem to be a personal correction. Probably, retroactive, we should put out some sane and truthful propaganda. We are living in an age of the onrush of science; and the art of medicine, it seems, is quite outrun for the time with the impetus. The pendulum is swinging. The clinic will not be so universal and supplanting. You cannot practise medicine with pathology and physiology alone. There are required psychology, sociology, economics, and humanism, as long as patients are more than robots in need of repair. "When all doctors are regularly practising medicine upon such a basis as this, we shall see fewer failures in treatment and a greater degree of confidence and happiness in the exercise of the healing art, founded upon and supported by all branches of modern science."—Editorial, *Clinical Medicine and Surgery*.

And from *Harper's* (December, 1929) "There are two glaring fallacies frequently set forth by those who advocate general medicine as a substitute for the individual family doctor. (1) That all patients exhaustive examination to find out what the matter. (2) Modern medical skill solve all medical problems—that it taken clinical practice from the realm of guesswork to the realm of certainty."

Will Durant says in a July magazine article that life with all ills is worth living if you can keep away from the doctors.

Zat so—and not worth dying if you keep away from the scientists.

\* \* \*

*Q. What is the practice of medicine?*

A. It consists in the "observation, interpretation and correlation of physiological data and of treatment chosen and applied when physiology is wrong and pathology appears."

\* \* \*

*Q. Are chiropractors and their ilk practising medicine?*

A. Since "the practice of medicine belongs to a group of men trained in observation, correlation, and interpretation of facts of physiology and pathology, and evaluation," it follows that there is pseudopractice of medicine.

\* \* \*

*Q. Is liver-feeding for anemia a fad or a treatment?*

A. It is a beneficial treatment. It acts rather quickly, sometimes startlingly. The permanence of the benefit, none can say as yet. (Liver for high blood-pressure—out—right out.) Anemia has been increasing of late, probably due to faulty dieting of the notable diet faddists and propagandists and instructionists to the contrary notwithstanding. Could it be that our poor health diet instruction, health column, talks, and all that, are the bunk? I still recommend the family physician. The price of liver at the shops has gone up, and the packers are all "liver making extracts. It seems to be a cheap thing—if you are fond of jumping at things. I am inclined to take up the suggestion of some animal in which I could develop two livers where but one grew before."

NOTE—Our readers are invited to contribute to the department by sending in their questions, or by taking part in the answers. Address Editor, "Quiz Compend."

SATURDAY AFTERNOON

is left open. It is expected that some social event, probably a special party trip to the beaches, will be arranged.

## THE EXHIBIT

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## COMING MEDICAL MEETINGS

### FIFTY-FOURTH ANNUAL SESSION

### CALIFORNIA STATE HOMŒOPATHIC MEDICAL SOCIETY



MAY  
FOURTEENTH  
FIFTEENTH  
SIXTEENTH

NINETEEN  
HUNDRED  
THIRTY

HOTEL MIRAMAR  
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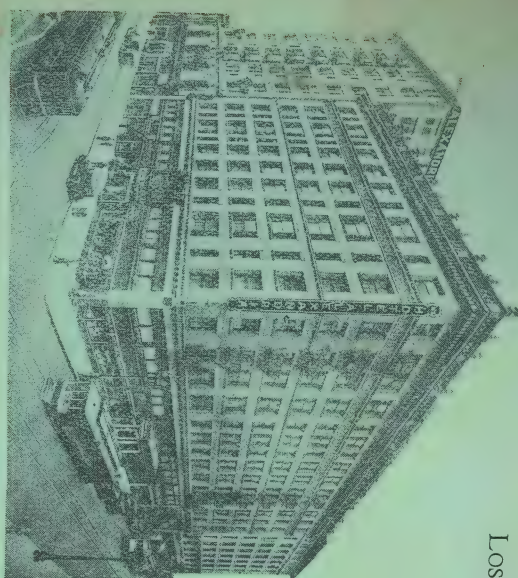
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WEEK  
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SECTION ON PHYSIOTHERAPY

May 16, 1930

Cora Smith King, M. D., Chairman, Hollywood

"The New Quartz Ultra Violet Lamp," a portable unit substituting the water cooled type; its uses and demonstration by the originator

FREDERICK FINCH STRONG, M. D., Los Angeles

"Electricity. What Is It?"

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**SCIENTIFIC SECTIONS—Continued**

**SECTION ON OPHTHALMOLOGY, OTOTOLOGY  
AND LARYNGOLOGY**

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Vice Chairman, Geo. Mosby, M. D. Oakland

An Unusual Eye Injury, Caused by a Chemical"

JOHN J. SMITH, M. D., San Francisco

Traumatic Ophthalmology"

EDWARD S. LODGE, M. D., Los Angeles

Some Ocular Manifestations of Nervous Diseases"

J. K. M. PERRINE, M. D., San Francisco

The Cause, Early Diagnosis and Surgical Treatment of

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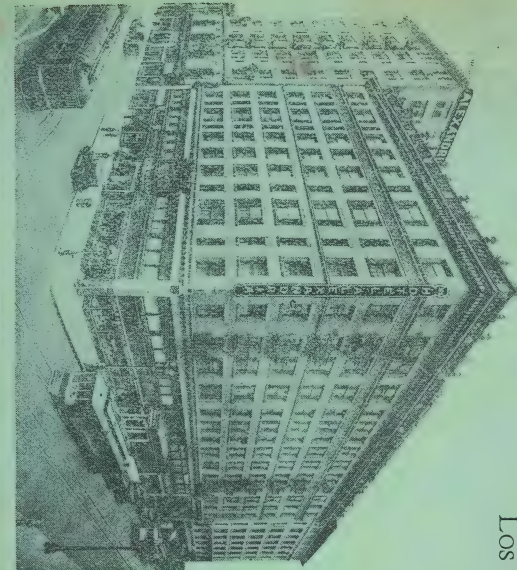
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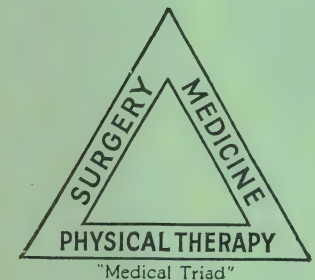


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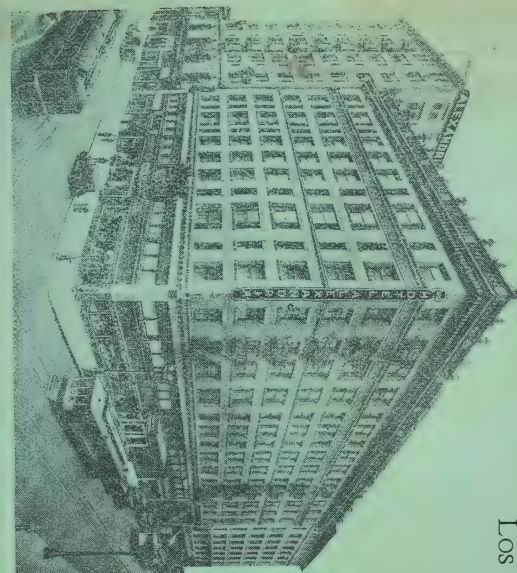
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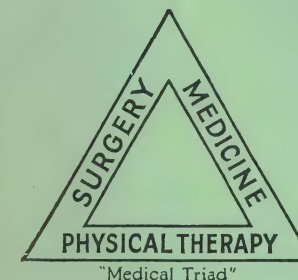


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### Announcement

Hotel Alexandria furnishes us arrangements which are ideal as meeting place and exhibits are both on the mezzanine floor. Those attending the meetings may eat, sleep, and attend all the sessions under one roof. Room reservations should be made early.

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San Gabriel, California  
CLINTON D. HUBBARD, M.D., Vice-President  
Huntington Park, California  
HERBERT V. MELLINGER, M.D., Secy.-Treas.  
412 W. Sixth Street, Los Angeles, Calif.  
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HOWARD C. SLAUGHTER, M.D. . . . Los Angeles  
J. SEVERY HIBBEN, M.D. . . . Pasadena

### Rules

Be sure to go to the Registration desk and procure a badge immediately upon your arrival.  
Tickets for the dinner must be secured before Friday noon.  
The reading of papers shall be limited to 20 minutes. Fifteen minutes additional will be granted for use of lantern slides.  
Each speaker will announce his name and residence distinctly.  
In the discussion of topics each member shall be limited to 5 minutes.  
The reader of a paper shall be allowed 5 minutes in which to close a discussion.  
Members shall speak but once on a subject.  
No paper shall be advanced upon the program without unanimous consent of the Association.  
If an essayist be not present when his paper is called, it will be placed at the end of the day's program.  
All resolutions must be furnished to the Secretary in writing.  
All papers read at every meeting become the property of the Association, and each contributor shall furnish a typewritten copy of his paper to the Secretary for publication in the official journal, The Medical Herald and Physical Therapist.  
Sessions will be called to order at the hour fixed on the program. It is especially desired that the members be prompt in their attendance.

All sessions are open to the regular medical profession, nurses, technicians, and members of Dr. Grover's class.

### Program

FRIDAY, JUNE 13, 1930

9:00 to 10:00 A.M.

BUSINESS SESSION

For Active Members

Reading of minutes of previous session.  
Report of Secretary-Treasurer.  
Report of committee on nominations.  
Election of officers.  
New Business.

10:00 A.M. to 1:00 P.M.

SCIENTIFIC SESSION

BURTON BAKER GROVER, M.D., Colorado Springs, Colorado—The Prostate and its Treatment.  
*Discussion by* H. J. Andrews, M.D.

HERBERT SCHOLTZ, M.D., Oakland, California. Rhinitis and its Complications, and Their Treatment by Physical Therapy.

CLARENCE S. COOK, M.D., Los Angeles, California. A Treatment of Chronic Nasal Catarrh and its Reflexes.  
*Discussion of the two preceding papers by* —  
Frank E. Detling, M.D., and  
W. H. Appleton, M.D.

J. E. G. WADDINGTON, M.D., Detroit, Michigan. Gynecological Indications for Physical Therapy.

*Discussion by* —  
William H. Gilbert, M.D.  
Rex R. Frizzell, M.D.

1:00 to 2:00 P.M.

ADJOURNMENT

LUNCHEON HOUR

DEMONSTRATION OF EXHIBITS ON MEZZANINE FLOOR

FRIDAY 2:00 to 5:00 P.M.

WM. W. WORSTER, M.D., San Gabriel, California. Blood Pressure Disturbances.  
*Discussion by* Guy L. Kay, M.D.

R. H. HETERICK, M.D., Surgeon U.S.P.H.S., personal representative of Hugh S. Cumming, Surgeon General, U. S. Public Health Service —

Physical Therapy as an Aid to the Government Physician.

CLEMENS W. McMILLAN, M.D., Maj. M.C., personal representative of Merritte W. Ireland, Surgeon General, U. S. Army —

Physical Therapy in Military Hospitals.

JAMES C. ELSOM, M.D., Madison, Wisconsin. A Physical Therapy Department in a State Hospital.

*Discussion of the foregoing three papers by* —  
Charles W. Decker, M.D., (formerly Col. M.C., U. S. Army)  
Cora Smith King, M.D.

(File)  
A. ROLLIER, M.D., Leysin, Switzerland. Work Cure for Indigent Patients Suffering from Surgical Tuberculosis Embodying the Use of Physical and Psychic Therapy.

*Discussion by* —  
J. E. G. Waddington, M.D.  
Howard C. Slaughter, M.D.

5:00 O'CLOCK ADJOURNMENT

REVIEW OF EXHIBITS

FRIDAY 6:30 P.M.

GOOD FELLOWSHIP DINNER

INFORMAL \$1.50 PER PLATE BRING THE LADIES  
BURTON BAKER GROVER, M.D., Toastmaster  
*A Program of Special Interest has been arranged.*

SATURDAY, JUNE 14, 1930

9:00 A.M. to 1:00 P.M.

SCIENTIFIC SESSION

LEIGH F. WATSON, M.D., Los Angeles, California. The office Treatment of Varicose Veins.  
*Discussion by* Delmer L. Davis, M.D.

GILBERT H. LARSON, M.D., Lieut. M. C., U. S. N., personal representative of Charles E. Riggs, Surgeon General, U. S. Navy. Ultra Violet Rays in Dermatology.

*Discussion by* —  
Sydney V. Kibbey, M.D.  
Frederick Finch Strong, M.D.

E. P. CUMBERBATCH, M.D., London, England. Some Forms of Arthritis in Women and Their Treatment by Diathermy.

*Discussion by* Clinton D. Hubbard, M.D.

A. DAVID WILLMOTH, M.D., Louisville, Kentucky. Newer Concept of the Management of Tubercular Glands of the Cervical Region.

M. W. KAPP, M.D., San Jose, California. A Few Static Waves, Sprays and Sparks.  
*Discussion by* Carl A. Wickland, M.D.

S. GROVER BURNETT, M.D., Kansas City, Missouri. The Modern Conception of Coccygodynia and Its Treatment.

*Discussion by* Wm. D. Napheys, M.D.

NOTE: It is very likely that neither Dr. Rollier nor Dr. Cumberbatch will be present in person, but each one is writing a paper especially for this meeting.

### VIEW THE EXHIBITS

Members should not overlook the splendid exhibits of apparatus shown on Mezzanine, Hotel Alexandria. Much time and expense has been necessary to prepare this exposition for your benefit. You will find on display the latest equipment and courteous attendants. No obligation to purchase.



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**FIFTY-FOURTH  
ANNUAL  
SESSION**

**CALIFORNIA STATE  
HOMŒOPATHIC  
MEDICAL SOCIETY**



**- - - MAY  
FOURTEENTH  
FIFTEENTH  
SIXTEENTH**

**NINETEEN  
HUNDRED  
THIRTY**

**HOTEL MIRAMAR  
SANTA MONICA, CALIFORNIA  
“WHERE THE MOUNTAINS  
MEET THE SEA”**

**SCIENTIFIC SECTIONS—Continued**

**SECTION ON OPHTHALMOLOGY, OTOTOLOGY  
AND LARYNGOLOGY**

Chairman, Oliver P. Bourbon, M. D., Los Angeles

Vice Chairman, Geo. Mosby, M. D. Oakland

An Unusual Eye Injury, Caused by a Chemical”

JOHN J. SMITH, M. D., San Francisco

Traumatic Opthamology”

EDWARD S. LODGE, M. D., Los Angeles

Some Ocular Manifestations of Nervous Diseases”

J. K. M. PERRINE, M. D., San Francisco

The Cause, Early Diagnosis and Surgical Treatment of

Glaucoma” CLIFFORD B. WALKER, M. D., Los Angeles

**SECTION ON PHYSIOTHERAPY**

*May. 16. 1930*

Cora Smith King, M. D., Chairman, Hollywood

e New Quartz Ultra Violet Lamp,” a portable unit sup-  
planting the water cooled type; its uses and demonstrations  
by the originator

FREDERICK FINCH STRONG, M. D., Los Angeles

ctricity. What Is It?”

PROF. D. M. DE MORANDINI, Physicist





6-B B.coli  
Through Pharyngeal  
Applicator - Quartz tipped  
Distance - grid to culture  
6-1/8 inches  
Time - 1 minute

*T.D. Burkhardt*



6-A B.coli  
Through Pharyngeal  
Applicator - Quartz tipped  
Distance - grid to culture  
6-1/8 inches  
Time - 3 minutes

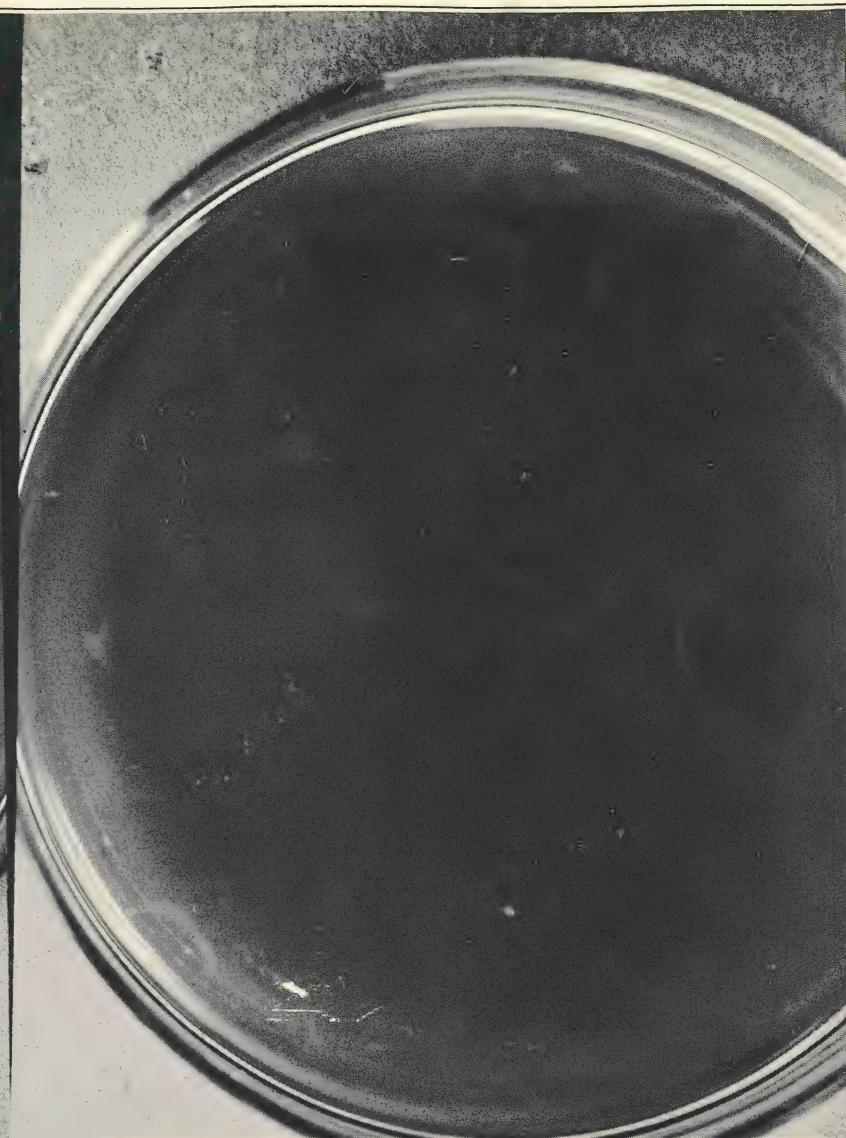
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Through Pharyngeal  
Applicator - Quartz tipped  
Distance - grid to culture  
6-1/8 inches  
Time - 3 minutes

*T. D. Burkhardt*





8-F B.coli  
Through  $6\frac{3}{4} \times \frac{1}{4}$  inch Quartz rod  
Distance - grid to culture  
 $9\frac{3}{4}$  inches  
Control (unexpo)  
*T. D. Beck*



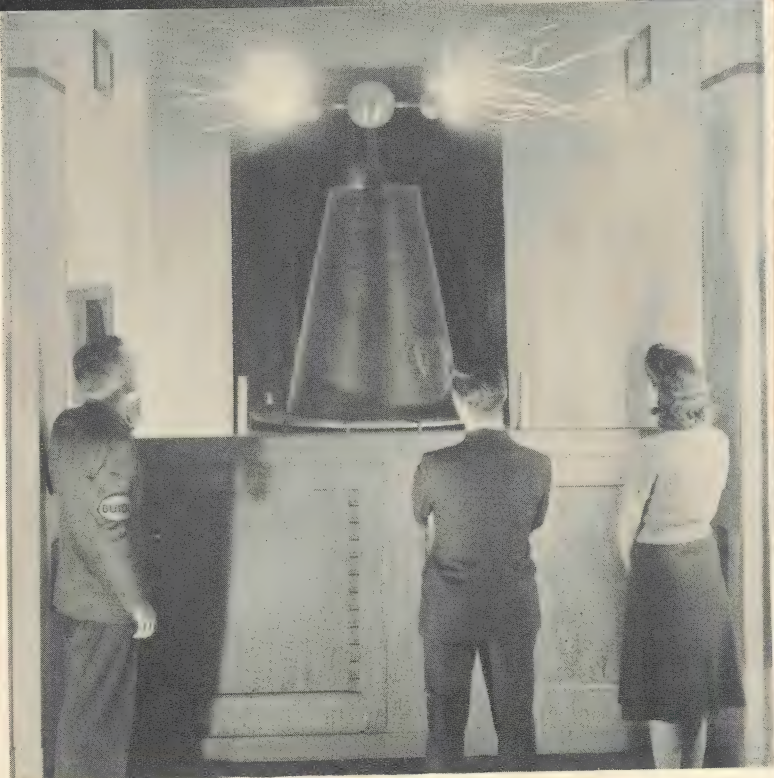
8-E B.coli  
Through  $6\frac{3}{4} \times \frac{1}{4}$  inch Quartz rod  
Distance - grid to culture  
 $9\frac{3}{4}$  inches  
Time - 15 seconds  
*T. D. Beck*





## MAN-MADE LIGHTNING

*This high voltage coil (Tesla coil) was built by Mr. Earl L. Ovington and willed by him to Dr. Frederick Strong, who presented it to the Griffith Observatory.*



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Experimentation with artificial lightning in the laboratory begun by Steinmetz and con-



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## LIGHTNING

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Griffith Observatory

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But man is a curious beast, and frightening and deadly as lightning is, he has probed into the cause and the mechanics of Jove's fiery weapon. Not satisfied merely to watch and measure nature's electrical displays, he has dared to duplicate them, even though on a small scale, and he now produces, controls, and is able to measure lightning of his own creation in the laboratory.

The first experimenter with lightning is probably the best known. When Benjamin Franklin flew his kite into a storm-infested sky to prove that lightning is electrical in nature, he certainly did not realize the personal risk he took. Since Franklin, experimenters have learned enough so that today we are far safer from, though still unable to control, this highly destructive force of nature.

Let us review what men have learned and guessed about the source and behavior of the lightning stroke. The thunder-storm is the mother of the stroke. There is no agreement at present as to the exact method by which it is brought about, but it is definitely known

that thunder clouds bear electrical charges. In fact, the lower portion of the cloud is almost always negatively charged and the upper portion is charged positively. It is further known that the mechanics of the formation of the cloud are also the mechanics by which the separation of the electrical charges is brought about.

Let us stand at a safe distance and watch the events leading up to a stroke of lightning. Let us choose a spot where there is a wide level field with but one lone tree standing in its center. A storm is brewing, the clouds have been growing darker and heavier, and now we see one very dark cloud moving across the field. It seems to hang lower over the pasture than any before. We can visualize the lower extremities dense with negative electrical charges, and as it moves across the field we can imagine the negative charges in the ground to be scurrying away, repelled by the negative charges in the cloud. The earth directly below the cloud is left with a very strong positive charge and as the cloud moves over the tree we know that the positive charges are drawn up the trunk of the tree to the uppermost branches. If it were night, we might see a pale coronal glow at the tips of the upper branches. This phenomenon has become known as "St. Elmo's Fire," and has often frightened superstitious seamen who saw this mysterious fire springing from the tips of the yards and masts of their old sailing vessels. We know today that

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We seldom stop to realize the importance of the noninterruption of power service unless an interruption occurs. The failure of a piece of equipment along the power line due to a stroke of lightning may interrupt a bridge game or it may halt a delicate operation in a hospital. Our penalty for mechanizing our lives for more comfort and luxury is our consequent dependence upon our sources of power.

Another man-made protection against lightning is the "lightning-rod" invented by Benjamin Franklin. From his observations of the leakage of electricity from sharp needle points in the laboratory, he assumed that sharp pointed rods erected near a building, well grounded, and extended above the roof of the structure would allow the electrical charge in the ground to leak off into the air and so prevent a stroke at that point. The rods protected the structure

ing a discharge of one million volts. This high voltage is obtained in two steps. The voltage used in house-wiring is 110. This voltage is stepped up, by means of a large transformer in the basement of the building, to ten thousand volts. The ten thousand volts are then stepped up one hundred times by the Tesla coil to give one million volts. This exhibit is operated and explained by the guides.

One more comment upon lightning is in regard to the old saying that lightning never strikes twice in the same place. Nothing could be more distant from the truth. If lightning strikes, it is good evidence that conditions are right for it to strike the same place again and again. "If you heard the thunder, the lightning did not strike you; if you saw the lightning, it missed you; and if it did strike you, you would not have known it."

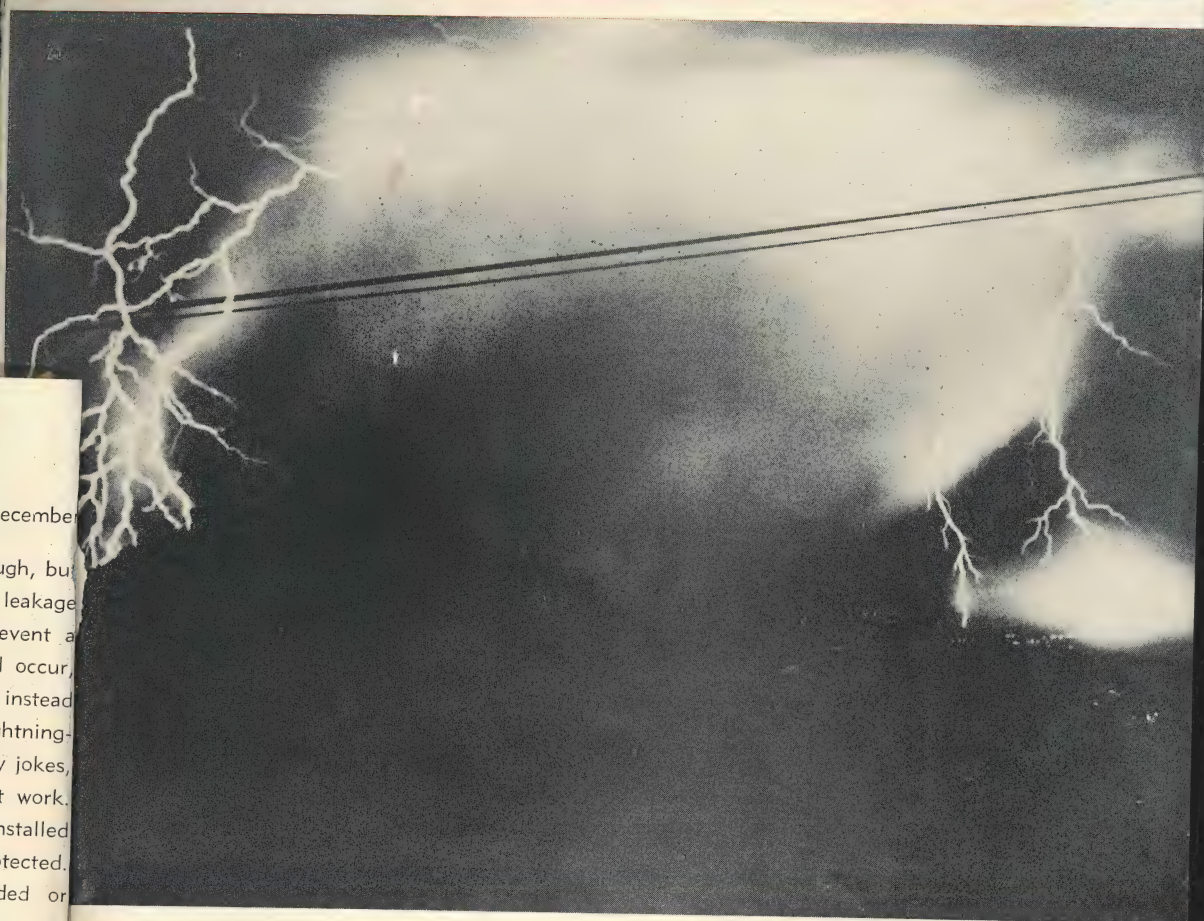


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Photograph by Ferdinand Ellerman

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December

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Several methods have been devised for producing a high voltage discharge to imitate lightning. In the Griffith Observatory's Hall of Science is a "Tesla coil," a device operating on the principles of the transformer and producing a discharge of one million volts. This high voltage is obtained in two steps. The voltage used in house-wiring is 110. This voltage is stepped up, by means of a large transformer in the basement of the building, to ten thousand volts. The ten thousand volts are then stepped up one hundred times by the Tesla coil to give one million volts. This exhibit is operated and explained by the guides.

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Photograph by Ferdinand E.

## LIGHTNING

P-135

tinued by many workers throughout the world, notably in the laboratories of the General Electric Company in Pittsfield, Mass., has revealed many helpful facts in the protection of structures and power lines. It has been found that a tall conducting tower electrically connected to the ground, will protect all smaller structures around it within a radius of approximately ten times the height of the tower, all bolts within that radius preferring to strike the tower. This fact is made use of in the oil storage tank fields. Tall, metal, well-grounded spires are erected at intervals to provide a path to the ground for lightning strokes, the "cones of protection" overlapping in such a way that the entire field of tanks is protected. The famous power line from Boulder Dam power plant to Los Angeles is protected from lightning by two wires above the cables carrying the power, these wires being connected to the ground through the metal supporting towers, and thus forming an umbrella over the power cables.

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The Cause  
and Cure  
of the  
Disease  
Called  
'War'

\* A Brochure by  
FREDERICK FINCH STRONG, M. D.

1942



We are in the midst of the greatest War recorded in ancient or modern History, and unfortunately the primal cause of war is *personal, family, national, or racial SELFISHNESS*.

This is so ingrained in the race of today that the only hope for a future free from war is in the CONSTRUCTIVE EDUCATION of the CHILDREN of the PRESENT, inasmuch as they will constitute the men and women of the *world of tomorrow*.

Such a System of Education (which has been formulated and tested for several years on over a hundred children of all ages), would,—if generally adopted,—awaken in the consciousness of each child a realization of *his personal responsibility in the establishment of general peace, fraternity and cooperation among the citizens of the world of the approaching twenty-first century*.

Nearly all of our truly great scientists, (and mark well,—the *misuse* of the discoveries of science has made the horrors of our present "Global War" possible),—our greatest scientists, I repeat, have, after years of futile effort in the search for *Absolute Truth*, reached the same conclusions that are the bases of my new System of Education. These Fundamental Principles as to the true nature of MAN, and of the Universe which seems to surround him,—instead of coming to rarely gifted individuals,—(such as Einstein, Jeans, Eddington, Carrell, Jung, Compton and Millikan,—should form the Basis,—(as this Brochure is the Thesis)—for

*The Education of Our Children.*

These Fundamental Principles,—while few,—are *simple*, and experimentally de-

motrable by *the children themselves*, and wh they intuitively realize or deduce from the experiments will be not mere information about life and things but will be permanently retainable Wisdom, that is—**TRTH ITSELF**.

It only has this new System of Education been proved by tests on scores of children but the writer has completed a Text-book ready for editing, outlining in detail all the experiments and the Truths to be deduced therefrom,—designed as a PRESCIENCE COURSE for use in our Grade Schols. To this book he has given the title,

**"THE SCIENCE OF A LIVING UNIVERSE."**

(The Essence of the book has also been embodied in a series of Radio Broadcasts, whh,—it is hoped,—will assist this little Brochure in bringing the New Education to the attention of PARENT-TEACHER ASSOCIATIONS and other organizations interested in *constructive education*.)

The Thesis of the New Education may be briefly outlined as follows:

**"THE SCIENCE OF A LIVING UNIVERSE."**

1. There is ONE All-inclusive Reality:—*LIFE* itself.
2. This *LIFE*, which each child intuitively recognizes as *HIMSELF*, is identical with the Life of all other Beings.
3. All the *POWERS*, which the child finds in himself, he will discover in the whole of Nature,—differences being "not in kind, but in *degree* only."
4. One Power only is peculiar to MAN:—MAN has the power *TO CHOOSE*. Deterministic from habit and lack of *Self-discipline*, Man is in reality a *FREE-*



WILL BEING, and therefore spon-  
sible to himself and to the role of  
Manifested Life.

5. Pondering on this and studying myself  
in the light of the Subjective as well as  
the Objective Universe,—the pupil will  
ultimately realize,—
6. That this is a Universe of LAW. Physi-  
cally we state it: Action and reaction  
are equal and opposite—metaphysically  
—each man reaps what he sows. No  
one can set up a cause without individ-  
ually experiencing its effects:—no one  
can get anything for nothing—con-  
structive causes bring constructive  
effects: and vice versa.

\*How blind we have been not to have re-  
alized that the same inexorable relation be-  
tween cause and effect which has converted  
modern Chemistry and Physics into exact  
mathematical sciences, operates as well in  
the Metaphysical World: that is in the realm  
OF HUMAN THOUGHT, MOTIVE, and  
BEHAVIOR.

In the hope that it may awaken some of  
his fellow educators to their responsibility  
in correctly teaching those,—now children,  
who will form the humanity of the century  
next in line, in this hope this brochure has  
been prepared to be sent to those whose  
work has shown THAT THEY ARE  
READY FOR TRUTH.

May they cooperate in this effort to estab-  
lish Constructive Education of our children,  
which are those who will form a Humanity  
which will end

*The Disease Called War.*

FREDERICH FINCH STRONG, M. D.  
6129 Fountain Avenue,  
Hollywood, California.





TIMES BUILDING  
FIRST AND BROADWAY

OFFICE OF

# The Times-Mirror Company

PUBLISHERS OF

## Los Angeles Times

FOUNDED BY HARRISON GRAY OTIS, DECEMBER 4, 1881

LOS ANGELES, CAL.

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ASSISTANT GENERAL MANAGER AND  
MANAGING EDITOR

MRS. MABEL OTIS-BOOTH

July 1, 1919

Dr. Frederick Finch Strong,  
Kratona, Hollywood, Calif.

My dear Dr. Strong:-

I am enclosing clippings of my stories in the Los Angeles Times on June 27th and 30th, reporting two of the three lectures delivered by you in Blanchard Hall.

The subjects covered by your able lectures were so broad in scope, and so tremendously important and all-embracing, that it was rather difficult to compact them into a brief, and hastily-written newspaper report, and yet preserve the spirit and correct aspect of your theme. If, therefore, my stories were not altogether misleading or incorrect in essentials, I'm sure you will forgive the errors in other respects.

I will make an effort to start work on the illustrated story we have discussed some time ago in a few days.

Hoping to have the pleasure of meeting you soon, I am,

Yours sincerely,

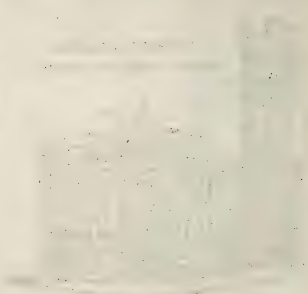
*AM Roehren*



THE  
AMERICAN  
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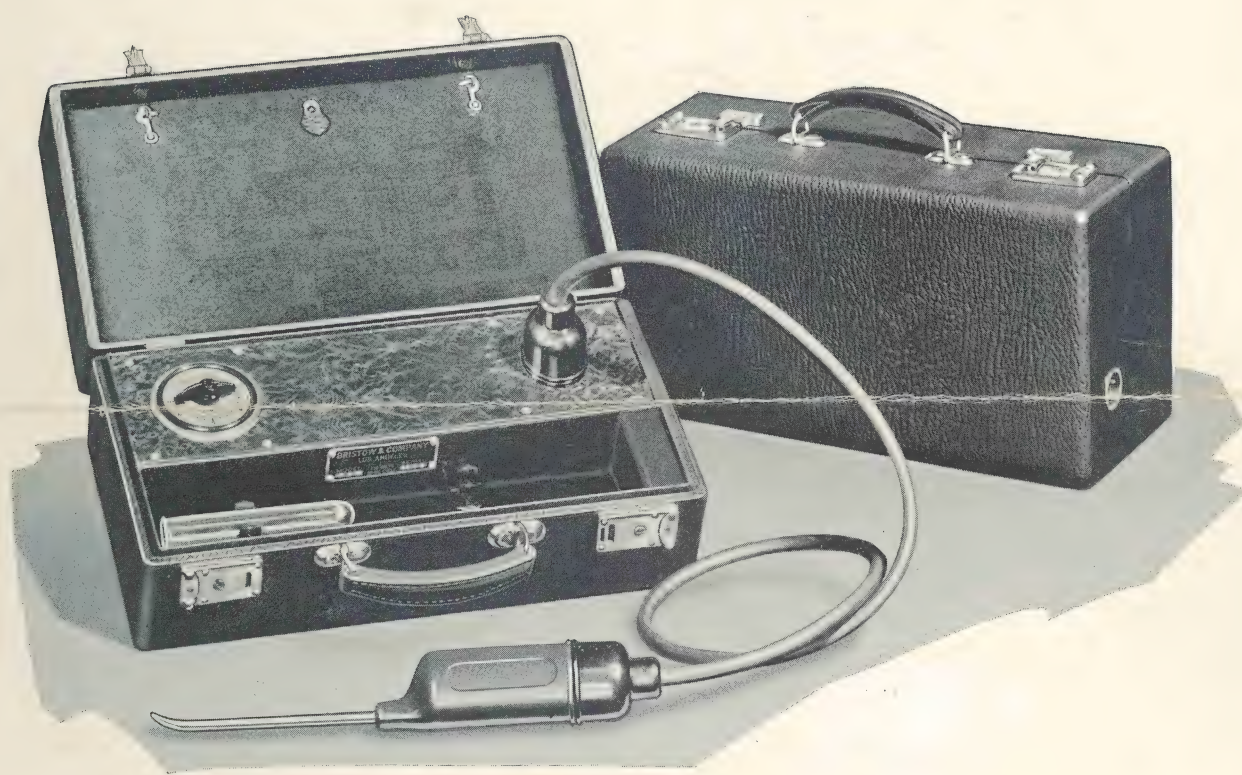
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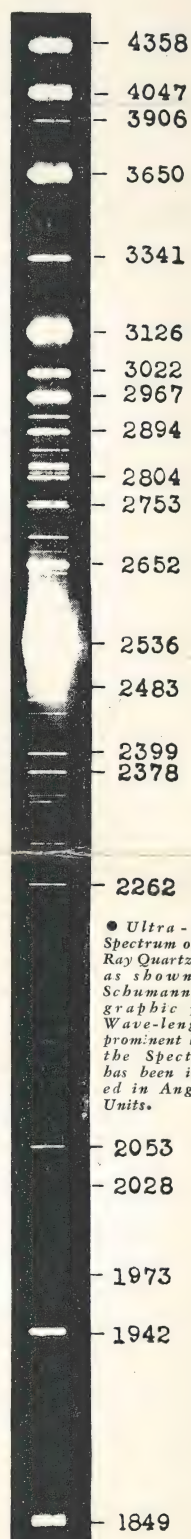
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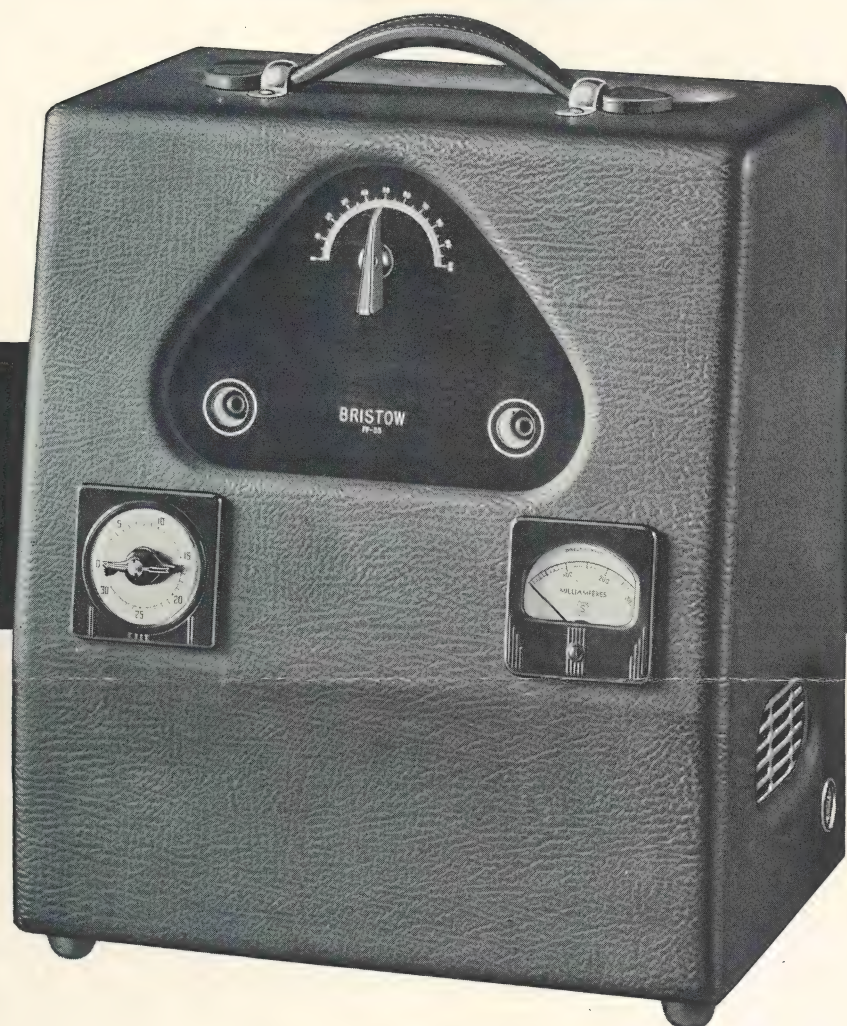
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## MODEL FP-35

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● **RESULTS COUNT**—Satisfactory results obtained, justify our efforts in making this model an outstanding advance in short wave therapy apparatus.

● **YEARS OF EXPERIENCE**—BRISTOW—a reliable established manufacturer of Therapeutic apparatus—has combined **EXPERIENCE—EXACT ENGINEERING**—a thorough understanding of ultra-high frequency circuits, and now offers to the Profession the most satisfactory and dependable ultra-short wave unit ever produced.

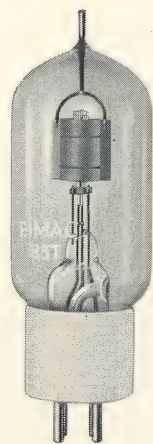
● **LONG LIFE ASSURED**—Expert workmanship and the use of the highest quality materials obtainable, especially **TUBES** designed for ultra-high frequency circuits, assure a machine which will give years of dependable service. "EIMAC" tubes are standard equipment—**TANTALUM** being used in the construction of both plates and grids—eliminating possibility of overloading, whether accidental or intentional.

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● **6 METER WAVE LENGTH**—(Fifty Million Cycles per second.) This wave length has proven to be particularly favorable. Localizing of the depth effect on organs in the interior of the body (a factor which increases as the wave length decreases) is strongly marked, and most effectively utilized where a 6 meter wave length is used, allowing the desired "AIR SPACING" with a minimum "SKIN EFFECT."

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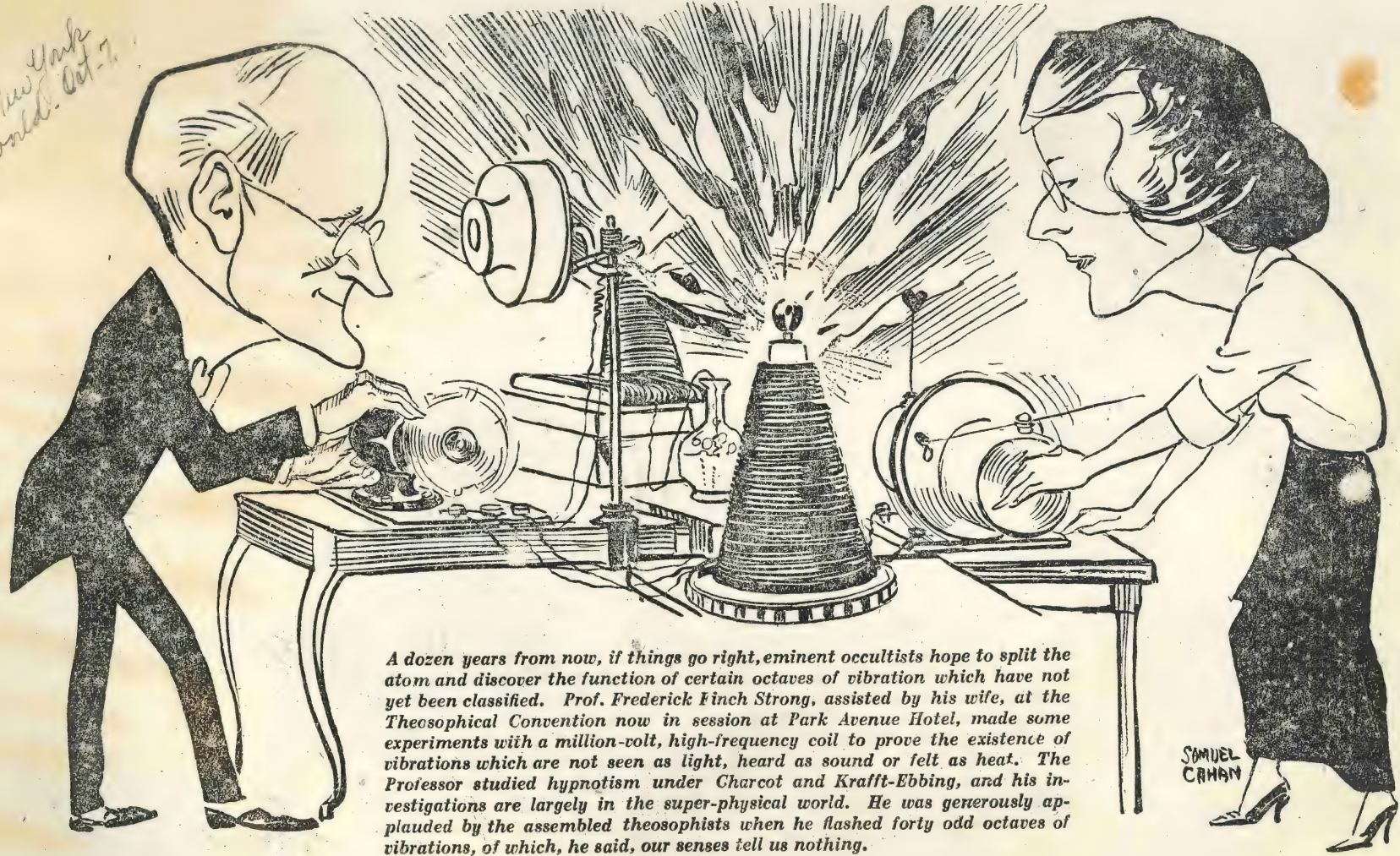


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sta  
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A dozen years from now, if things go right, eminent occultists hope to split the atom and discover the function of certain octaves of vibration which have not yet been classified. Prof. Frederick Finch Strong, assisted by his wife, at the Theosophical Convention now in session at Park Avenue Hotel, made some experiments with a million-volt, high-frequency coil to prove the existence of vibrations which are not seen as light, heard as sound or felt as heat. The Professor studied hypnotism under Charcot and Krafft-Ebbing, and his investigations are largely in the super-physical world. He was generously applauded by the assembled theosophists when he flashed forty odd octaves of vibrations, of which, he said, our senses tell us nothing.

SAMUEL CHAN

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Demonstrating in a Startling Manner, the Appearance of the Human (the Author's) Body When Charged With a High Frequency Current. This Picture Shows Exactly How a Person Charged From a Powerful High Frequency Apparatus Would Appear to Our Unaided Eyes, Were They Attuned to Respond to Vibrations of One or Two Millions Per Second, Instead of From 380 to 760 Million-Millions Per Second (the Range of Normal Human Vision). This Display Greatly Resembles the Natural Aura Surrounding the Human Body, but which Average Persons Can See Only by Gazing Thru Special Chemical Screens.

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1871



1871



A SUMMARY OF THE PATHOLOGICAL  
EXAMINATIONS MADE DURING  
THE SUMMER AT THE MASSA-  
CHUSETTS HOMŒOPATHIC HOS-  
PITAL.

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BY FREDERICK F. STRONG.

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[*Reprinted from the New-England Medical Gazette.*]



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A SUMMARY OF THE PATHOLOGICAL  
EXAMINATIONS MADE DURING  
THE SUMMER AT THE MASSA-  
CHUSETTS HOMŒOPATHIC HOS-  
PITAL.

BY FREDERICK F. STRONG.

[Reprinted from the New-England Medical Gazette.]



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1895  
NOV  
11



# A SUMMARY OF THE PATHOLOGICAL EXAMINATIONS MADE DURING THE SUMMER AT THE MASSACHUSETTS HOMŒOPATHIC HOSPITAL.

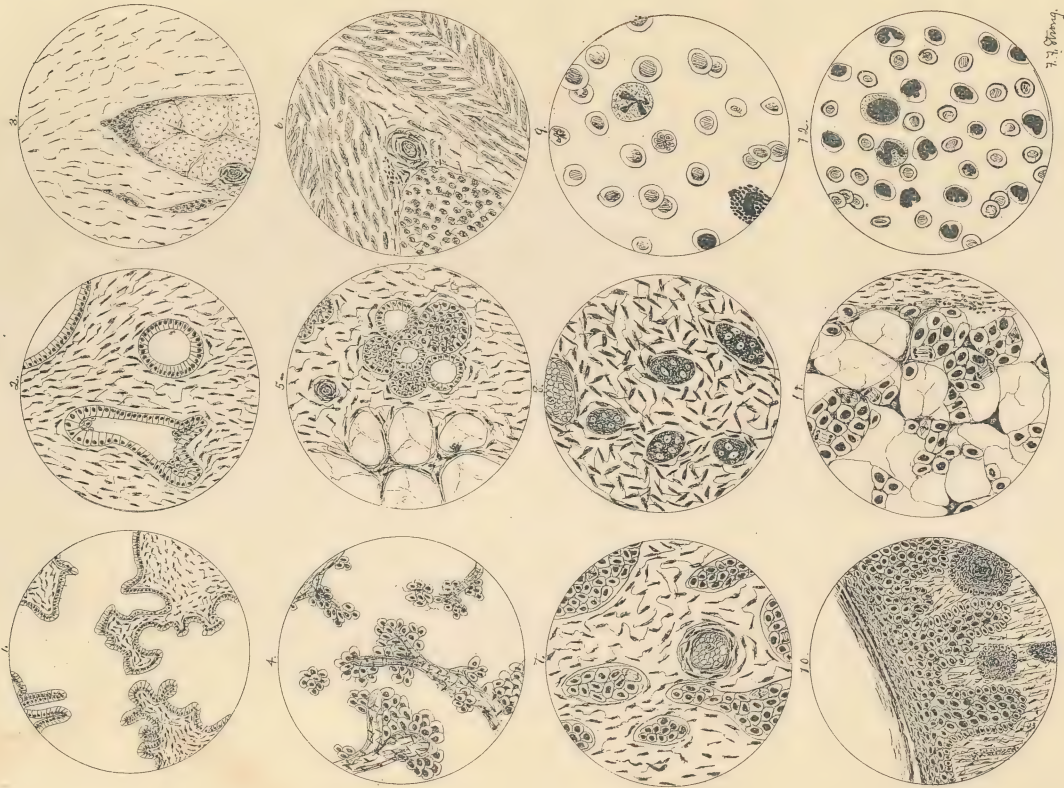
BY FREDERICK F. STRONG.

The series of microscopic examinations herein described were conducted during the summer at the Massachusetts Homœopathic Hospital; the writer having been assigned to fill the position of pathologist, in the absence of Doctor Winthrop T. Talbot. They are of interest as illustrating the wide range of pathological conditions to be encountered in the ordinary succession of hospital cases, as well as showing the value of microscopic methods in their application to the diagnosis of disease.

The examinations may be classed under four headings, viz., sputum examination; analysis of urine; examination of blood; and the examination of pathological tissues. The last class is the most important as in many cases the question of a severe operation is determined by the evidence of the microscope. The determination of the exact nature of growths removed by operation is likewise of great value in forming a prognosis and in determining the treatment to be employed.

The technical difficulties involved in the preparation of tissues for microscopical study form a great drawback to the employment of this means of diagnosis, as in most cases the interval necessary for the completion of the processes of hardening and embedding covers a period of a week, at least, thereby greatly diminishing the practical value of the results.

Much is claimed for the results obtained by the use of the various modifications of the "Freezing Microtome," an apparatus in which fresh specimens are rendered sufficiently firm for sectioning by the action of ice and salt, ether spray, or liquid carbonic oxide. The process, while valuable as a means of obtaining prompt diagnosis, is open to many objections,





among which are the structural alterations often caused by the freezing process and by the difficulty of staining the sections in such a manner as to properly differentiate the details of their formation. In the ordinary routine of microscopic work, specimens must first be hardened before satisfactory sections can be obtained. This is accomplished by one of two processes, having as their basis alcohol and chromic acid respectively. The slowness of action of the latter class of agents renders them useless in pathological work, where time is an important factor. Small specimens may be hardened in several days by the alcohol method; or in a little shorter time by using an alcoholic solution of mercuric chloride, but the violent action of the latter solution frequently renders the specimen worthless. After hardening, the tissue must be placed for a certain length of time in each of the following: absolute alcohol; alcohol and ether; 2% collodion; 6% collodion, after which it is imbedded in thick collodion which is rendered solid by the action of alcohol or chloroform, and forms a matrix for the support of the specimen while it is being shaved into thin sections in a microtome. The sections must then be subjected to a tedious process of double staining, clearing, etc., before they are finally ready for examination.

By the employment of a technical routine the details of which will be published later, the writer has been able to condense the above steps into a period of from twelve to twenty-four hours, the method giving sections fully equal to those obtained by the old routine, and insuring a prompt report. It has been employed on a number of specimens removed at the Massachusetts Homœopathic Hospital during the surgical service of Dr. W. J. Winn, and has given satisfactory results in every instance.

Some sixty pathological examinations have been made during the summer, the majority of which are included in the following summary:—

| <i>a. Examination of tissues:—</i> | No. of cases. |
|------------------------------------|---------------|
| Fibroma durum.....                 | 1             |
| “ cellular.....                    | 1             |
| Myo-fibroma .....                  | 2             |
| Sarcoma:—small round celled.....   | 1             |
| “ large “ “ .....                  | 1             |
| “ spindle celled.....              | 1             |
| “ alveolar .....                   | 1             |
| “ myeloid .....                    | 1             |
| “ endothelial .....                | 1             |
| Fibro-adenoma:—tubular .....       | 3             |
| “ “ alveolar .....                 | 1             |
| Papilliferous Cystadenoma.....     | 2             |



|                                          |    |
|------------------------------------------|----|
| Carcinoma:—adeno-carcinoma .....         | 3  |
| “ simplex .....                          | 2  |
| “ medullary .....                        | 1  |
| Fibro-carcinoma (“Scirrhus”).....        | 5  |
| Epiblastic Carcinoma (Epithelioma) ..... | 3  |
| Papilloma .....                          | 1  |
| Scrofulous—lymphadenitis .....           | 1  |
| Total.....                               | 32 |

*b. Uranalyses.....* 13

*c. Sputum examinations in*

|                          |   |
|--------------------------|---|
| Purulent bronchitis..... | 1 |
| Tuberculosis .....       | 2 |
| Asthma .....             | 1 |
| Pneumonia .....          | 1 |
| Total.....               | 5 |

*d. Blood examinations in*

|                             |    |
|-----------------------------|----|
| Chlorosis .....             | 2  |
| Secondary anæmia.....       | 2  |
| Secondary leucocytosis..... | 2  |
| Lymphatic leukæmia.....     | 1  |
| Pernicious anæmia.....      | 1  |
| Tertian ague.....           | 2  |
| Total.....                  | 10 |

In the uranalyses several interesting sediments were observed, one containing a rare form of uric acid crystal, but otherwise nothing of particular interest was encountered.

Of the sputum examinations, one case in which bacilli tuberculosis were detected is of interest, in that no other indications of the disease were present, beyond a very slight apical dullness. The bacilli seen were, as a rule, embedded in the protoplasm of leucocytes, showing that the system was endeavoring to rid itself of the infection. It is in these early cases that pulmonary tuberculosis may be checked, and the microscope is the one means by which the disease may be detected at this stage. The asthmatic sputum contained the characteristic fibrinous “spirals,” and also showed several crystals of hematoidin (“Charcot-Leyden,” or “asthma crystals.”)

The blood examinations were conducted according to the methods of Ehrlich, the details of which were described by



the writer in the June "Gazette." Of unusual interest was the blood of which a field is shown in the illustration (fig. 12); it was taken ten days prior to death, from a man about fifty years of age who was suffering with scorbutus. As may be seen the large and small lymphocytes are enormously increased, a condition seen only in the blood of lymphatic leukæmia. There are extremely few cases of this disease recorded; those which have been described having all occurred in Europe. The scorbutus was doubtless the result of the malnutrition resulting from the preëxisting leukæmic condition. The writer hopes to submit a more detailed account of this case at a future time.

The blood of one of the malarial cases contained a considerable number of red corpuscles infected by the "plasmodium" (*hæmatamoeba malarie*). The latter was usually seen in the "amoeboid" stage but several instances of approaching segmentation were noted (see illus. fig. 9, e, e, e, infected discs). A peculiar feature is present in the blood of the cases of chlorosis; in every case of this disease examined by the writer (about eleven) the granules of the "Eosinophile cells" assume an oblong, rod-like form, quite different from their normal (spherical) shape. This peculiarity, taken in connection with the increased number of blood "plaques," and the presence of "microcytes," appears to be diagnostic of this disease.

In regard to the tumors, it will be seen that in comparison with the total number examined, quite an unusual variety of species are represented, the above list containing types of nearly every class of tumor with which we are familiar.

Of the tumors of the connective tissue group, the mature type is represented by the simple fibroma (fig. 3), a tumor formed almost entirely of dense fibrillated connective tissue with an occasional area of small-celled infiltration; and by the myo-fibroma (fig. 6) in which unstriped muscle also enters into the formation of the growth. The two cases of the latter variety of tumor which were examined were both of uterine origin, one being of the sub-serous, the other of the sub-mucous type. The so-called "fibromas" and "fibroids" of the uterus are, in reality, members of this class, a true uterine fibroma being of somewhat rare occurrence.

The sarcomas, or connective tissue tumors of the embryonic type, were frequently met with; in addition to the more common small-round and spindle-celled varieties, several somewhat rare ones were examined: the myeloid sarcoma (fig. 8) was taken from the region of the tibia, from a knee-joint amputation by Dr. G. H. Earl.\* It shows under the microscope various gradations from a fibroma to a mixed-celled sarcoma.

\*The multi-nuclear bodies ("giant cells") have to do with the resorption of bone, and are not, strictly speaking, sarcoma cells.



The alveolar sarcoma (fig. 11) from the subcutaneous tissue of the neck, is interesting from the fact that it is frequently mistaken for carcinoma; careful study, however, reveals the presence of minute branches of stellate cells, separating the larger cells of the tumor, thereby distinguishing it from the cells of cancer, which are in direct contact with each other, connective tissue occurring only between the groups of cells, as shown in fig. 7.

The latter is from a primary carcinoma of the mammary gland, and is an example of the cylindrical cell carcinoma, which has its origin in the cells of glandular epithelium. The other variety (fig. 10), or epithelioma, is formed by the proliferation of cells from the malpighian layer of the skin, and is, therefore, an epiblastic carcinoma.

Several forms of adenoma were met with: the specimen shown in fig. 2 is of the tubular variety, and is beginning to show a tendency to grow into carcinoma; the proliferating cells, seen at either extremity of the lumen in the centre of the illustration give evidence of this fact. In the alveolar adenoma shown in fig. 5 a similar condition appears to exist, but in reality, the cells which seem to fill several of the spaces, form the lining of a hollow hemisphere into the concavity of which the observer is looking.

The papilliferous cystadenoma (fig. 1) is formed of fibrous processes covered with glandular epithelium, which is distinct in point of origin from the connective tissue upon which it rests. It contrasts well with the endothelioma, or villous endothelial sarcoma, shown in fig. 4, in which the groups of epithelial-like cells are quite distinct from each other, showing that they must have originated from the endothelium of the papillary stroma. It was taken from the peritoneal cavity, while the former tumor is an ovarian growth.

In reporting the above cases a colored drawing and a permanent microscopical preparation were turned in with the description of the histological structure and the diagnosis.

As far as can be learned, the clinical history of most of the cases has been in accord with the microscopic evidence.







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1895  
NOV  
11



## Biographical Data

*Copied From*

WHO'S WHO IN AMERICA  
(Vol. 21)

... and ...

WHO'S WHO AMONG  
PHYSICIANS AND SURGEONS  
(1940-42)



LOS ANGELES, CALIFORNIA  
1942

775. Age 72.

Tuesday, June 6, 1944

By ZUMA PALMER

President Roosevelt's talk at 7 p.m. over KHJ, KFI, KNX and KECA is scheduled to be six minutes in length.

\* \* \*

Schedules will not mean a thing today because of invasion news and commentary on the same.

\* \* \*



"WHO'S WHO IN AMERICA" (Vol. 21)

STRONG, FREDERICK FINCH, M.D.

Inventor; b. Aurora, N. Y., June 6, 1872. s. Thomas Campbell (D.D.) and Mary Arabella (Finch) Strong. Grad. high sch, Ithaca, N. Y. student Cornell Univ. 1889-93; Univ. of Berlin, 1893-94. Boston Univ. Med. Sch. 1895-97. M. D. Tufts Coll. Med. Sch. 1898. m. Ethel Ellen Haley, Sept. 27, 1916; Practiced Medicine, Boston '98-'08. Research in Paper-pulp, St. Petersburg, Florida. Granted 4 patents on pulp process, 1910-13; In practice of Medicine, St. Petersburg, Fla., 1913-15. Scientific Lecture Tour of U. S., 1916-18. In practice in Hollywood, Cal., 1919. Dir. Strong Therapeutic Inst., 1928-37. Senior Regent, Life Research Foundation, Inc., Los Angeles, 1938, Mem. Medical Editor's and Author's Assn. Pac. Physical Therapy Soc. Mason, Republican, Theosophist. *Author:* Modern Electro-therapeutics, 1906-18. High-frequency Currents, 1908; Science of a Living Universe, Vital Normalization; Dance of the Octaves (Scenario), 1939. *Composer:*—"Valse Petite," "Minuet in C." "Barcarole." (*Inventor*,—Tesla-High-Frequency therapeutic Apparatus; "Cold Ray" and "Cold Quartz" Ultra-Violet Apparatus, 1936. "Photosonic Harmony System" (copyright. 1936) Photosonic Synchronizer for cure of deafness (1935). "Hole-in-One Club" 1932. Author of numerous Scientific articles. *Poems*, "Echoes," Palmetto, Fla., 1913. "Lesson of the Cloud" (pub. in "New England Craftsman," 1916).

Address—

6129 Fountain Ave.  
Hollywood, California.

"WHO'S WHO AMONG PHYSICIANS  
AND SURGEONS"

(1940-42)

STRONG, FREDERICK FINCH:

s. Physiotherapist; b. June 6, 1872, Aurora, N. Y., Strong, Thos. Campbell (D.D.) and Mary Arabella (Finch) Strong. ed. Cornell U., 1889-93; U. of Berlin, 1893-'94, Boston U. Med. Sch., '94-'97. Tufts Coll. Med. Sch. M.D., 1898; m. Ethel Ellen Haley, Sept. 27, 1916. Instr. Microscopy and Bacteriol. Boston Univ. Med. Sch., 1897-98. Originated and made first therapeutic High-frequency apparatus, 1897 (this was "father" of all the diathermy, short-wave and ultra-short wave since that date. Invented and made the first carrier-wave apparatus: (this was the basis of modern RADIO and was shown at A.M.A. Meeting, New York Academy of Medicine, 1904. Inventor, Cold Quartz Ultra-violet Apparatus, patented 1903; Vacuum Electrode, etc. Instr. Clinical Hematology Tufts Coll. Med. Sch. 1898; Lecturer in Electrotherapeutics 1898-1908. Research in paper-pulp, St. Petersburg, Fla., 1910-13. Granted 4 patents paper-pulp process; granted 8 patents on various electrical devices. Lecture Tour of U. S., 1916-18. Dir. Strong Therapeutic Inst., 1928-37. Senior Regent Life Research Foundation, Inc., Author "HIGH-FREQUENCY CURRENTS" (1908), "MODERN ELECTRO-THERAPEUTICS" (2nd edit., 1918), also many medical and scientific articles in various journals, Mem. Amer. Med. Editor's and Author's Assn.

Address—6129 Fountain Ave.,

Phone HI-8041  
Hollywood, Cal.

Dr. Strong is also originator of special technique for cure of STREPTOCOCCUS INFECTIONS (such as "Strep. Throat," Common "Colds," Influenza ("Flu"), etc.)

Also

for cure of Cardiac (valvular) infections, and diseases associated with HIGH BLOOD PRESSURE.

775. Age 72.

Tuesday, June 6, 1944

By ZUMA PALM  
President Roosevelt's  
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SUNDAY MORNING.

# LIQUID SULPHUR AIDS MAN WIN LIFE'S FIGHT

## World War Flyer Apparently Doomed Defies Death With Experiment

Continued from First Page

shine, orange juice and goat's milk.

"I had fooled the doctors to the extent of an extra month," he recalls, "but my weight refused to go over 105 pounds."

STUDY

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Not only physicians, but scientists have suggested how it might be possible for Wilson's discovery to mark another advance in curbing disease.

Dr. Elbert E. Chandler, professor of chemistry at Occidental College, analyzed the clear amber liquid.

FAVORS ACTIVITY

"This sulphur," he commented, "is undoubtedly precipitated in a colloidal or finely divided state when taken internally. A cubic inch of sulphur would have a surface of six square inches, but in this colloidal state it might have an acre of surface. If it is active at all, the enormous surface presented favors activity."

For the Los Angeles man has been testing his liquid sulphur on human skin cancer under direction of doctors for many months.

NOT SURPRISED

Neither has he been startled by the amazing and unquestioned cures of certain infections.

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"You just a bit looney," the researcher was directed.

"dictatorial powers," his onic retort, "I could health standard of the es 60 per cent in s with sulphur prod-

Girl One had heard Mom remark that the patio chairs should be repainted. She knew, too, where there was a lot of paint. So while mother was away she painted the chairs as a surprise. She did a pretty good job of it, too. She didn't do the dress she was wearing any good but she didn't do it a great deal of harm, either. Altogether the surprise was a success and when Dad was told of it he felt that Girl One deserved an extra half-dollar when she went to the air.

Surprise for Mother

Shop. to disturb anything in his work. swept he won't permit anyone front porch or front walk isn't her. For while he fusses if the gives her a dime to get rid of him. Then Seymour hurriedly to ask if she can sweep it for —which always needs sweeping and takes it to Dad's workroom for it. She dashes for a broom tra dime or so she rarely asks



LA Times Oct 9, 1938

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Continued from First Page

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### STUDIES CHICKENS

When a score of baby chicks died Wilson dissected them in a laboratory he had outfitted in an abandoned shed. He was surprised to find in each chick a hard lump which analysis proved to be sulphur the chicks had failed to absorb from the yolk before hatching. Tests indicated that unless chickens utilize this yolk sulphur in their bodies they cannot survive. That was the start of the former flyer's serious research.

Of course, the use of sulphur to relieve human ills dates back to 434 B.C. when Herodotus wrote about the early mineral baths. Grandmothers of the present generation dosed their children with sulphur and molasses to pep them up in the spring. More recently, President Roosevelt founded a \$500,000 endowment to increase availability of the sulphur and other mineral waters of Warm Springs, Ga.

### ESTABLISHES "HOSPITAL"

"When I found that an apparent deficiency in sulphur accompanied a variety of poultry diseases and that 16 per cent of chicken feathers is sulphur," Maj. Wilson explained, "I decided to learn all I could about the element's relation to life. My first objective was to develop a sulphur which chickens could utilize from their drinking water."

One of his concoctions reputedly cured so many cases of poultry rheumatism that a San Fernando rancher's wife began using it secretly to treat her own neuritis, also with apparent success. Soon the researcher, almost forgetting his precarious health, established hospital pens for a variety of animals as a prelude for experimentation with human diseases.

### HIS OWN SUBJECT

Eventually he became his own first human "guinea pig," testing each sulphur solution on himself before allowing his comrades in the Burbank Legion post to try it on the various aches and pains left over from trench life. Maj. Wilson, at least, is convinced it was the sulphur which in three years restored his health and increased his weight from 105 to 160 pounds.

Common sulphur is supposedly insoluble in water, the accepted method of putting it in solution being to mix it with lime. Such solutions, according to Wilson, are less effective because the lime "ties the sulphur up." This prevents it from combining with poisons in the body, usually carbon compounds. As the result the sulphur is unable to do its work of making the poisons so soluble that they can be eliminated."

### FORM DISCOVERED

Dr. Frederick Finch Strong, a Los Angeles physician, asserts the former chicken rancher has discovered a special form of sulphur that actually is combined chemically with water, something hitherto unknown in chemistry.

"I feel," said Dr. Strong, "that an entirely new and important field of medical research has been opened by the discovery. Knowing the active part sulphur plays in the vital chemistry of vegetables and animals, it seems logical to assume that this is

For the Los Angeles man has been testing his liquid sulphur on human skin cancer under direction of doctors for many months.

### NOT SURPRISED

Neither has he been startled by the amazing and unquestioned cures of certain infections with sulfanilamide, a coal-tar sulphur compound. He is not surprised that insulin, which has given new life to thousands of diabetics, is reported to be ineffective unless it contains sulphur.

"Aren't you just a bit looney on sulphur?" the researcher was asked.

"If I had dictatorial powers," was his laconic retort, "I could raise the health standard of the United States 60 per cent in three months with sulphur products."

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research.

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#### VALUES LETTERS

On "Sulphur Earle's" desk are letters of appreciation from remote parts of the globe, including Australia and China. He values them as highly as the watch he won as an ace war pilot.

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It did not amaze Maj. Wilson the other day to read that Dr. Eric Boyland of the Royal Canadian Hospital has prepared sulphur compounds which checked the growth of cancers in mice.



A close-up photograph of a dark, textured surface, possibly a book cover or a piece of fabric, featuring a prominent white circular emblem with a black swastika symbol. The image is framed by a thick black border.

# Doomed World War Flyer Defies Death With Experiments

Knives, airplanes, bullets, chickens and sulphur are the stuff of which the fantastic life of Maj. Earl Hill Wilson has been made.

## "SULPHUR EARL"

For from all parts of the world physicians have written reports of encouraging results obtained with liquid sulphur. Occidental College chemists and scientists of a national research institute have taken an active interest in testing the mixture.

But it was with no idea of becoming a research chemist that Wilson became, in turn, a boy circus performer, ordained minister, aviator and medical man. In 1911, as one of the first commissioned United States Army pilots, he was injured critically when his plane was struck by lightning.

## SHOT DOWN SEVEN

Besides a gold "Ace" watch his war souvenirs include a silver plate in his skull, a silver plate in his right leg, and a case of advanced tuberculosis resulting from having three ribs torn loose.

STUDIED MEDICINE

Just before the war he had managed to complete three years of medical training at Rush Medical College, Chicago, and had served for a time as assistant to a brain surgeon. In Burbank he dosed himself with sun-



# Sulphur Aid to Life Found

## Doomed World War Flyer Defies Death With Experiments

BY WILLIAM S. BARTON

Knives, airplanes, bullets, chickens and sulphur are the stuff of which the fantastic life of Maj. Earl Hill Wilson has been made.

First, as a student brain surgeon, he trained to save lives with knives. Then, as a World War ace, he sought to take enemy lives. Bullets and gas shattered his own health. Condemned by doctors to die, he settled on a small Burbank chicken ranch. He learned to save his chickens' lives by developing a new liquid sulphur. Then he saved his own life. Now he is conducting research with the hope of saving others from suffering and death.

### "SULPHUR EARL"

At present a resident of North Hollywood, his life is spent working with sulphur, drinking sulphur and talking about sulphur. It isn't surprising that his friends call him "Sulphur Earl." And his conviction that a pound of sulphur is worth more than a pound of diamonds may be permitted.

For from all parts of the world physicians have written reports of encouraging results obtained with liquid sulphur. Occidental College chemists and scientists of a national research institute have taken an active interest in testing the mixture.

### BEGAN IN CIRCUS

But it was with no idea of becoming a research chemist that Wilson became, in turn, a boy circus performer, ordained minister, aviator and medical man. In 1911, as one of the first commissioned United States Army pilots, he was injured critically when his plane was struck by lightning.

Released from Walter Reed Hospital with a pension for life as totally disabled, he threw away his crutches in 1914 and went to France with the Storck Escadrille, afterward merged with the Lafayette Escadrille. He later won a commission as major in the Royal Flying Corps, in command of a squadron of bombers.

### SHOT DOWN SEVEN

Official records credit him with shooting down seven German planes. After he himself had been shot down for the third time in France he was transferred to the United States Army as a casualty and invalided home.

Besides a gold "Ace" watch his war souvenirs include a silver plate in his skull, a silver plate in his right leg, and a case of advanced tuberculosis resulting from having three ribs torn loose.

Back in Walter Reed Hospital, Washington, D. C., in the same bed from which he had hobbled seven years before, Maj. Wilson was told he could not expect to live ninety days.

### STUDIED MEDICINE

The war ace disliked the idea of waiting to die in bed so he insisted upon being carried on a stretcher to a California-bound train.

Just before the war he had managed to complete three years of medical training at Rush Medical College, Chicago, and had served for a time as assistant to a brain surgeon. In Burbank he dosed himself with sun-

Turn to Page 3, Column 1





**THE "ORIGINAL SEVEN" MEMBERS** of the Tufts College Medical School faculty. The school will observe its golden anniversary Wednesday night in John Hancock Hall, Boston. Front row (left to right): John W. Johnson, M. D.; Charles P. Thayer, M. D., secretary; Albert Nott, M. D., dean; William R. Chipman, A. B., M. D. Back row: Henry W. Dudley, M. D., Walter L. Hall, M. D., and Frank G. Wheatley, M. D.

## Tufts Medical School Marks 50th Anniversary Wednesday

A school, famed for its contribution of "family doctors" to the New England scene in times of peace and equally famous for its output of "fighting doctors" in times of war, will observe the golden anniversary of its founding Wednesday night with simple but appropriate ceremonies in downtown Boston.

It was 50 years ago tomorrow that the Tufts College Medical School opened in Boston on a "shoestring"—\$150 contributed by three of the original faculty. The records say that the trustees of Tufts College "not without some misgiving owing to the financial depression" but firmly convinced of the need of a medical training center especially for Boston and New England doctors of both sexes, decided to open the school.

### LEADING ROLE

Since that time from its humble beginning, the school has contributed much to the well being of New England and has played a leading role in medical progress. It has become the principal training center for New England physicians, particularly family doctors.

Since the turn of the century, Tufts has trained more doctors for New England practice than any other school in the country. Of the New England physicians trained by New England schools of medicine, Tufts graduates number one in every three according to a survey of the A. M. A. directory a few years ago.

The anniversary observance will take place in John Hancock hall, within a few blocks of its original location. More than 1000 New England laymen, faculty alumni and students are expected to attend.

The program, somewhat sobered by the fact that some 2000 of the school's 3500 medical graduates are in active military service in all parts of the world, lists prominent speakers who will review some of medi-

cine's achievements of the past 50 years and evaluate present trends.

Typical of Tufts contribution to the war effort is Comdr. Bartholomew W. Hogan, U. S. N., class of 1925, who won the Navy and Marine Corps Medal for heroic self-sacrifice as senior medical officer on the torpedoed aircraft carrier Wasp. He will be a speaker on the program.

### WASP HERO SPEAKS

Comdr. Hogan worked without sleep for 48 hours despite injury during the sinking of the carrier, treating the wounded. Before the war he was chief of medicine at the U. S. Naval Hospital, Annapolis. He is now with the U. S. Navy Medical Corps in Washington as senior medical officer.

Comdr. Hogan also gained fame for his recent report to the International College of Surgeons in which he gave his findings concerning how intense sound waves kill men in the armed forces.

The main speaker at the observance will be Dr. Karl T. Compton, president of M. I. T. Other speakers will be Harold E. Sweet, president of the Tufts College trustees; Dr. A. K. Paine, president of the Medical Alumni Association; Capt. A. Warren Stearns, USNR, dean on leave; Dr. Louis E. Phaneuf, committee chairman, and Dr. Leonard Carmichael, president of Tufts College.

Tufts Medical School held its first classes in 1893 at 188 Boylston street. The founders are known in Tufts tradition as "the original seven."

They were Dr. Albert Nott, dean and professor of physiology; Dr. Charles P. Thayer, secretary and professor of general, descriptive and surgical anatomy; Dr. Henry W. Dudley, professor of pathology; Dr. William R. Chipman, professor of surgery; Dr. Walter L. Hall, professor of the principles and prac-

tice of medicine; Dr. John W. Johnson, treasurer and professor of obstetrics, and Frank G. Wheatley, A.M., professor of materia medica and therapeutics.

### 80 STUDENTS

There were 80 students enrolled that first term. Of that number 22 were graduated in 1894, among them eight women. The course was extended to four full years for the session of 1895-1896, and shortly afterward, as enrollments increased, the school moved to the Old Stone Church at the corner of Rutland street and Shawmut avenue. Here a dispensary attached to the school held busy clinics, especially evenings when the outpatient clinics of the Boston City Hospital were closed.

Five years later—in 1901—the present Tufts Medical School on Huntington avenue was erected. For a year or two a clinic was conducted in the basement of the school by the faculty. Shortly afterwards the students were assigned for practical clinical experience at various Boston clinics.

Students of the original class of 1894 living today are Dr. Mary Briggs of Pawtucket; Dr. Henry B. Dunham of Greenock, N. J.; Dr. George E. Hunt and his wife, Dr. Alice Palmer Hunt, of Los Angeles; Dr. Charles D. Knowlton of Rockport; Dr. Ella G. Stone, Boston psychiatrist; and Dr. Edward E. Thorpe of Boston and Newton.

The next step in the history of Tufts College Medical School will be the removal of the school from its present location to a new building to be erected at the New England Medical Center.

Prepared especially for the 50th anniversary, after five years of research, is a history of the school written by Dr. Benjamin Spector, professor of anatomy and history of medicine at Tufts.



# Eliot Praises Alli

## Forts Batter Emden Third Time in Week

**Nazis Report Yanks  
Join RAF in Night  
Attack on Hagen**

LONDON, Oct. 2 (AP)—A scant 12 hours after the Germans reported them joining the RAF in a big night raid on the Ruhr, American Flying Fortresses, escorted by Thunderbolts, this afternoon gave the Nazis' prime North Sea merchant shipping port of Emden its third battering of the week.

Later in the day more Allied attackers streamed across the channel to the continent, keeping up the crescendo of the new two-way interlocking Allied aerial assault from both British and Mediterranean bases which in two days has dealt three big blows on Hitler's so-called European fortress.

### SILENT ON REPORT

U. S. Eighth Air Force officers maintained silence on the German radio report that American bombers had joined the RAF in the assault last night on the Ruhr industrial city of Hagen, which is both a rail center and an important industrial target.

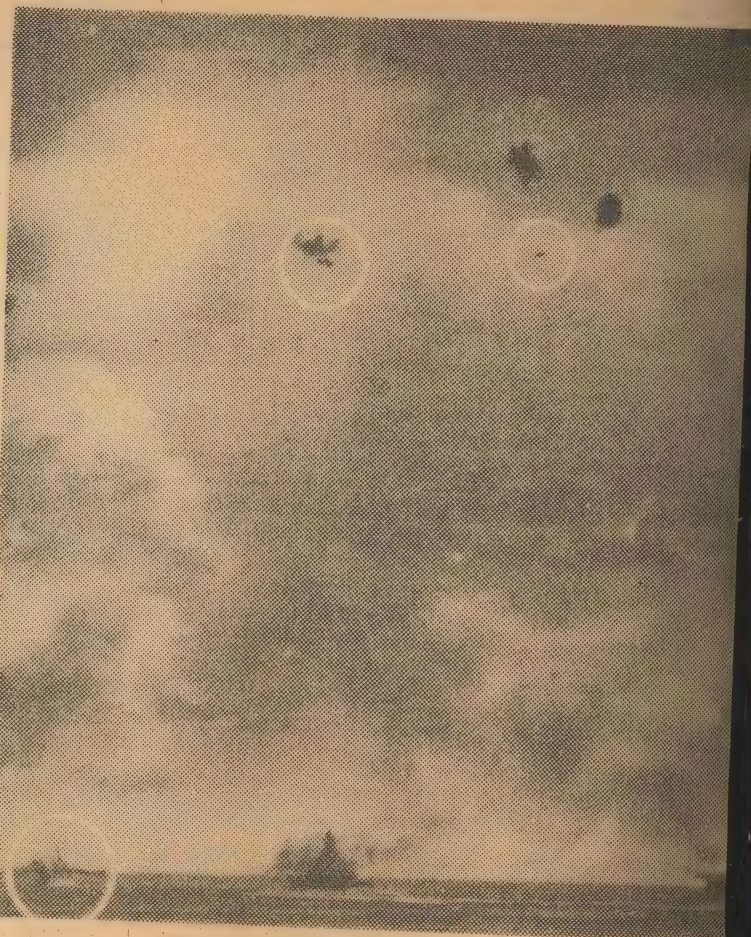
The German announcement recalled, however, that as far back as March Maj. Gen. Ira C. Eaker, Eighth Air Force commander, said Flying Fortresses would bomb at night—a field of operation hitherto carried out exclusively by the RAF.

Whether or not it has joined in the night bombing, the Eighth Air Force has quadrupled, at least, the power of its heavy raids on Germany and France since a year ago. It now is sending out an average of more than 200 bombers on each raid, and it is likely this average was much exceeded on a number of recent raids. During September the American planes dropped more than 8000 tons of bombs.

The attack against Emden today was the third for that city this week. Emden was bombed twice on Monday, in daylight by the Fortresses and at night by the RAF.

Since the destruction of Hamburg, Emden has fallen heir to a big block of German shipping. It is the terminus of the Dortmund-Ems canal used to carry Scandinavian iron ore and other vital raw materials to the Ruhr.

The two-day blows against the Reich began from North Africa yesterday. American Flying Fortresses, making their first raid on Germany from the Mediterranean theater and their longest operational flight from Northwest African bases, pounded Munich in a round-trip flight of approximately 1800 miles. Liberators teamed with them to blast the Messerschmitt air frames factory at Wiener Neustadt.



(AP Wirephoto)

**NAVY TEAMWORK THAT TOOK BIG JAP TOLL** — "Battleship Nipponese planes in the Battle of Santa Cruz, Oct. 26, 1942, was carrier which, with its planes, accounted for 33 of the foe, was announcement yesterday, the Navy released this picture of the fought that battle. Splash at left (circle) is believed to be Jap water. Other enemy planes overhead (circles) are subjected to h

## Boston Warned Of Group 1

(Continued from First Page)

toward staying out of Group 1. That is really serious."

A similar analysis was given by Harold D. Leslie, executive secretary of the Springfield Chamber of Commerce. "The effect of the order here has been felt mainly in non-essential activities," he said, "such as banks, department stores and insurance houses. They have been forced to go on the 48-hour week, and are not replacing men as they leave for the service."

"But in industrial plants the effect has been negligible. The whole thing has worked out pretty well."

### GROUP 1 REALLY SERIOUS

"Our biggest worry here has been to keep out of Group 1. We were in it for a brief while, and it was really serious. That is what Boston should think of."

George Harding, head of the United States Employment Service in Springfield and deputy WMC officer, said that Springfield industry had still been able to get new con-

## Mass. Marine Tells Of Jap War Horrors

**SOMEWHERE IN THE SOUTH PACIFIC**—(Delayed)—A tale of horror and savagery in jungle fighting with the Japanese, which involved a Massachusetts man was brought back today from New Georgia Island by a group of wounded Marine Raiders.

Cpl. John M. King, USMC, 24, of Danvers, was wounded in the field. Carried to a hospital, the Japanese bombed the hospital huts and a bomb splinter lodged in the already wounded man's liver.

"An emergency operation soon after we were evacuated by plane saved him," said Pvt. Fred Linton, a fellow fighter who wiped out a nest of Japanese before a sniper wounded him.

ever small, would necessitate withdrawing the contract from Boston and placing it elsewhere. It was calculated that such an interpretation would cost the city \$1,000,000 daily, with the possibility that other Army departments would fall in line. Even local WMC officials were







# WHO'S IMPORTANT IN MEDICINE

A Biographical Encyclopedia of Physicians, Surgeons,  
Medical Educators and Hospital Administrators

compiled and published by

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7-8458

Office of the Editor

January 24, 1944.

Dr. Frederick F. Strong,  
6129 Fountain Ave.,  
Hollywood,  
Los Angeles, Calif.

Dear Dr. Strong:

Your biography has been edited and is now submitted to you prior to publication in WHO'S IMPORTANT IN MEDICINE, which records the careers of Outstanding Physicians, Surgeons, Medical Educators and Hospital Administrators.

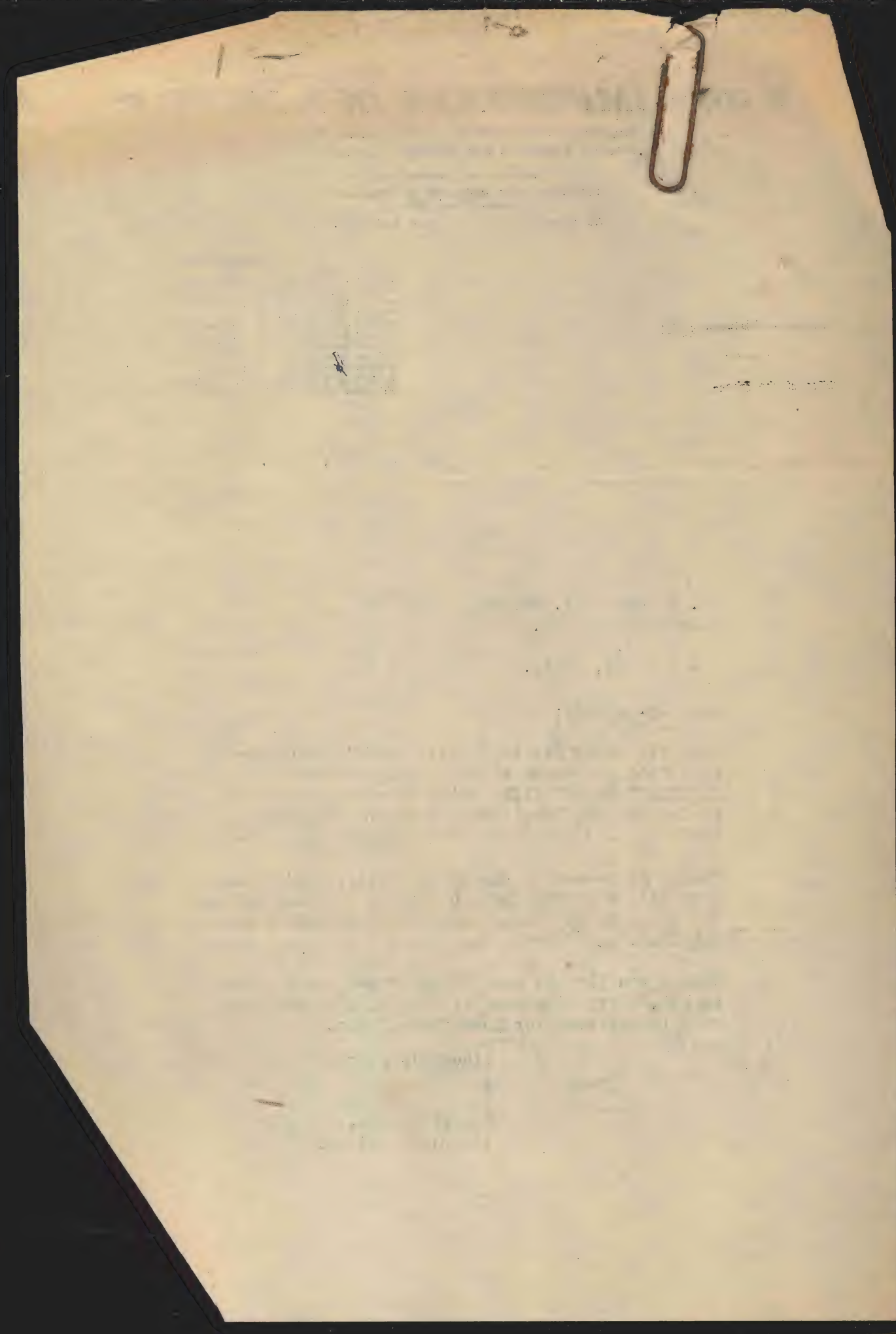
Please go over this sketch carefully, making any corrections or changes you desire, and then return the proof to me with your personal signature of approval.

Should you like to own a copy of the forthcoming volume, containing your biography, a reservation card is enclosed for your convenience.

Sincerely yours,

*Robert Tilton*  
Robert Tilton,  
Associate Editor.







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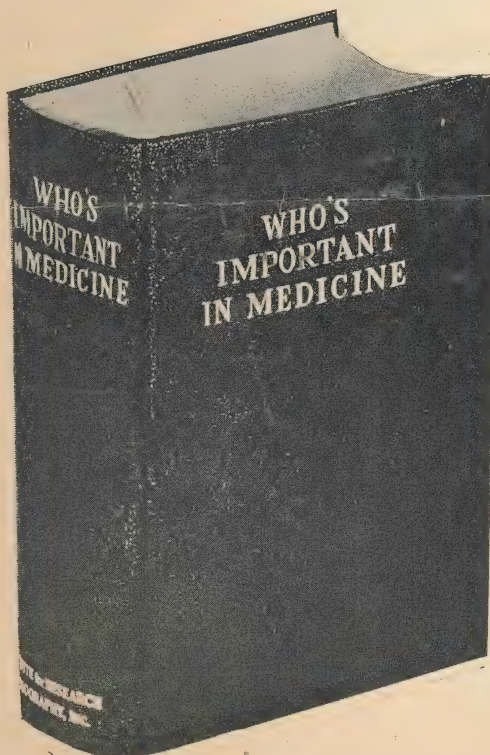
A Biographical Encyclopedia of Physicians, Surgeons,  
Medical Educators and Hospital Administrators

## WHO'S IMPORTANT IN MEDICINE

**BEST, CHARLES HERBERT, M.D.**, Physiologist and co-discoverer of insulin, was born in West Pembroke, Me., February 27, 1899, the son of Herbert Huestis, M.D., and Luella (Fisher) Best, both of Canada. He was educated at the University of Toronto, from which he received degrees of B.A., M.A., and M.D., and at the University of London, England, where he won the degree of D.Sc. On September 3, 1924, he married Margaret Hooper Mahon, and they have two sons—Charles Alexander and Henry Bruce Macleod. Dr. Best began his career as a fellow in the department of Physiology at the University of Toronto in 1920. From 1922 to 1932 he was research member of the Connaught Laboratories, University of Toronto, of which he has been Associate Director since 1932. Since 1923 he has been research associate in the Banting-Best Department of Medical Research. Dr. Best was assistant professor of physiological hygiene at the University of Toronto from 1926 to 1929, since which time he has been acting head of the Department of Physiological Hygiene, and professor and Director of the Department of Physiology. In 1921 Dr. Best and Sir Frederick G. Banting discovered a remedy for

**BALFOUR, DONALD CHURCH, M.D.**, Chief of the Division of Surgery of the Mayo Foundation, Professor of Surgery at the Graduate School of the University of Minnesota, and Director of the Mayo Foundation for Medical Education and Research, was born in Toronto, Ontario, Canada, August 22, 1882, the son of Walter and Alice (Church) Balfour. He received his preliminary education at the Hamilton Collegiate Institute and was graduated from the University of Toronto with his M.B. in 1906. Dr. Balfour received his M.D. from this institution in 1914 and received the honorary degree of LL.D. from Carleton College in 1934, and the degree of D.Sc. from McMaster University, 1941. On May 28, 1910, he married Carrie Louise Mayo. Dr. Balfour began his career as assistant in pathology at the Mayo Clinic in 1907. He was clinical assistant in 1908 and was appointed junior surgeon in 1909. In 1912 he became Head of a Section in the Division of Surgery of the Mayo Clinic and has been Chief of the Division of Surgery in the Mayo Foundation since 1923. Dr. Balfour has been professor of surgery in the Graduate School of the University of Minnesota since 1923. In 1935 he was appointed Associate Director of the Mayo Foundation for Medical Education and Research, serving in this capacity until July 1, 1937, since which time he has been Director. Dr. Balfour is Fellow, Regent and Past President of the American College of Surgeons and Fellow and Chairman of the Surgical Section of the American Medical Association (1928-29). He is honorary fellow of the Royal

**CARREL, ALEXIS**, Nobel Prize Winner, was born in Lyon, France, 1873, son of Alexis Ricard. In 1913 he married de la Motte. Dr. Carrel was educated at the Universities of Lyons and Dijon, receiving L.B. in 1890, Sc.B. in 1893, and M.D. in 1900. Numerous degrees have been conferred on Dr. Carrel by American universities. After completing his internship in 1900, he joined the University of Lyons, where he was appointed to the Faculty of Medicine. In 1905 he entered the Rockefeller Institute for Medical Research, New York City, where he remained until 1912. He won the Nobel Prize for his work on blood-vessels and organs. In 1931 he was awarded the Nordhoff-Jung Cancer Award of the University of New York. He retired from the Rockefeller Institute in 1939, after serving a number of years as Head of the Division of Experimental Surgery. He is Commander of the French Legion of Honor and of the Order of Leopold of Belgium. Dr. Carrel has received many decorations in his own and foreign countries. In addition to numerous papers on biology and surgery, he is author of "Le goitre cancéreux," "The Treatment of Infected Wound," "Man, the Unknown" and "The Cultivation of Organs" (with Charles A. Lindbergh). Address: Rockefeller Institute, 66th St. and York Ave., New York, N. Y.



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16

Visible Light - Octave.

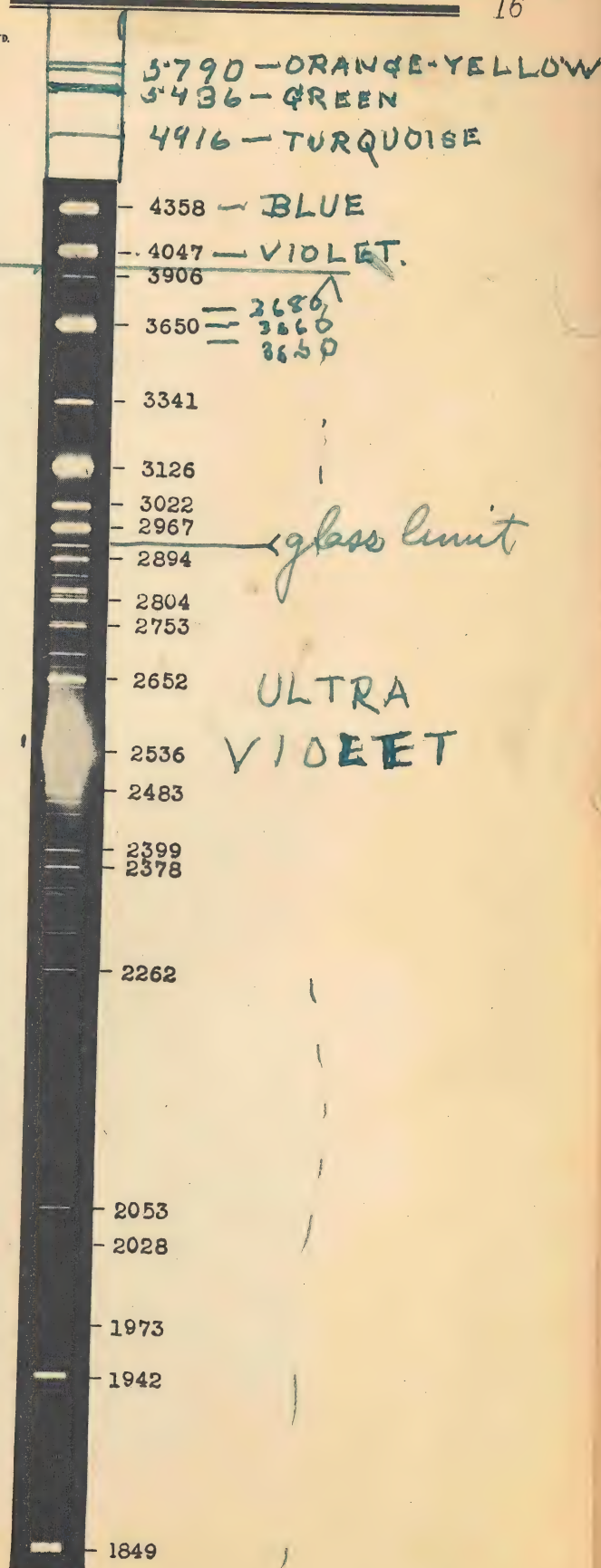
Limit of Vision

(An Angstrom Unit is  
one ten-millionth of a millimeter)

Ultra-Violet Spectrum of Cold-Ray  
Ultra-Violet Quartz Lamps as shown  
by a Schumann photographic plate.  
Wave-length of prominent lines of  
the Spectrogram has been indicated  
in Angstrom Units.

As compared with the Spectra of  
earlier forms of Ultra-Violet ener-  
gy from mechanical sources, the  
Cold-Ray Spectrum is seen to re-  
present an increase in energies  
effective in producing chemical  
change.

Spectrogram of  
Dr Strong's  
"Cold Quartz"  
Mercury Ultra-violet  
Radiation.

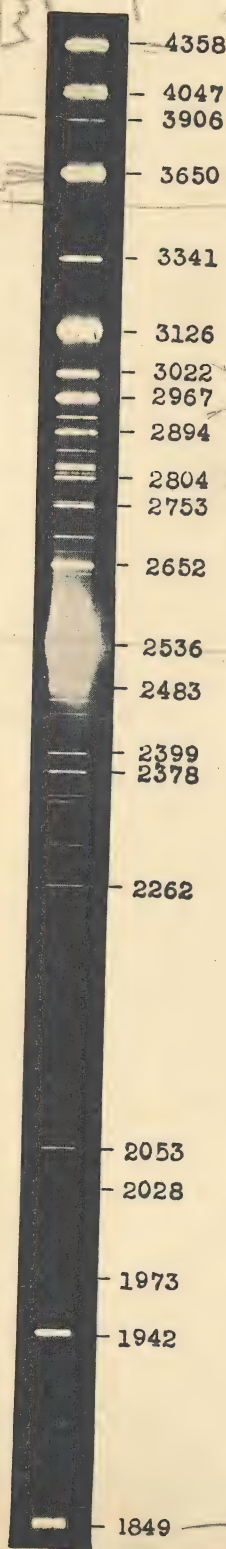


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SIR WILLIAM CROOKES

THE researches of Sir William Crookes in the fields of chemistry and physics have made his name an honored and respected one in the annals of scientific endeavor. His work on the rare earths, contributions to the discovery of X-rays and other far-reaching scientific accomplishments earned for him a knighthood in 1897, the Nobel prize in chemistry in 1907 and the coveted Order of Merit in 1910. Both Sir William and his son, Henry, were actively interested in the study of colloids for medicinal use. The perfected results of their early pioneering efforts in this direction have been made available to the medical profession during the past 25 years through Crookes Laboratories, an organization imbued with the spirit of research and accomplishment of the man whose name it proudly bears.

*Depot for Crookes Products*

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Los Angeles

Pasadena

Beverly Hills

Hollywood

California



and undiluted oil, extracted by Crookes' special process from the livers of fresh halibut caught in northern European waters. Oil from this source is normally richer in Vitamin D.

#### CONVENIENT - EASY TO TAKE

The needs of the average patient can be well met by the convenient capsules which may be readily carried in the pocket. Each capsule, which can easily be taken both by children and adults, contains 3 minims, and 1 to 2 capsules daily will be sufficient in most cases.

CROOKES HALIBUT LIVER OIL contains not less than

70,000 units Vitamin A and  
2,750 units Vitamin D per gram

It is scientifically standardized, each package bearing a label showing the complete assay of the contained oil.

**HOW SUPPLIED:** CROOKES HALIBUT LIVER OIL is supplied in round capsules, each containing 3 minims, in boxes of 50 and in 10 cc. and 30 cc. bottles with dropper.

*In cases demanding additional intake of calcium the use of HALYCALCYNE is suggested. This is supplied in boxes of 50 round gelatin capsules, each containing 2½ minims of CROOKES HALIBUT LIVER OIL and 2 grains of dicalcium phosphate.*

CROOKES VITAMIN AB<sub>1</sub>B<sub>2</sub>D capsules are available also for use where the adjunctive administration of Vitamins B<sub>1</sub> and B<sub>2</sub> is indicated. Supplied in packages containing 25 and 100 capsules.

**CROOKES LABORATORIES, INC. -- NEW YORK, N. Y.**

*Therapeutic preparations for the medical profession*



CROOKES LABORATORIES, INC.  
305 East 45th St., New York, N. Y.

*Send me literature describing the following products:*

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City.....State.....

**LOWERED RESISTANCE**



## "The Science of the New Age."

A LECTURE BY

DR. FREDERICK FINCH STRONG,

Lecturer on Electricity at Tufts Medical School,  
Boston.

This lecture is intended to prove by brilliant and spectacular experiments that,—outside of the everyday world which we see, hear and touch,—there is a far more real and wonderful realm pressing upon us on all sides; a realm which we are just beginning to recognize through scientific discovery, although all the great philosophers and religious teachers of the ages have maintained that it exists.

The era into which the world is entering bids fair to inaugurate revolutions in all fields of human thought and activity; this is already apparent in the changed attitude of eminent scientific men toward the deeper things of life, and it is not too much to say that the results of modern laboratory research have infused a note of spirituality into the hitherto materialistic realm of physical science.

Dr. Strong's object in this lecture is to show the harmony between the latest scientific deductions

to interpret life and consciousness in terms of matter and force: today we recognize matter and force as manifestations of the one Divine Life ever evolving through outer forms into new glories of creation."

\* \* \* \*

"Dr. Frederick F. Strong gave an informal lecture to the ladies of the Wintergreen Club last Tuesday evening. He chose as his subject, 'The Miracles of Modern Science,' and illustrated his remarks by many brilliant experiments. At the conclusion of the lecture Dr. Strong was tendered a vote of thanks by the Club and appreciative remarks were made by Mrs. Mary A. Livermore."

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From the Portsmouth Chronicle.

"Dr. F. F. Strong, a scientific lecturer at Tufts College, delivered an interesting lecture at the Hotel Wentworth, holding his large audience spellbound with his exhibition of the marvels of electricity. The Doctor is a pleasant speaker and has a charming manner of presenting his subject, but what is more, he understands his subject and showed a master's skill in the handling of it. His explanations were so clear and concise that a child could have understood his message from a world unseen by the natural eye. Dr. Strong illustrated the relationship between the world we live in and the unseen one from whence all mysteries spring, showing that he is not only a scientific man but one who is interested in the deeper things of life. It was a pleasure to hear a scientific man pay tribute to an unseen Deity who governs the universe, and it shows that scientific men have a reverence for the real and beautiful in life."

Psychic Inquiry Club. Nov. 16. 17. World Forces of the Future  
Century Medical Club. Jan. 17. 17. Healing forces of the Future  
Riverside Park Congregational Church. Jan. 21. 17. Science of the New Age  
Boston New Thought Club. Jan. 23. 17. World Forces of the Future  
Boston Women Business League. Feb. 13. 17. Science of the New Age  
Boston New Thought Church. Feb. 18. 17. World Forces of the Future  
" " " Feb. 25. 17. Religious Unity in the coming world race.  
Boston New Thought Church. Apr. 8. 17. The Masters.  
Psychic Inquiry Club. Boston Apr. 11. 17. Science of the New Age  
Psychic Inquiry Club Apr. 12. 17. Reincarnation  
Boston New Thought Church. Apr. 15. 17. The Spiritual side of World Forces



and the real fundamental truths of religion. Wonderful and beautiful experiments are shown illustrating the recent discoveries which have carried scientific minds out of the realm of "dead" matter into a world of ever-living, ever manifesting spirit.

Many persons of the present day, especially young men, are being driven from the church because of the apparent incompatibility of the teachings of science and religion. This lecture is an especial message to souls at this critical stage. By experiments and logical deduction it is shown that in this "New Age" science and religion will work hand in hand. The laboratory of the future will deal with forces and phenomena entirely beyond the present range of human consciousness, and the scientist will become the great ally of all true teachers and preachers of religion.

All religions are united by certain essential beliefs, namely the "Fatherhood of God,"—the "Brotherhood of man,"—the beneficence of the Divine Plan, and the evolution of the human soul. All of these truths will be recognized and taught by the "Science of the New Age."

It is a lecture compiled for thinking people, yet even young children witness with intense interest the many beautiful experiments employed in illustrating the various phases of the subject.

#### PRESS NOTICES.

*From the Boston Transcript—("Science at Greenacre").*

"On Wednesday evening Dr. Frederick Finch Strong, lecturer on electricity at Tufts Medical School, delivered the first of his series of lectures on 'Vibration.' The subject for Wednesday evening was 'Force and Matter in the Unseen.' The speaker called attention to the fact that science has studied sixty octaves of vibrations of which only about fourteen produce any impression on the human consciousness,—ten octaves as sound, three as heat and one as light. The purpose of the first lecture was to prove by experiment the existence of the inaudible, invisible waves beyond the sound waves and below the light waves. For this purpose an electrical high-frequency apparatus was used which is said to be the largest ever shown on the lecture platform outside of New York City. It produces a marvelous discharge resembling a branching tree of electrical flame nearly four feet in height. Dr. Strong took this current through his body without injury, explaining the harmless character of the apparently formidable current by the fact of its great frequency of alternation, it being a rapid electrical vibration rather than a true current."

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New Hope Church. Apr. 8. 17. The Masters.  
Engineers Club. Boston. Apr. 11. 17. Science of the New Age  
Psychic Inquiry Club. Apr. 12. 17. Reincarnation  
Mrs. Eliot Mainer (sic) Lecture  
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" " " Apr. 2. 17. Reincarnation.  
" " " Nov. 1. 17. The Spiritual Side of World War.





### Boston Lodge, Theosophical Society

295 HUNTINGTON AVENUE

Room 212

BOSTON, MASS.

#### Public Lodge Meetings

To be held on Wednesday Evenings  
from eight to nine o'clock

#### Meeting for Members only

Wednesdays from 7.15 to 7.45

MRS. BESSIE JEWETT, President

Tel. Dor. 2692-W

MISS GRACE BROWN, Secretary

23 Hollis St., Newton, Mass.

MRS. MARY PORTER, Treasurer

8 Cumberland St., Boston, Mass.

Lending Library and Reading Room open to the public



### ANNOUNCEMENT OF

## FREE THEOSOPHICAL ACTIVITIES IN BOSTON

AT THEOSOPHICAL HEADQUARTERS  
GAINSBORO BUILDING  
295 HUNTINGTON AVENUE ROOM 212  
OPP. NEW ENG. CONS. OF MUSIC  
BOSTON, MASS.

1916-1917

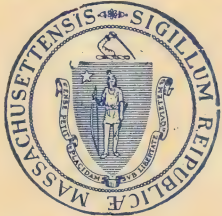
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COUNCIL FOR  
THEOSOPHIC PROPAGANDA  
MRS. GRACE LORD PORTER  
SECRETARY  
8 CUMBERLAND ST., BOSTON  
TEL. B.B. 2711-W

### Daughters of Massachusetts

Thursday Afternoon

March eight

Nineteen seventeen.



Hotel Brunswick

Boston

Three o'clock

Lillian Whiting, Speaker

Theme: "Happiness as a Creative Power"

Elizabeth Martina Taber, Entertainer

- |                                  |               |
|----------------------------------|---------------|
| (a) "Judith's Garden"            | Stone Bassett |
| (b) "In the Children's Hospital" | Will Kenyon   |
| (c) "1492"                       |               |

Dr. Charles Fleischer: An "Original" Aspiration

Brief Routine Business

Bring Patriotic Knitting

Informal Reception and Tea

Admit One

## DAUGHTERS OF MASSACHUSETTS HOLD RECEPTION

Entertain Informally at Hotel  
Brunswick—John Barrett to  
Address Members of Women's  
City Club Tomorrow Evening  
—Roswell R. Robinson Cele-  
brates 82d Birthday.

### PERSONAL AND SOCIAL NEWS OF GREATER BOSTON

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R. Prescott and Miss D. G. Moseley  
were the pourers at the tea. Mrs.  
Austin C. Wellington presided at the  
entertainment. The reception was the  
most successful yet held by the  
Daughters of Massachusetts.

*ton Herald. Nov. 9, 1917*



|                                                |                                                             |                                                              |                        |
|------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|------------------------|
| Sept. 20—Social                                |                                                             | Jan. 31—Avataras                                             | Miss H. C. Whittredge  |
| Sept. 27—Birth and Growth of the T. S.         | Mr. A. I. Campbell                                          | Feb. 7—Yoga                                                  |                        |
| Oct. 4—Objects of the T. S.                    | Mr. Raymond Goudey                                          | Feb. 14—                                                     | Mrs. Josephine Kilduff |
| Oct. 11—Mr. L. W. Rogers, National Lecturer    |                                                             | Feb. 21—Healing                                              | Mrs. Grace Porter      |
| Oct. 18—Socialism in the Light of Theosophy    | Mrs. E. D. T. Sarabia                                       | Feb. 28—The Astral Plane                                     | Mr. Chester Green      |
| Oct. 25—The Teachings of Pythagoras            | Mr. Henry Talbot                                            | March 7—The Monad, the Ego and the Personality               | Miss Selma Fritz       |
| Nov. 1—Thought Power                           |                                                             | March 14—Theosophy in Everyday Life                          | Dr. Frederick Strong   |
| Nov. 8—                                        | Mrs. L. K. Hastings                                         | March 21—The Masters                                         | Dr. Chas. Rosenthal    |
| Nov. 15—How We Remember Past Lives             | Miss Mildred Bent                                           | March 28—"Character Building Through Music"                  | Mrs. Natalie Woodward  |
| Nov. 22—Baha' o' llah, The Persian Mystic      | Dr. Frederick Strong                                        | April 4—Permanent Atoms                                      | Mrs. Mary Porter       |
| Nov. 29—Meditation                             |                                                             | April 11—The Teachings of Baha' o' llah and H. P. B. are One | Mr. Albert Randall     |
| Dec. 6—The Coming of The World Teacher         | Mrs. Mary Porter                                            | April 18—Practical Mysticism                                 | Mr. Carl Knauff        |
| Dec. 13—The Hidden Side of Things              | Miss Eva Blytt<br>(General Secretary, Norway Section T. S.) | April 25—Group Souls                                         | Miss Grace Brown       |
| Dec. 20—Theosophic Art                         | Mrs. Joseph Leland                                          | May 2—Unitarianism and Theosophy                             | Mrs. Ebba Tellstrom    |
| Dec. 27—Art as a Factor in Human Evolution     | Mr. Carl Knauff                                             | May 9—Our Duty to our Younger Brothers                       | Mrs. E. D. T. Sarabia  |
| Jan. 3—Spiritual Centres in California         | Mrs. Roland Gray                                            | May 16—Glimpses of the Sixth Root Race                       |                        |
| Jan. 10—Scientific Corroborations of Theosophy | Mr. G. W. Presby                                            | May 23—                                                      | Mr. A. I. Campbell     |
| Jan. 17—Devas of the Elements                  | Miss Grace Brown                                            | May 30—Annual Meeting                                        |                        |
| Jan. 24—Bahai Points of Contact with Theosophy | Prof. E. C. Getsinger                                       |                                                              |                        |



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OF

## FREE THEOSOPHICAL ACTIVITIES IN BOSTON

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GAINSBORO BUILDING  
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1916-1917

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MRS. GRACE LORD PORTER  
SECRETARY  
8 CUMBERLAND ST., BOSTON  
TEL. B.B. 2711-W

### Daughters of Massachusetts

Thursday Afternoon  
March eight  
Nineteen seventeen.



Hotel Brunswick  
Boston  
Three o'clock

Lillian Whiting, Speaker  
Theme: "Happiness as a Creative Power"

Elizabeth Martina Taber, Entertainer

- |                                  |               |
|----------------------------------|---------------|
| (a) "Judith's Garden"            | Stone Bassett |
| (b) "In the Children's Hospital" | Will Kenyon   |
| (c) "1492"                       |               |

Dr. Charles Fleischer: An "Original" Aspiration

|                          |                            |
|--------------------------|----------------------------|
| Brief Routine Business   | Informal Reception and Tea |
| Bring Patriotic Knitting | Admit One                  |

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Entertain Informally at Hotel  
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Address Members of Women's  
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Herald-Mob. 9. 1917



**Other Classes**

Boston  
Mondays at 3 P. M. at 295 Huntington Ave., Room 212  
Mrs. Mary Porter

Cambridge  
Second and fourth Tuesdays at 8 P. M. at 39 Amory St.  
Mrs. S. H. Hamby

Dorchester  
Thursdays at 3 P. M. at 76 Centre St.  
Mrs. L. K. Hastings

Everett  
First Friday of each month at 8 P. M. at 43 Hancock St.  
Mr. Raymond Goudey

—o—

To form a nucleus of the Universal Brotherhood of Humanity, without distinction of race, creed, sex, caste or color  
To encourage the study of comparative religion, philosophy, and science  
To investigate unexplained laws of nature and the powers latent in man

—o—

Objects of the Theosophical Society



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For Herald-Mob. 9. 1917



## LECTURES

SUNDAY EVENINGS AT HEADQUARTERS  
at eight o'clock  
(See Saturday Evening Transcript for Notices)

The meeting on the fourth Sunday evening of each month is under the auspices of the Order of The Star in the East

Post

- Oct. 1 *Mrs. Besant and the Theosophical Society*  
Oct. 8 *The Opportunities Offered by the Theosophical Society* Mrs. MARY PORTER  
Oct. 15 *Our Talents* Rev. FRANK ABRAM POWELL  
Oct. 22 *The Coming of the World Teacher* Miss EUDORA MOREY  
Oct. 29 *Indian Literature* Mr. JAMES MIDDLETON  
Nov. 5 *A Theosophist* Mr. RAYMOND GOUDEY  
Nov. 12 *Our Thoughts Seen as Mental Pictures* Miss LUELLA K. HASTINGS  
Nov. 19 *Do You Believe in Fairies?* Miss MILDRED BENT  
Nov. 26 *The Unity of Religions* Mr. A. I. CAMPBELL  
Dec. 3 *The Purpose of the War and the Triumphs of Peace* Mrs. JOSEPH LELAND

MRS. B.

MISS G.

MRS. M.

Lendir

## DIRECTORY

Of Theosophical and Allied Activities in Boston

Δ

### Alpha Lodge

Meets at Headquarters, Thursday evening at 8 o'clock.  
Miss Marguerite Boice, Secretary,  
Room 216, Kensington Bldg., Boylston St.

### Besant Lodge

Meets at 121 St. Stephen St., suite 21,  
Wednesday evenings at 8 o'clock.  
Miss Eudora Morey, Secretary.

### Boston Lodge

Meets at Headquarters, Wednesday evenings at 8 o'clock.  
Miss Grace Brown, Secretary,  
23 Hollis St., Newton.

### Huntington Lodge

Meets at Headquarters, Thursday evenings at 8 o'clock.  
Miss Florence B. Ross, Secretary,  
370 Austin St., West Newton.

### Order of the Star in the East

Meets at Headquarters, Sunday evenings at 6.30, except the 4th Sunday in the month.

### Classes for the Public

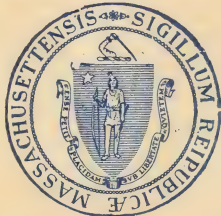
At Headquarters Monday afternoons at 3 o'clock and Friday evenings at 8.

### Free Library and Reading Room

Open Mondays, Wednesdays and Saturdays from 3 to 5 P.M.  
Informal Tea Saturdays.

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Elizabeth Martina Taber, Entertainer

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(b) "In the Children's Hospital" Will Kenyon  
(c) "1492"

Dr. Charles Fleischer: An "Original" Aspiration

Brief Routine Business

Bring Patriotic Knitting

Informal Reception and Tea

Admit One

## DAUGHTERS OF MASSACHUSETTS HOLD RECEPTION

Entertain Informally at Hotel Brunswick—John Barrett to Address Members of Women's City Club Tomorrow Evening—Roswell R. Robinson Celebrates 82d Birthday.

### PERSONAL AND SOCIAL NEWS OF GREATER BOSTON

Daughters of Massachusetts entertained at an informal reception and tea yesterday afternoon at the Hotel Brunswick. Miss Lillian Whiting spoke on "Happiness as a Creative Power"; Dr. Frederick Finch Stone of Tufts supplemented Miss Whiting's talk and Dr. Charles Fleischer read.

Elizabeth Martina Taber, Stone Bassett, Will Kenyon and Nixon Waterman were among the entertainers. Mrs. M. E. Rand Miller and Mrs. A. L. Richards presided at the coffee urn and Miss M. R. Prescott and Miss D. G. Moseley were the pourers at the table. Mrs. Austin C. Wellington presided at the table. The reception was held at the Hotel Brunswick.

for Herald - Nov. 9, 1917



# LECTURES

SUNDAY EVENINGS AT HEADQUARTERS  
at eight o'clock  
(See Saturday Evening Transcript for Notices)

The meeting on the fourth Sunday evening of each month is under the auspices of the Order of The Star in the East

- Oct. 1 Mrs. Besant and the Theosophical Society  
Oct. 8 The Opportunities Offered by the Theosophical Society Mrs. MARY PORTER  
Oct. 15 Our Talents Rev. FRANK ABRAM POWELL  
Oct. 22 The Coming of the World Teacher Miss EUDORA MOREY  
Oct. 29 Indian Literature Mr. JAMES MIDDLETON  
Nov. 5 A Theosophist Mr. RAYMOND GOUDEY  
Nov. 12 Our Thoughts Seen as Mental Pictures Miss LUELLA K. HASTINGS  
Nov. 19 Do You Believe in Fairies? Miss MILDRED BENT  
Nov. 26 The Unity of Religions Mr. A. I. CAMPBELL  
Dec. 3 The Purpose of the War and the Triumphs of Peace Mrs. JOSEPH LELAND

- Dec. 10 Formation and Growth of the Human Soul Miss GRACE BROWN  
Dec. 17 The White Lodge and its Messengers Mrs. ROLAND GRAY  
Dec. 24 The Mystical Meaning of Christmas Dr. FREDERIC STRONG  
Dec. 31 How to Live the Life Sublime Mrs. LUELLA K. HASTINGS  
Jan. 7 Subject to be announced Rev. FRANK ABRAM POWELL  
Jan. 14 Astrology the Ancient Wisdom Miss FLORENCE ROSS  
Jan. 21 Hindu Legends and What They Teach Mr. C. A. RUSSELL  
Jan. 28 The Coming of the World Teacher Dr. CHARLES ROSENTHAL  
Feb. 4 Buddhism Mr. JAMES MIDDLETON  
Feb. 11 Our Previous Lives on Earth Mr. A. I. CAMPBELL  
Feb. 18 Temperament Mr. KARL KNAUFF  
Feb. 25 The Coming of the World Teacher Dr. F. F. Strong Mrs. JOSEPH LELAND  
Mar. 4 Subject to be announced Mrs. MARY HULL  
Mar. 11 The Deva Evolution Miss GRACE BROWN

- Mar. 18 The Use of Dreams Miss ALICE M. HOPKINS  
Mar. 25 The Christ, the World Saviour Mrs. MARY PORTER Mr. CHESTER GREEN  
Apr. 1 Subject to be announced Rev. FRANK ABRAM POWELL  
Apr. 8 Something of Our Invisible Friends and the Work They do Dr. GEORGE PORTER  
Apr. 15 Rosicrucianism Mr. JOSEPH GOODSPEED  
Apr. 22 The Meaning of Mastership and its Attainment Mrs. LUELLA K. HASTINGS  
Apr. 29 The Art of the Future (Stereopticon) Mr. KARL KNAUFF  
May 6 India Miss HATTIE WHITTREDGE Mr. CHESTER GREEN  
May 13 Subject to be announced Dr. FREDERIC STRONG  
May 20 Brotherhood Mrs. BESSIE JEWETT  
May 27 The Coming of the World Teacher Mr. C. A. RUSSELL

## DAUGHTERS OF MASSACHUSETTS HOLD RECEPTION

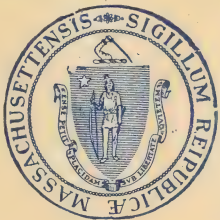
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## Daughters of Massachusetts



Hotel Brunswick  
Boston  
Three o'clock

Lillian Whiting, Speaker

Theme: "Happiness as a Creative Power"

Elizabeth Martina Taber, Entertainer

- (a) "Judith's Garden" Stone Bassett  
(b) "In the Children's Hospital" Will Kenyon  
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Dr. Charles Fleischer: An "Original" Aspiration

Brief Routine Business Informal Reception and Tea  
Bring Patriotic Knitting Admit One

for Herald - Feb. 9, 1917



## Electricity and Life

The Construction of High-Frequency Apparatus for Medical and Lecture Use.

By FREDERICK FINCH STRONG, M. D.

Lecturer on Electro-therapeutics, Tufts Medical School, Boston

(Second Article)

IN the March number of THE ELECTRICAL EXPERIMENTER the author pointed out that high-frequency currents, when properly tuned, acted as "Vital Boosters," increasing all the functions of the body and helping it to resist and

The author has interviewed a number of the more prominent authorities on medical electricity and they agree as to the vitalizing effects resulting from daily high frequency treatment.

Anyone who possesses a  $\frac{1}{4}$  or  $\frac{1}{2}$  K.W. wireless transformer, operating on 110 volt, 60 cycle A.C., can easily construct an efficient high-frequency outfit for medical or lecture use. The complete equipment includes a .01 microfarad glass plate condenser, Tesla coil, inductance, spark gap and electrodes.

The Tesla coil is made as follows: (Fig. 3) On a paper mailing tube  $2\frac{1}{2}$ " diam. and 14" long wind 480 turns of No. 34 D.C.C. copper magnet wire. Set up the tube in the lathe, apply a coat of orange shellac, spin on the wire, apply a second coat of shellac and allow to dry thoroly. The winding occupies twelve inches, leaving a margin of one inch on each end of the tube. Leads of light auto (ignition) cable are soldered to the ends of the winding. A strip of waxed, corrugated paper M, 5" wide is wrapt around the center of the secondary tube and on this is wound the primary, consisting of four turns of heavy high tension auto cable, and thoroly secured by tape; at least a foot of cable should project from each end of the winding to form the primary leads. Place the coil in a wax tight box made without nails and embed it in a mixture of four parts rosin and one part beeswax. It is safer to boil the coil for an hour in the insulating mixture before placing it in the box. Coils made in this way by the writer are still giving good service after fifteen years of use.

The greatest source of trouble in a medical high-frequency outfit is the spark gap; the one described below is the outcome of many years experiment. If properly

made it will run daily for months without deterioration. The spark takes place between two pieces of brass rod  $1\frac{1}{4}$ " diam. and  $3\frac{3}{4}$ " long, turned and tapt as shown. The sparking surfaces are turned in annular grooves with a 60 degree tool. If



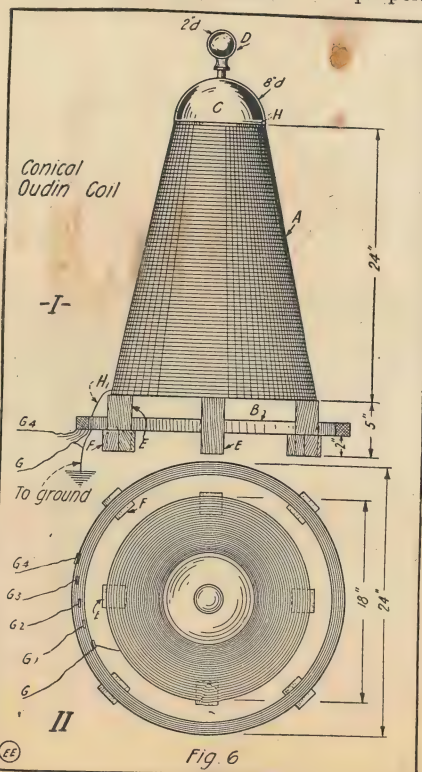
Fig. 2. Another View of the Strong High Frequency Coil Producing a Perfect Sheet of Flaming Sparks to a Grounded Conductor. The Exciting Energy is but 1 Kilowatt.

Fig. 1. View of the Strong Conical Oudin High Frequency Coil Delivering a Veritable Tree of Sparks Several Feet in Length.

throw off disease. This vitalizing effect is not due to the mere liberation of heat in the tissues, for it is produced by the very high-voltage ("Tesla") currents as well as by the heavy amperage ("D'Arsonval") currents from which the thermic effects are usually obtained.

When the writer demonstrated the first therapeutic Tesla Coil and the first Vacuum Electrode—in 1896 before a Boston Medical Society—and suggested that this method was destined to come into general use as a vitalizing agent, he was laughed at by his colleagues; yet to-day there is scarcely a well equipped physician's office in this country or in Europe that does not contain some form of therapeutic high-frequency apparatus. Even the barber-shops of the present time have their small "Violet Ray" outfits; and these are not by any means "fakes" for they produce real results, such as the relief of headache, neuralgia, skin diseases, et cetera.

Unlike other forms of electricity, these currents may be administered to patients with perfect safety. In twenty years' experience in electro-therapeutics the author has never known of harmful results from the use of Tesla Currents applied thru a vacuum electrode. The heavy amperage ("D'Arsonval") currents, owing to their deep thermic effects, should be used only under the direction of a physician. The writer is a firm believer in the use of Tesla currents in the home—if each member of the family could receive ten-minute daily treatments from a small high-frequency apparatus, the general standard of health would be greatly increased. This has been demonstrated in hundreds of cases.



Details Are Given in This Article for Constructing a Reliable and Powerful Oudin or Tesla High Frequency Coil, Suitable for Physicians' Use. This Type of Coil is the Most Efficient Ever Designed.

your lathe has an automatic cross-feed you may set it to twenty turns to the inch, and turn a spiral groove instead of the annular rings. After finishing, the brass pieces are heavily silver plated and mounted in the usual manner as shown. (Fig. 4.) For currents over  $\frac{1}{4}$  K.W., a plate of silver should be soldered to the brass before turning the grooves. This gap will also give greater efficiency in wireless work as compared with the usual stationary gap.

The connections for the various parts of the apparatus are shown in Fig. 5. An important feature is the use of an external inductance or tuning coil "d" in series with the Tesla coil. It consists of 32 turns of No. 8 bare copper wire, wound on a frame 8" diam., with  $\frac{1}{4}$ " between turns. Edge-wise wound flat copper strip is better but more expensive. (d Fig. 8.) This coil when used in series with the Tesla primary enables us to tune the oscillating system in perfect resonance when the capacity of the patient's body is added to the Tesla terminal. Effects are produced which are impossible with any other method. The beautiful High-frequency Effluve or brush-discharge, so valuable in treating pulmonary diseases, and which so few modern high-frequency machines can produce, is obtainable by the use of this series inductance. It may also be used, by short-circuiting the Tesla primary, as an auto-transformer from which may be derived heavy "D'Arsonval" and "Diathermic" currents as described in the next article of this series.

For stage demonstration and public lecture work the writer employs a large high-frequency resonator which produces a tree-

Continued on page 59)



## ELECTRICITY AND LIFE.

(Continued from page 798)

Some years ago the great Swedish scientist, Arrhenius, was reported to have subjected one-half of a class of school children to the action of high-frequency currents, one hour daily for several months, at the end of which time there was marked increase in the average growth, weight, general health and mental ability in the electrified pupils as compared with those not so treated. At the present time high-frequency currents are actually being used in truck-gardens to promote the growth and increase the size of vegetables for table use.

The high-frequency currents, in short, act as *vitality boosters*—no other form of electricity will do this. *Galvanism, Faradism, Static* electricity are all valuable agents in the hands of the Electro-therapeutic specialist, but they have little direct action in promoting cell vitality and growth, as do the high-frequency currents when properly applied.

Authorities explain the action of high-frequency currents in various ways, the favorite theory being that the healing effect is due solely to the liberation of heat in the tissues. It is perfectly true that in many diseases the heat liberated in the body by the passage of from 400 to 2,500 milliamperes at a frequency of about one million cycles is an important agent in promoting an artificial inflammatory reaction and increasing circulation. The heat is, however, only one of the *secondary* forces generated by the current; there are many other factors in the vitalizing effect. The thermic theory will, for example, not explain the increased growth of plants produced by the action of high-frequency currents of very high voltage and low amperage. In medical practise often the most marked results are obtained by the use of Tesla currents of low intensity, but of exceedingly high potentiality. The author can account for these effects only on the theory that these currents, when of proper frequency, are *synchronous with the normal rate of sympathetic nerve vibration*, and in this way increase the flow of the mysterious *Pranic* force thru which function and tissue growth are maintained.

High-frequency currents are now extensively used by the medical profession to increase cell growth, metabolism and functional activity. They tend to normalize the blood pressure and are the only agents that are of real curative value in certain stages of Arterio-sclerosis (hardening of the arteries). They greatly augment the defensive powers of the organism, enabling it to resist and overcome disease-producing agencies. The prejudice against high-frequency currents on the part of many physicians may be attributed to the fact that they do not employ proper technique or that they use an apparatus which does not admit of proper variation of frequency, amperage and voltage, in order to suit the requirements of the individual case.

In the next article the author will describe the details of construction of an apparatus suitable for the generation of high-frequency currents for therapeutic use and the technique for their application.

## THE TREATMENT OF DISEASE WITH HIGH-FREQUENCY CURRENTS

By Frederick Finch Strong, M. D. [Formerly Lecturer on Electro-therapeutics at Tufts Medical School, Boston, Mass.]

This little brochure has been prepared with the object of answering the many queries received from time to time, as to the theory and rationale of the system for treating disease by tuned High-frequency currents, which I originated some sixteen years ago, and toward the perfection of which I am still working.

Altho entirely unknown at the time when first introduced in my Boston practice, High-frequency treatments are now given in all the larger cities of this country and Europe, and are familiar to both physicians and laity.

Manufacturers have not been slow to recognize the possibilities of High-frequency apparatus for physician's use, and many varieties of machines are now on the market. Some of these are therapeutically quite efficient but the majority of them are little more than expensive toys. Most of them are based upon the principles involved in my early machines, the data for which appeared in the New York Medical Record. Others are of the European, ("D'Arsonval"), type, and produce their results in an entirely different manner. My own method—generally known as "the American High-frequency system,"—employs the principle discovered by Tesla in 1890 for the production of rapid electrical oscillations. Both systems are fully described in my books, ("Modern Electro-therapeutics," 1907; and "High-frequency Currents," 1908; published by Rehm Co., N. Y. and London), to which I would refer those who desire detailed information. I am writing at present for those who desire a concise, non-technical elucidation of the subject.

The questions most frequently asked are—"What are these High-frequency currents that you talk about?"; "How do they cure disease?"; "In what class of maladies are they of use?" I will endeavor to answer these questions briefly and in order.

The High-frequency currents as I employ them are technically known as "Tesla currents," or "Alternating currents of high frequency and very high potential". Practically they consist of very rapid, electrically-generated vibrations; which move easily thro almost all forms of matter, including the tissues of the human body, and even electrical non-conductors, such as glass, etc. As I produce them these vibrations are impelled by a potential of about

*Palmetto 1911*



three hundred thousand volts; a true current at this voltage, if of low frequency, would be fatal if passed thro the body, but, at the high-frequency mentioned above it produces a pleasing sense of warmth and well-being. My machines are operated by the ordinary 60 cycle 110 volt alternating electric light current; this passes thro a "step-up" transformer which raises it to 20,000 volts; the latter current charges the condenser formed of many alternate sheets of glass and tin-foil; this in turn discharges across a small air gap between silver discs, which has the effect of increasing the frequency to about half a million per second; this passes through the "Tesla transformer," and is again raised to about three hundred thousand volts in which form it is employed in treating the patient. The discharge from the terminals may be likened to that from two rapid-fire guns; passing into the body these rapid impulses bombard the nerves, cells, and even the molecules, causing them to vibrate in unison with the high-frequency and producing a general cell massage.

Any high-frequency machine will produce this effect and increase vitality to some degree; my machines, however, are constructed to give a vibration of definite frequency, so as to artificially produce, or, at least, reinforce the peculiar form of energy, (often vaguely called "vital force"), which constantly flows to all parts of the healthy body thro the sympathetic nerves radiating from the solar plexus. Tissue growth and organic function are dependent upon the maintenance of this flux.

The sympathetic nervous system is a marvelous network of nerves, and their center—the "solar plexus"—is the great vital dynamo of the body. A blow on the solar plexus interrupts the vital currents, and heart, lungs, and even consciousness cease to function until the "dynamo" resumes its work; its current maintains, also, the thousands of little vein-pumps which return the blood to the heart from the remote capillaries of the body; this mechanism is called the "Vaso-motor system" and nine-tenths of all chronic diseases owe their origin to impairment of its function. When the vital "dynamo" is working at less than its normal rate the vein-pumps do not act perfectly and the patient suffers from so-called "Nervous exhaustion," "Neurasthenia," or "Chronic anaemia," the symptoms being—cold and numbness of the extremities, short breath, frequent headaches, weakness, dyspepsia, and pallor.

The impaired digestion and assimilation in these cases causes a so-called "vicious circle" to be formed, as the only way the nerves can be restored is thro digested food and the latter cannot be absorbed without the action of the sympathetic centers. These patients, therefore, usually become more and more debilitated, and secondary diseases result, such as rheumatism, Bright's disease, (the interstitial form), hardened arteries, (arterio-sclerosis), and chronic general catarrh, pulmonary, nasal and gastro-intestinal). The lowered vitality makes the body a ready prey for infec-

tious germs and all sorts of bacterial diseases result.

In testing out my theory, I made a machine which would give electrical vibrations varying in frequency from ten thousand to one million per second, with which I treated several hundred patients in the Nervous Clinic of the Boston Dispensary. The various frequencies produced markedly different effects; currents below 100,000 and over 1,000,000 produced but little effect on the general functions, but a current averaging 500,000 per second applied to a case of "nervous exhaustion," or vital depletion, produced a decided and almost instantaneous result in re-establishing circulation and increasing organic activity: the small, thready pulse becoming full and soft; the cold extremities becoming warm, and numbness (when present), disappearing, and digestion and assimilation being re-established.

It should be distinctly understood that this effect is not produced by STIMULATION, but by actual VITALIZATION, a certain amount of potential vital energy being stored up in the nerve centers and given off as required; this is ordinarily used up during the twenty-four hours following the treatment, and to obtain permanent curative results, short daily treatments should be given for a considerable time, (varying, of course, with the severity of the case, and its degree of chronicity). These currents almost invariably cure, or greatly benefit cases due to nervous exhaustion and impaired vitality when the treatments are continued over a sufficient period.

From the above brief explanation, it will be seen that physiologically tuned High-frequency currents will naturally produce beneficial results in almost all chronic or nutritional diseases not dependent upon serious organic lesions.

These currents are also of great value in the relief of local pain, both of the congestive and neuralgic type; for this purpose they are applied by means of glass "Vacuum electrodes," from which all but a mere trace of air has been withdrawn. I devised this instrument in 1897, and used it exclusively for three years. It is now in general use in all parts of the world, and, I regret to say, that many utterly worthless machines are sold as "Violet ray apparatus" merely because they cause the illumination of vacuum electrodes. It should be emphatically stated that this light is purely an adventitious phenomenon, and has no real relation with the therapeutic effect, which is due to the rate and intensity of the transmitted vibrations.

No attempt will be made in the present brief article to enumerate in detail the different diseases which have been successfully treated by this system; suffice it to say, that it is the nearest approach—in fact, the ONLY approach to anything resembling or counterfeiting the "vital force" of the body—that has ever been introduced into the practice of medicine. As to its general applicability I may merely add that after using for years the most efficient apparatus for producing and applying Static, Galvanic, Farad-

that they use an apparatus which does not admit of proper variation of frequency, amperage and voltage, in order to suit the requirements of the individual case.

In the next article the author will describe the details of construction of an apparatus suitable for the generation of high-frequency currents for therapeutic use and the technique for their application.



ic, Sinusoidal and other forms of electricity, in my Boston practice, I finally eliminated everything except the physiologically tuned High-frequency currents, experience in the treatment of hundreds of cases having convinced me that practically all that electricity in other forms could accomplish, could be duplicated by the High-frequency, while many other most valuable effects could be produced solely by the latter agency. Since that time, I have confined my practice almost entirely to the use of tuned High-frequency currents. So far as I know, I am the only "High-Frequency specialist" in this country; there are a number abroad, but they do not employ the tuned system.

Many of my colleagues call me a "man of one idea"; I may reply that I would rather tie up to one really Big Idea and work it to its limit, than to scatter my energies in the attempt to keep track of the hundreds of therapeutic fads which are extolled in the Medical Journals of one month and condemned in the next.

The High-frequency currents produce many wonderful physical phenomena which appear contrary to accepted laws; for example, a patient connected to one terminal of the apparatus becomes a radiating centre: vacuum tubes are illuminated brilliantly if brought within six feet of the patient's body and incandescent lamps may be lit if brought into contact with the patient. Sparks capable of igniting wood and cotton may be drawn from the patient even when a plate of glass is interposed, and many more wonderful and spectacular effects may be produced.

It is difficult to overestimate the curative possibilities of these currents when the system becomes fully perfected. Even in its present crude state I believe it to be the most generally efficient single agent for the prevention and cure of disease that has ever been given to the medical profession.

#### The Home Treatment of Tuberculosis.

This is one of the special fields in which the high-frequency currents have already given promise of great things.

In 1906, I originated a treatment for consumption in which the patient is submitted to the simultaneous action of tuned High-frequency currents, Nebulized essential oils (electrified and ozonized), diffused X rays, and bipolar diathermic treatment with vacuum electrodes. All of these agents had previously been used separately by physicians of prominence, and for each method many cures had been reported. Dr. F. D. Gibson, of Colorado Springs, has successfully treated hundreds of cases of consumption with the X rays. Dr. Chisholm Williams and Dr. Thielle, of Paris, have each reported a large number of cases treated with high-frequency currents, both exhibiting a high percentage of cures. Ozonized Nebulae are now used by almost every eminent Lung specialist, and are regarded as a valuable addition to their armamentarium.

The combination—or more correctly—the simultaneous exhibition of all the above agents gives us what is perhaps the most efficient means yet devised for the treatment and cure of pulmonary tuberculosis. I have quite recently perfected an apparatus for

this purpose, in a portable form, for home use. There is no possible danger in its use, and treatments may be administered at the bedside if desired by a relative or attendant of the patient.

Physicians and others interested in the treatment of tuberculosis are invited to call at my offices in Palmetto, and see this apparatus in operation.

To get the best results with this method, treatments should be given at least three times a day, each seance being followed by an hour's absolute rest. For this reason it is practically impossible to use this treatment in the office except in mild cases and early stages of the disease. The machines for home use operate from the ordinary alternating electric light current and may be attached to any lamp socket. While cases should always be treated under medical supervision, it is not necessary for the physician to be present in person when the treatments are given.

The same apparatus in a somewhat simpler form has given excellent results in the home treatment of arterio-sclerosis, chronic rheumatism and in the earlier stages of locomotor ataxia and progressive paralysis.

Palmetto News Print

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## Electricity and Life

The Uses of High-Frequency Currents in Medical and Lecture Work

By FREDERICK FINCH STRONG, M. D.

Lecturer on Electro-therapeutics, Tufts Medical School, Boston

(Third Article)

THE phenomena of high-frequency currents offer us a fascinating field from which to select experiments for public lecture demonstration. In his lectures on "The Realms Beyond the Senses," the author has used high-frequency

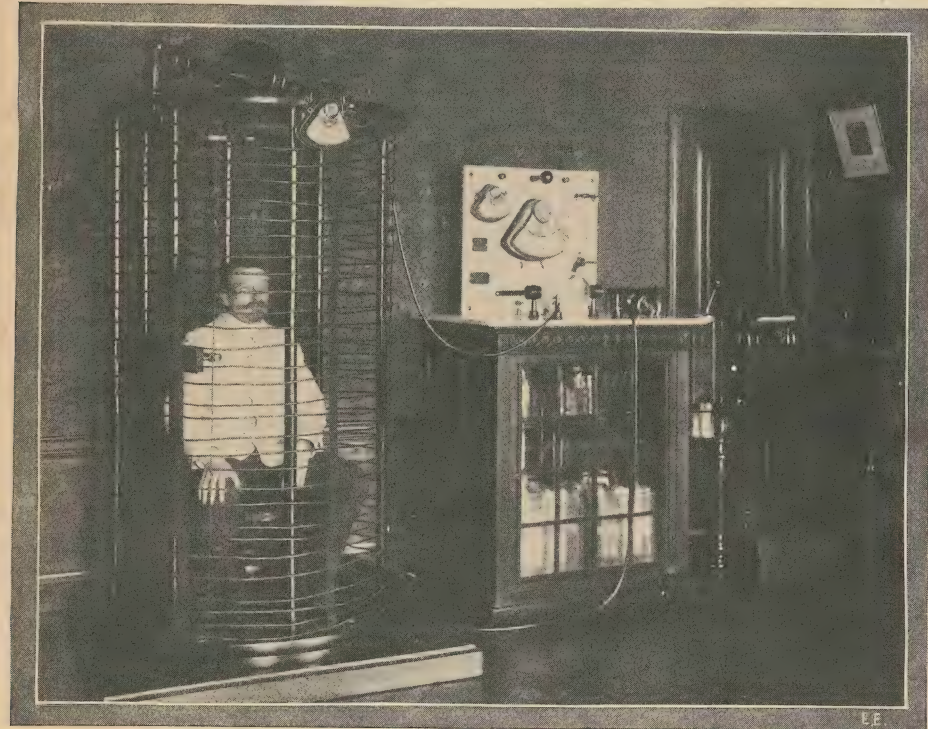
ductance coil being adjusted to balance the different capacities added to the resonator terminal.

This little resonator is made by winding 600 turns of No. 30 triple cotton covered wire upon a shellacked paper cone, 12 inches in diameter at the bottom, 5 inches

at the top, and 14 inches high. It is a difficult matter to insulate this small coil as the turns of the winding are very close together; it can be done, however, by the use of from six to eight coats of *Armialac*. The primary coil is a ring, 18 inches in diameter, formed of five concentric turns of thin copper ribbon 1 inch wide. The exciting apparatus is the same as that described in the last paper in connection with the large resonator, except that a  $\frac{1}{2}$  K.W. transformer is used instead of the heavy 1 K.W. (See Fig. 2.)

The writer also employs a standard Clapp-Eastham  $\frac{1}{4}$  K.W. Tesla coil excited by the same apparatus (see Fig. 3). Connected with two parallel upright wires the spark from this coil will run up and repeatedly reform again at the bottom, producing a very spectacular effect (Fig. 4).

Another brilliant experiment can be performed with two large glass flasks (ordinary carafes or water-bottles will do). One is filled with water containing a few drops of *fluorescein* solution (a coal tar dye)—the other with water to which a small amount of *bi-sulfate of quinine* has been added; the bottles or flasks are placed about six inches apart and a wire from the Tesla coil terminal inserted into the solution in each. The current passes down thru the water and the arc takes place between the glass walls of the two flasks. The ultra-violet rays from the discharge cause the water in the flasks to become luminous—the quinine solution with a pale blue light, the fluorescein with a beautiful apple-green. The discharge apparently passes directly thru the glass walls of the flask; in reality, of course, the current passes by *induction* rather than *conduction*, the flasks acting as condensers in series. (See Fig. 5.)



Hardening of the Arteries—Most Dreaded of Ailments in Later Life—Is Successfully Treated By Placing the Patient Within a Wire Cage, Thru Which High-frequency Currents Surge at a Frequency of 600,000 Cycles Per Second: D'Arsonval's Method.

quency phenomena to demonstrate the existence of force and matter beyond the range of human perception. In "The Science of the New Age," he has employed similar means in calling attention to the fact that the investigators of to-day are leaving the crude matter of earth and are dealing more and more with *Etheric Force*—and with matter of a *super-gaseous* nature. The scientist of the future will have to provide himself with instruments far more delicate than anything hitherto dreamed of or else he will develop super-normal powers of perception by the manifestation of faculties already latent in the human organism.

For the traveling lecturer who wishes to employ high-frequency currents in his work, the large resonator described in the last issue of THE ELECTRICAL EXPERIMENTER may prove somewhat cumbersome and difficult of transportation. Those who wish a lighter, more compact apparatus may use the small resonator shown in Fig. 1.

It is quite small, yet it sends out streamers two feet in length, and may be operated by a  $\frac{1}{2}$  K.W. "wireless" (step-up) transformer. With this little apparatus beautiful luminous effects may be obtained—as, for example, by connecting the terminals with a tin-foil star glued to a sheet of glass; with a suspended umbrella (opened); with a long wire running out over the lecture hall, etc.

For each of these experiments different tuning will be necessary—the series in-



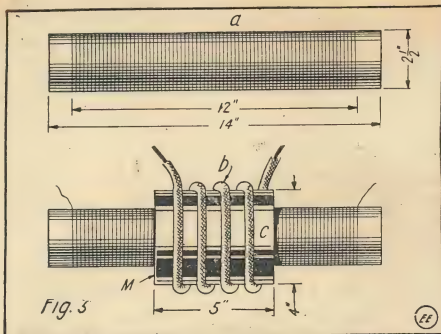
The "Effleuve" or High-frequency Brush (or Spray) Treatment Has Proven Highly Efficacious in the Treatment of Nervousness (Nerve and Brain Exhaustion)—"Neurasthenia." American Electro-therapists Find It Very Valuable.

Photos from Jacques Boyer

Jun 1917 Electrical Experimenter

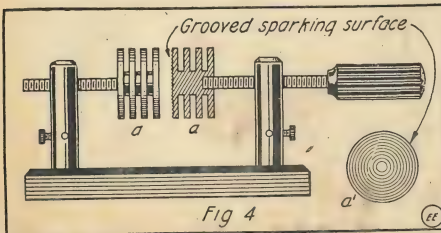


like discharge three feet in diameter (Fig. 1), and gives a heavy arc over two feet in



How Small Size Tesla Coil for Medical Treatment Is Built; "b" Is the Primary; "a" the Secondary.

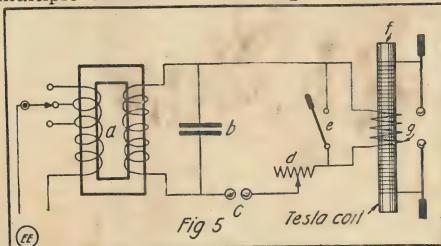
length. (Fig. 2.) This shows remarkable efficiency when it is considered that the resonator is excited by a "Type E" transformer drawing only 1 K.W. and a con-



Unique Stationary Spark Gap Having Grooved Faces, as Devised by Dr. Strong.

denser of but .01 m.f. capacity. A small rotary spark gap is used such as is supplied by the E. I. Co. This result is made possible by the use of the separate inductance in series with the resonator primary (exactly the same as that described in connection with the therapeutic apparatus) (d Fig. 8). The writer believes his resonator gives the most spectacular discharge ever obtained from 1 kilowatt of energy.

Ordinary plate condensers are used, made from 8 x 10 inch negative glass, coated on both sides with tin-foil 6 x 8 inches (a Fig. 7). Six pairs of plates assembled into a unit and boiled in wax give a capacity of .01 m.f. For safety it is better to employ four of these sections connected in pairs of .02 m.f. each (b Fig. 7). To run this resonator at full power for long periods of time it would be safer to use a series multiple condenser consisting of three sec-



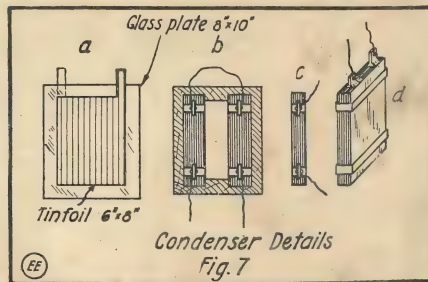
Connection Scheme for Tesla Coil "f-g," Shorting Switch "e," Tuning Inductance "d," Spark Gap "c," Condenser "b" and Step-up Exciting Transformer "a."

tions of .03 m.f. each in series. Such a condenser would contain 108—8 x 10 inch plates, and would be expensive, bulky and very heavy. For this reason the writer has found it much more convenient to use a single 12 plat. (.01 m.f.) condenser across the transformer secondary and to replace it when it punctures. The large resonator was operated for six months in lecture and experimental work before a condenser section broke down.

The cone for the secondary of the large resonator is of heavy paperboard and was built for the author by Bicknell and Fuller of Boston. Its dimensions (see Fig. 6) were suggested by Mr. Earle L. Ovington, the cone being similar in shape to those used by Mr. Ovington in the New York Electrical show several years ago. Any amateur can make a cone of this kind by superimposing strips of heavy paper, soaked

in paste, over a wooden framework. The secondary winding consists of 400 turns of No. 27 D.C.C. copper magnet wire. Two parallel strands of wire are wound onto the cone, the adjacent turns in contact; after winding, one strand of wire is removed, leaving a space equal to the diameter of the wire between each of the 400 turns. The cone and winding is then treated with several coats of "Armialac" (ordinary shellac will not answer).

The primary consists of five turns of thin copper ribbon 1 inch wide, 1/8 inch paper-board strips being placed between the turns. The diameter of the coil is 24". When completed it is taped and rotated in a pan of melted wax until thoroly impregnated. The terminal shown in the photographs is made from a large brass oil-can, the stem being removed and replaced by a 3" brass "bed-ball." The terminal is not attached to the cone but simply rests on its upper surface in contact with the end of the secondary wire. The primary and secondary are separately supported by

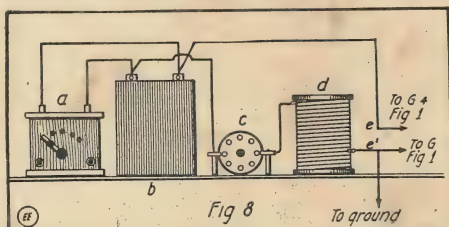


Details for Building High Tension Glass Plate Condenser to Be Connected in Tesla Coil Circuit.

quare wooden blocks; the coupling is rather loose, the bottom of the resonator being at least two inches above the primary. The lower end of the secondary coil is attached to the inner primary terminal and grounded.

Perfect resonance is obtained by varying the number of turns in the inductance coil in series with the primary. (Fig. 8.) This tuning system enables us to perform many brilliant experiments otherwise impossible, such as illuminating wires stretched across a lecture hall, lighting an inverted umbrella, etc. Some new and very spectacular experiments with this large resonator will be described and illustrated in an article in next month's "ELECTRICAL EXPERIMENTER," entitled "Methods of employing high-frequency currents in medical and lecture work."

The author is greatly indebted to Mr. O. K. Luscolm, for advice and assistance which made possible the successful construction of the large resonator.



Method of Connecting Transformer, H. T. Condenser, Rotary Spark Gap and Tuning Inductance "d" to Large Oudin Coil.



## ELECTRICITY AND LIFE.

(Continued from page 105)

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3. Perhaps the most remarkable therapeutic effect of heavy high-frequency currents is their power to liberate heat in the tissues of the body. For this purpose the so-called "D'Arsonval current" is used. This is a secondary current of high amperage derived from the heavy coil of copper strip shown in Fig. 6. The lower terminal of this coil is connected with the condenser pad on which the patient is seated; the tubular metal electrode is held in both hands and connected thru a Milli-ampere meter with the upper turns of the coil. The clip is moved to different turns as in wireless tuning, until the meter shows the highest reading for a given amount of exciting current. The patient's circuit is in this way tuned in perfect resonance with the primary oscillations. After a few moments the patient's wrists become hot, the heat rapidly extending up the arms and into the body until profuse perspiration is produced. Ordinarily we do not carry the treatment as far as this: the safe dose for an average patient being not over 700 milliamperes for twenty minutes. This is "D'Arsonval Autocondensation", and is applied with great benefit to patients suffering with *Arteriosclerosis* ("hardening of the arteries"), and in a variety of other diseased conditions involving mal-nutrition.

4. In diseases in which we wish to in-crease a regenerative inflammation, promote circulation and absorption, and increase cell activity, the method known as "Diathermie" is employed. Instead of the hand electrode and condenser-pad the D'Arsonval current is applied thru two small sheets of block-tin about 2 x 4 inches. These are applied to the skin on either side of the affected part and a current employed which gives the patient a decided sensation of penetrating heat. Average treatments use from 1000 to 1600 milliamperes. In treating consumption (pulmonary tuberculosis) one electrode is placed on the back and the other on the chest over the affected lung. One Tuberculosis Hospital in which this treatment was given daily to a number of patients reported 85 per cent of cures! The author is working on an apparatus which will make possible the use of Diathermic treatment in the homes of patients suffering from this disease.

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## SUMMER SESSION 1919

Six Weeks, June 9--July 19

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2130 Vista Del Mar Avenue, Hollywood, Los Angeles, California

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Vice-President

Dr. Frederick Finch Strong  
Acting Dean

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For further information apply to  
W. SCOTT LEWIS  
Registrar

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"Sound, Color and Form"

JUNE, 1919

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Sunday, June 22, at 3 P.M.

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National Lecturer for the Theosophical Society  
Topic: "Ultra-violet Rays and Etheric Vision"  
Illustrated with Experiments

June 6, 1919  
Lecture for Burbank I. S.

### Inventor Says Science of Tomorrow Will Be Religion's Aid.

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"It is all a matter of the rate of vibration," he declared. "Everything in this world vibrates and everything has its keynote. Just as you were able to see vibrations of this current after they were stepped down or stepped up, when otherwise they would have remained unseen by you, so are there vibrations of thoughts, of emotions and desires."

Angelus J.  
June 27, 1919



## ELECTRICITY AND LIFE.

(Continued from page 105)

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June 6, 1919  
Lecture for Burbank I. S.

Los Angeles I. S. June 27.



1. THEOSOPHY. (12 Lessons) - - - - - Marie Poutz  
Mondays and Fridays at 2:45 p. m.  
A resume of Theosophy based upon Mrs. Besant's "The Ancient Wisdom" and Mr. Leadbeater's "The Hidden Side of Things." Its purpose is to show the practical value of Theosophy as applied in daily life.
2. PSYCHOLOGY. (6 Lessons) - - - - - Mildred Kyle  
Mondays at 4:00 p. m.  
The development of the mind and the emotions. Their power and use. How to think constructively.
3. MENTAL EFFICIENCY IN SERVICE. (6 Lessons) - - - - - Alice A. Evans  
Mondays at 1:30 p. m.  
How to teach oneself to teach. Helps in lecture-building and class-leading. Tact and psychology in handling individuals. The value of definition and the capacity to think synthetically.
4. ASTROLOGY. (12 Lessons) - - - - - Marie Beal Kramer, M. D.  
Tuesdays at 11:00 a. m. and 1:30 p. m.  
This course will present the science and philosophy of Astrology; Signs, Symbols, calculations and correspondences.
5. PSYCHOTHERAPY. (6 Lessons) - - - - - Frank L. Riley, M. D.  
Mondays at 8:00 p. m.  
1. Karma and reincarnation—their relation to Psychotherapy. 2. "Know thyself." 3. Mental Diagnosis. 4. The law of Correspondence. 5. Concentration. 6. The Silence, Meditation and Prayer. 7. Treatment; special cases. 8. "The Music of the Spheres."
6. PHILOSOPHY OF EXPRESSION. (6 Lessons) - - - - - Charlotte C. Robertson  
Fridays at 7:30 p. m.  
Training of speakers. The dignity of English. Oratory and Stage Etiquette. Psychology of voice, color and sound. Psychology and eloquence of silence. Science of gesture. Occultism in Shakespeare. Philosophy of Delsarte. The Cosmic Man; the Microcosmic Man. The Mirror of the Soul; how it reflects. Physical Culture. Eurythmics.
7. MYSTIC CHRISTIANITY. (6 Lessons) - - - - - Ethel M. Patterson  
Thursdays at 2:45 p. m.  
Meaning, characteristics and value of Mysticism. God, transcendent and imminent. Mystical Christ. The Way of the Cross. Lessons from the lives of great Mystics.
8. CHRISTIAN SACRAMENTS. (6 Lessons) - - - - - Rev. Charles Hampton  
Thursdays at 1:30 p. m.  
A course under the Third Object of the Theosophical Society. A study of the occultism in the Seven Sacraments, and in the Sacramentals.

9. CHARACTER ANALYSIS. (6 Lessons) - - - - - Mrs. R. E. Emerson  
Fridays at 4:00 p. m.  
Modern methods outlined. The application of one approved method to vocational and industrial fields explained and illustrated.
10. TALKS ON THE NEW EDUCATION. (6 Lectures)  
Fridays at 1:30 p. m.  
By the teachers of the School of the Open Gate.
11. FOLK LORE, MYTH AND SYMBOL. (6 Lessons) - - - - - George Kramer  
Tuesdays at 4:00 p. m.  
This course will give the mystic interpretation and extract the truth kernel from the various myths and traditions, and explain the universal symbols in the Signs of the Zodiac.
12. THOUGHT POWER, ITS CONTROL AND CULTURE. (6 Lessons) Maude F. Galigher  
Tuesdays at 2:45 p. m.  
Intended to help the student to study his own nature, so far as its intellectual part is concerned. Practical application of the Power of Thought in daily life.
13. SCIENCE AND THEOSOPHY. (6 Lectures) - - - - - W. Scott Lewis  
Wednesdays at 1:30 p. m.  
Historical geology and evolution, correlating the latest teachings of science with Theosophy. A general history of the world, emphasizing modern proofs of the age-old occult teachings.
14. OCCULT CHEMISTRY. (6 Lectures) - - - - - Frederick Finch Strong, M. D.  
Wednesdays at 10:00 a. m.  
The structure of the Atoms of the Chemical Elements on the etheric and denser sub-levels according to the investigations of trained occultists. Fully illustrated with lantern slides and models.
15. VIBRATORY PHYSICS. (6 Lectures) - - - - - Frederick Finch Strong, M. D.  
Wednesdays at 3:00 p. m.  
The basis of modern chemistry and physics as deduced from the most recent laboratory investigations. The positive and negative electron. Ether vibrations and their use in atomic analysis. Radium and Modern Alchemy. Illustrated with lantern slides and experimental demonstrations.
16. MENTAL EFFICIENCY AND ETHERIC VISION. (6 Lessons) - - - - - Strong-Lewis  
Tuesdays at 8:15 p. m.  
Mental and telepathic exercises. Experiments and demonstrations in etheric vision. A special course, admission twenty-five cents a lesson.
17. MAN'S RELATION TO GOD. (12 Lessons) - - - - - Emily Pelton-Shutts, M. A.  
Tuesdays and Fridays at 10:00 a. m.  
A class for advanced students, based upon the first five chapters of "A STUDY IN CONSCIOUSNESS."

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## SPECIAL DEPARTMENT OF KROTONA INSTITUTE

### The Order of Field Servers

### Teachers Normal Training Class

This course is intended to provide intensive training for Lodge and Field work. During the six weeks of the Summer School material given in the Institute classes will be made the basis for training, but for five weeks (before or after the Institute) a one and one-half hour class and two to three hours daily study will be required.

### CURRICULUM

The class commencing May 19 and closing August 1 will meet Mondays and Thursdays at 9:00 a. m.  
The class commencing June 9 and closing August 22 will meet Mondays and Thursdays at 10:30 a. m.

The courses will include the following subjects:

|                                                            |               |
|------------------------------------------------------------|---------------|
| HOMILETICS                                                 | Evans         |
| PLATFORM DEPARTMENT                                        | Robertson     |
| VOICE PLACEMENT                                            | Orme          |
| PARLIAMENTARY LAW                                          | Robertson     |
| NEWSPAPER WORK                                             | Dukes-Hampton |
| EFFICIENCY                                                 | Garman        |
| PRACTICAL TRAINING IN CLASS LEADERSHIP<br>AND LECTURE WORK | Patterson     |

The tuition fee for this course is ten dollars. Only ten pupils will be taken in a class therefore registration should be made at once with the Registrar.

Students attending the Institute Courses may avail themselves of the Krotona Library Books used in the courses and theosophical reference works may be purchased, if desired, from the Theosophical Publishing House, at Krotona.

There is a Vegetarian Cafeteria in the Court for the convenience of Institute Students and the visiting public.

Attention of the students is called to the Bulletin Board in the Hall of Krotona Court for information regarding Sunday Lectures and Special Activities.

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*Los Angeles I.S. June 27, 1919*



### The Use of High-Frequency Currents in the Treatment of Disease.

High-frequency currents are employed by physicians in four principal ways, each adapted to the treatment of certain types of diseased conditions. These are:

1. "Tesla" treatment with vacuum electrodes ("Violet-ray treatment").
2. "Effeuve" or high-frequency spray.
3. "D'Arsonval auto-condensation."
4. "Diathermie."

1. The method most frequently employed applies the Tesla current thru glass (vacuum) electrodes for the relief of local pain or inflammation. The little muscular pumps around the veins—the "vaso-motor system," which keep the blood circulating by withdrawing it from the capillaries and sending it back to the heart—act more vigorously in tissues over which the vacuum electrode is applied. In this manner waste products which cause rheumatism and gout are dissolved and washed away and fresh blood and white corpuscles are brought to infected parts, thus aiding nature in destroying disease-producing germs and their poisonous products.

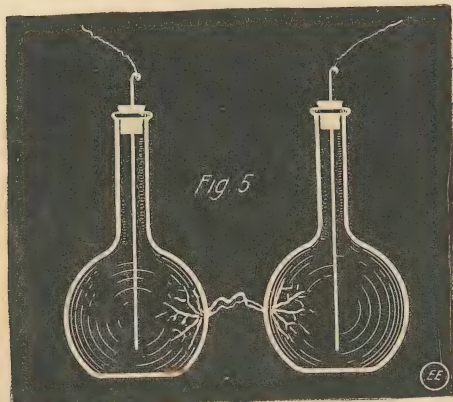
In most of the smaller high-frequency machines for physicians' use, but one Tesla terminal is provided; a coil of the resonator type being connected to the glass electrode by a flexible wire. The effects are largely local, but the method is of value in relieving pain, swelling and congestion. The writer has always advocated the bipolar method, even for treating purely local conditions. The best results will be obtained from the use of a Tesla outfit of the type described in last month's ELECTRICAL EXPERIMENTER. The patient is to be connected to one terminal of the Tesla coil by means of a metal electrode held in both hands (a piece of thin nicked pipe will answer, 1 foot long and 1½ inches in diam.). In this way the current is dif-

This method—employed by the writer for years—enables us to obtain the wonderful *vitalizing effect* of the high-frequency currents on the whole body simultaneously,

By careful tuning a beautiful effect may be obtained. Close examination of this discharge will show it to be literally an electric "brush", formed of thousands of



The Accompanying Illustrations Show Some of the Spectacular Electric Spark Discharges Obtained From the High-Frequency Apparatus Used by Dr. Strong in His Lecture and Electrotherapeutical Work. The "Ladder of Sparks" in Figs. 3 and 4, Is easily Produced, the Tesla Spark Simply Jumping the Gap Between Two Vertical Copper or Iron Wires.



Startling Experiment With Two Glass Water Bottles Connected to Tesla Coil. The Spark Jumps Between the Glass Surfaces and Illuminates Solutions Within the Bottles.

fused thru the entire body. The vacuum electrode, connected with the opposite Tesla terminal is applied to the skin over the affected part for from five to twenty minutes, a very short spark-gap being used.

with the local effects from the vacuum electrode.

For the past few years the writer has been in the habit of connecting the Tesla coil with an *Auto-condensation pad* (as used in the "D'Arsonval" and "Diathermie" methods). This is formed of two plates of Bakelite, ½-inch thick, hinged to fit the seat and back of an ordinary chair. To the back of each plate is cemented a sheet of tin or copper foil, covered with leatherette. Suitable flexible conductors connect these metal plates with each other and with the Tesla terminal. This folding pad may be used in both "Tesla" and "D'Arsonval" treatment, and is quite as efficient for ordinary use as the cumbersome and expensive condenser chair or couch.

2. For the "Tesla Effeuve" treatment a brass bell electrode is used. This can be made from a common brass oil can, the flat bottom being removed and the resulting hollow hemisphere being mounted on an insulating handle; the discharge occurring from the sharp edge of the brass. The patient is seated on the Bakelite pad, which is connected to the Tesla coil. The opposite terminal is attached to the brass bell electrode and a sufficient number of turns of the inductance coil are placed in series with the Tesla primary to give a full, smooth "effeuve" or purple brush discharge, when the electrode is held from four to eight inches from the patient.

distinct, delicate, purple threads. Upon each of these hair-like paths of light countless millions of *ions* (electrically-active atoms), are being shot from the electrode to the patient at a speed of over 60,000 miles per second; the treated surface is therefore being submitted to a literal bombardment by countless microscopic projectiles which are thrown out in periodic showers from the electrode, once for each cycle of the oscillating current. Two effects are produced—one due to the penetration of the tissues by *ozone-forming ions*; the second to the rhythmic or *periodic impact* of the discharge upon the nerve endings in the skin and superficial tissues. The writer hopes ultimately to produce an apparatus of a frequency *exactly synchronous with the rate of vibration of the sensory nerves*; an "effeuve" from such a coil would produce a harmless and efficient local anaesthesia so that operations could be performed without the use of ether or cocaine. The effects obtained from the "effeuve" as now used are stimulating and vitalizing to a marked degree. The nerve endings of the skin may be regarded as sensitive antennae of a complicated radio-system, and any intense sustained vibration to which the apparatus is attuned will be transmitted by them to the receiving station. The effect therefore, is not merely superficial but systemic as well. Tuber-

(Continued on page 152)



## ELECTRICITY AND LIFE.

(Continued from page 105)

culosis and other pulmonary troubles often yield to the "effluve" treatment.

3. Perhaps the most remarkable therapeutic effect of heavy high-frequency currents is their power to liberate heat in the tissues of the body. For this purpose the so-called "D'Arsonval current" is used. This is a secondary current of high amperage derived from the heavy coil of copper strip shown in Fig. 6. The lower terminal of this coil is connected with the condenser pad on which the patient is seated; the tubular metal electrode is held in both hands and connected thru a Milli-ampere-meter with the upper turns of the coil. The clip is moved to different turns as in wireless tuning, until the meter shows the highest reading for a given amount of exciting current. The patient's circuit is in this way tuned in perfect resonance with the primary oscillations. After a few moments the patient's wrists become hot, the heat rapidly extending up the arms and into the body until profuse perspiration is produced. Ordinarily we do not carry the treatment as far as this: the safe dose for an average patient being not over 700 milliamperes for twenty minutes. This is "D'Arsonval Autocondensation", and is applied with great benefit to patients suffering with *Arteriosclerosis* ("hardening of the arteries"), and in a variety of other diseased conditions involving mal-nutrition.

4. In diseases in which we wish to in-crease a regenerative inflammation, promote circulation and absorption, and increase cell activity, the method known as "Diathermie" is employed. Instead of the hand electrode and condenser-pad the D'Arsonval current is applied thru two small sheets of block-tin about 2 x 4 inches. These are applied to the skin on either side of the affected part and a current employed which gives the patient a decided sensation of penetrating heat. Average treatments use from 1000 to 1600 milliamperes. In treating consumption (pulmonary tuberculosis) one electrode is placed on the back and the other on the chest over the affected lung. One Tuberculosis Hospital in which this treatment was given daily to a number of patients reported 85 per cent of cures! The author is working on an apparatus which will make possible the use of Diathermic treatment in the homes of patients suffering from this disease.

For office use and for the Electro-medical specialist ("Electrotherapist") the writer has recently designed an apparatus from which remarkable results are being obtained (see Fig. 6). The Tesla and D'Arsonval coils are excited by a wireless transmitting set of the well-known "Hy-tone" type. The rotary quenched gap with its exceedingly high-spark frequency produces an almost sustained wave in the high-frequency coils. Both for the Tesla and D'Arsonval treatment the writer believes this apparatus superior to any that he has used up to the present time. The vitalizing and exhilarating effects are extremely pronounced. The machine has the added advantage that there is no troublesome spark gap to adjust, the strength of the current being regulated by a many-stepped rheostat in the primary transformer circuit.

Much has been done in adapting high-frequency currents to the treatment of disease, but much remains yet to be done before we shall be able to avail ourselves of the wonderful healing and vitalizing powers which these currents undoubtedly possess. The writer hopes to be able to continue his studies along this line, believing that when we can scientifically apply to our patients pure undamped waves of definite form, frequency, amperage and voltage, we will obtain results far surpassing anything that we have dreamed of up to the present time, and that in the future the scientific use of high-frequency currents will become the greatest method ever discovered for the healing of disease, the promotion of health and the maintenance of a "More Abundant Life!"

## SUMMER SESSION 1919

Six Weeks, June 9--July 19

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## Sunday Public Services



KROTONA INSTITUTE of THEOSOPHY

Mrs. Annie Besant, President

Sunday, June 22, at 3 P.M.

DR. FREDERICK FINCH STRONG

National Lecturer for the Theosophical Society  
Topic: "Ultra-violet Rays and Etheric Vision"

Illustrated with Experiments

*June 6, 1919  
Lecture for Burbank I. S.*

### Inventor Says Science of Tomorrow Will Be Religion's Aid.

The science of tomorrow will be the great ally of all true teachers of religion in its highest sense, for in the laboratory of today are being laid the foundations of the science of the new age—the science that is to tear down the materialism of yesterday.

This was the keynote of the lecture delivered last night in Blanchard Hall, by Dr. Frederick Finch Strong, lecturer and authority on electricity and psychic phenomena, and inventor of many notable additions to modern laboratory equipment.

More than 500 persons heard the lecture, which was the last of the series of three delivered by Dr. Strong. Occult chemistry and developments along other lines of occult investigation were touched upon by Dr. Strong.

Reinforcing some of the thoughts advanced by him with a number of unusual and highly interesting experiments on the stage, Dr. Strong brought into play strong electrical currents, with which he showed the audience the different aspects of vibratory manifestation of matter and force.

"It is all a matter of the rate of vibration," he declared. "Everything in this world vibrates and everything has its keynote. Just as you were able to see vibrations of this current after they were stepped down or stepped up, when otherwise they would have remained unseen by you, so are there vibrations of thoughts, of emotions and desires."

*Los Angeles I. S. June 27, 1919*



Published by Roman in 1908

PHYSIOLOGY FROM AN ELECTRICAL STANDPOINT.  
(From Modern Electro Therapeutics, Strong)

1. The Human organism may be compared to a symphony orchestra; the organs representing the various instruments, while the individual players may be likened to the peripheral nerves and ganglia of each organ, controlled and supervised by the conscious intelligence through the central nervous system, analogous to the conductor or musical director.
2. Suppression or alteration of any one function disturbs the equilibrium of the whole body, just as a single instrument playing out of tune will destroy the harmony of an entire orchestra.
3. The growth and functional activity of the human body is maintained by the potential energy stored up in the food. This food is derived directly or indirectly from vegetable substances.
4. All energy comes primarily from the sun, largely in the form of radiant heat waves. This heat is absorbed by vegetable organisms, and is used to break up carbon dioxide, from the atmosphere, into carbon and oxygen. The carbon is combined with water to form the organized structure of the plant or tree. The oxygen is given back to the atmosphere. The radiant solar energy is thus transformed into potential chemical energy which is stored up in the carbon of the plant, on the one hand, and the freed oxygen on the other. It is this stored-up energy which is employed in animal organism for the performance of the different physiological functions. Thus the energy expended in lifting a weight involves the recombination in the muscle fibers of the carbon obtained from the digestion of food with atmospheric oxygen brought from the lungs by the red corpuscles. A consideration of the above facts shows the fundamental difference between animal and vegetable organisms. The latter absorb the active solar energy and breathe CO<sub>2</sub>, returning oxygen to the atmosphere and building up carbon compounds in which potential energy is stored. Animals, on the other hand, break down the vegetable compounds which are burned up in the cells of the organism with oxygen from the air, the stored-up energy being liberated in an active, or kinetic form, and carbon dioxide being returned to the atmosphere.
5. While the maintenance of health in the human organism depends apparently upon the digestion and absorption of food, and a proper supply of oxygen, there are other factors at work which medical science is only beginning to recognize; there is no doubt but that the whole scheme of creation involves the action of what we may call the "Life force" or "Vital energy". Through the action of this great Cosmic Force electrons are formed into atoms; atoms into molecules; molecules into crystals and chemical compounds; and these into cells and bodies of plants, animals and man. We have no name for this force, but through its action the great Evolutionary Scheme goes on. In India they call it by a Sanscrit name, "Prana." Here in the occident we have not yet officially recognized this force, but its existence cannot be denied even though we are as yet unable to measure it and harness it in the laboratory. Simple animal organisms like the amoeba, and simple cells of the embryonic type, appear to possess the power of absorbing vital force from food and air and of using it in maintaining their various functions of growth, reproduction, etc. When cells become highly specialized,--as for example the cells of muscle fibers,--they lose this power of direct self-vitalization and must be sustained by subtle stimulating forces carried to them from the nerve centers. It is generally conceded that these vitalizing, or







"trophic" centers, are in the anterior horns of the spinal cord for the motor nerves and voluntary muscles, and, for the sensory nerves, in the posterior spinal roots. Hence, injury to a trophic center causes atrophy and loss of function in the corresponding nerves and muscles (as in infantile paralysis). The general distribution of the life force to unstriped muscle and to the visceral organs is largely through the sympathetic nervous system or some subtle "etheric body" intimately connected with it.

6. The following functions are concerned in the preparation and distribution of the food material and oxygen.

- (a) The Digestive System, in which the food is mechanically softened and disintegrated and then rendered soluble by chemical ferments.
- (b) The Absorbent System, in which the digested food is taken from the intestine and transferred to the blood stream.
- (c) The Distributory system, including the blood vessels and lymphatics, which carry the absorbed nutriment to all parts of the body.
- (d) The Respiratory System, comprising the lungs, which draw in oxygen, and the red blood corpuscles which carry this oxygen to all parts of the body.
- (e) The Excretory System, which frees the body from the burned-up cell debris, and the products of tissue combustion. The gas  $CO_2$  is brought by the blood returning from the different parts of the body to the lungs where it is thrown off, while the red corpuscles are absorbing a fresh load of oxygen. Solid waste particles are picked up by the leucocytes, or white blood corpuscles and carried to the spleen, where they are completely burned up. These leucocytes are the "police", as well as the "scavengers" of the body, picking up and carrying away disease germs or poisonous substances accidentally introduced through wounds. When any part of the body is cut or torn, these leucocytes form a wall, preventing foreign matter from gaining access to the blood stream; and in the same way they surround developing masses or colonies of disease germs, thus checking their development and protecting surrounding tissues. The little seed-like nodules which form in the lungs in the early stages of consumption are collections of the bacilli of tuberculosis which have been walled in by leucocytes in the above manner. These nodules are called "miliary tubercles". The leucocytes also aid the body to throw off infectious disease by forming soluble chemical antidotes, which neutralize the poisonous products of the bacteria. Diphtheria antitoxin is an antidote of this kind formed by leucocytes of the blood of a horse, which has been gradually immunized to poison obtained from diphtheria bacilli, artificially grown in the laboratory.
- (f) All of the above functions are maintained and regulated by vibrations or oscillations, transmitted through the nerves of the so called sympathetic system; which consists







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of a double chain of nerve ganglia and filaments radiating from the great center, or collections of nerve cells in the abdomen called the Solar Plexus.

7. In the last paragraph we have considered the various processes by which the cells and tissues of the human body are supplied with the potential energy necessary for the performance of their respective functions; and incidentally we have explained the manner in which the organisms is protected from the action of disease germs and their poisonous products. We will now discuss the functions which involve the dispersion of the energy taken in with the food and air.

8. The most important of these functions has its seat in the muscular system, and involves the conversion of the potential energy supplied by the food, into active, or kinetic mechanical force. The muscular system comprises, - the Voluntary muscles, which contract only under the influence of a conscious impulse, transmitted from the brain to the motor nerves through the spinal cord; and the Involuntary muscles, which are independent of consciousness or volition; they are associated with the mechanical processes incidental to digestion, circulation and respiration. They are operated by vibrations transmitted largely through the nerves of the sympathetic system.

9. The sensory mechanism also involves the dispersion of stored-up energy. Through the various sensory nerves we are enabled to come into conscious relation with the objective world which we interpret through Vibrations, of different types and frequencies. Almost all parts of the body are provided with sensitive, bulb-like structures called "tactile corpuscles", each of which is connected to a sensory nerve filament which passes through the spinal cord to the centers of sensation in the brain. These filaments pass through large nerve cells in the spinal cord which act like batteries, supplying energy for the vibratory impulses which cause sensation. The exact nature of sensory nerve is not known. It is probable, however, that each sensory nerve with its terminal bulb acts somewhat like an electrical condenser, and that stimulation or irritation of the nerve-ends cause this condenser to discharge, producing oscillations of a definite frequency, varying in intensity or amplitude according to the degree of stimulation. Slight contact between the skin and a soft substance would set up faint oscillations, which would be transferred to the brain and interpreted as a delicate tactile sensation; severe irritation or abrasion of the skin, on the other hand, probably causes a complete "short-circuiting" of the nerve condenser, resulting in oscillations of great intensity, which give rise to a conscious sense of local pain.

10. Finally, we have the so-called "special senses" - sight, sound, taste, and smell. The nature and range of the vibrations which affect the human ear and eye have been considered in a previous chapter. The frequency of vibrations which in the nerves of taste and smell has not been determined. They are closely allied to ordinary tactile sensations, but the various impressions are probably produced by contact with matter in an etheric or supergaseous condition (between the gas and the electron).

11. The various types of nerves, whether sensory, motor or sympathetic, transmit to their respective organs and tissues a



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peculiar vitalizing influence called "Trophic force". This action which was formerly believed to possess a special system of nerve filaments, is now known to be a common function of all nerves; in other words, each nerve possesses a so-called trophic center, which continually supplies the nerve and its respective tissues with the peculiar vibratory force necessary for their growth and vital action. The trophic centers of the motor nerves are in the anterior horns of the spinal cord. The sensory nerves have their trophic centers in small ganglia which lie just outside of the posterior roots of the spinal cord. The significance and importance of the trophic centers is shown by the study of diseases involving their degeneration. For example, in certain types of lateral sclerosis which involve certain trophic centers, the muscles corresponding to the latter atrophy, and practically disappear. In cases of motor and sensory paralysis, on the other hand, where the trophic centers are not affected, the muscles remain for a long time without much diminution in size.







PHYSICAL AND CLINICAL STUDIES OF THE COLD-QUARTZ MERCURY ULTRA-VIOLET LIGHT.

Frederick Finch Strong, M.D.

(Member of the American Medical Editors' and Authors' Association.)

Hollywood, California.

(Presented before the Pacific Physiotherapy Association, L.A., Nov., 1929)

In considering the importance of mercury in connection with the generation of ultra-violet rays, it may be well briefly to review the history of the researches that led to its adoption as a source of light energy, before discussing its specific application in the later experiments that I have made in an endeavor to contribute further to the armamentarium of the physical therapist.

The first mercury lamp ever constructed was made by Gay in London, in 1860 (Russell and Russell: "Ultra-Violet Radiation," 1929). In 1892, Arens described a laboratory model. In 1890, Peter Cosper Hewitt patented the lamp that bears his name. Later Koch and Heraeus made the first mercury vapor lamp in quartz. In 1905, Kromayer designed the water-cooled lamp that still bears his name. (Herman Goodman: "The Basis of Light in Therapy," 1927).

In my laboratory at Tufts Medical College, in 1898, I made what I believe was the first gas-ionized mercury vacuum tube. It was constructed from a side-necked test-tube in which two electrodes were sealed. An old quartz spectacle lens was cemented over the mouth of the tube. A pellet of mercury was enclosed in the tube, and the air was exhausted by means of a "Geyk" glass hand pump. Passing a Tesla current through the tube caused it to emit the ultra-violet spectrum of mercury from the lens, but the heat of the current soon broke down the seal. (F.F. Strong: "High-Frequency Currents," 1908)

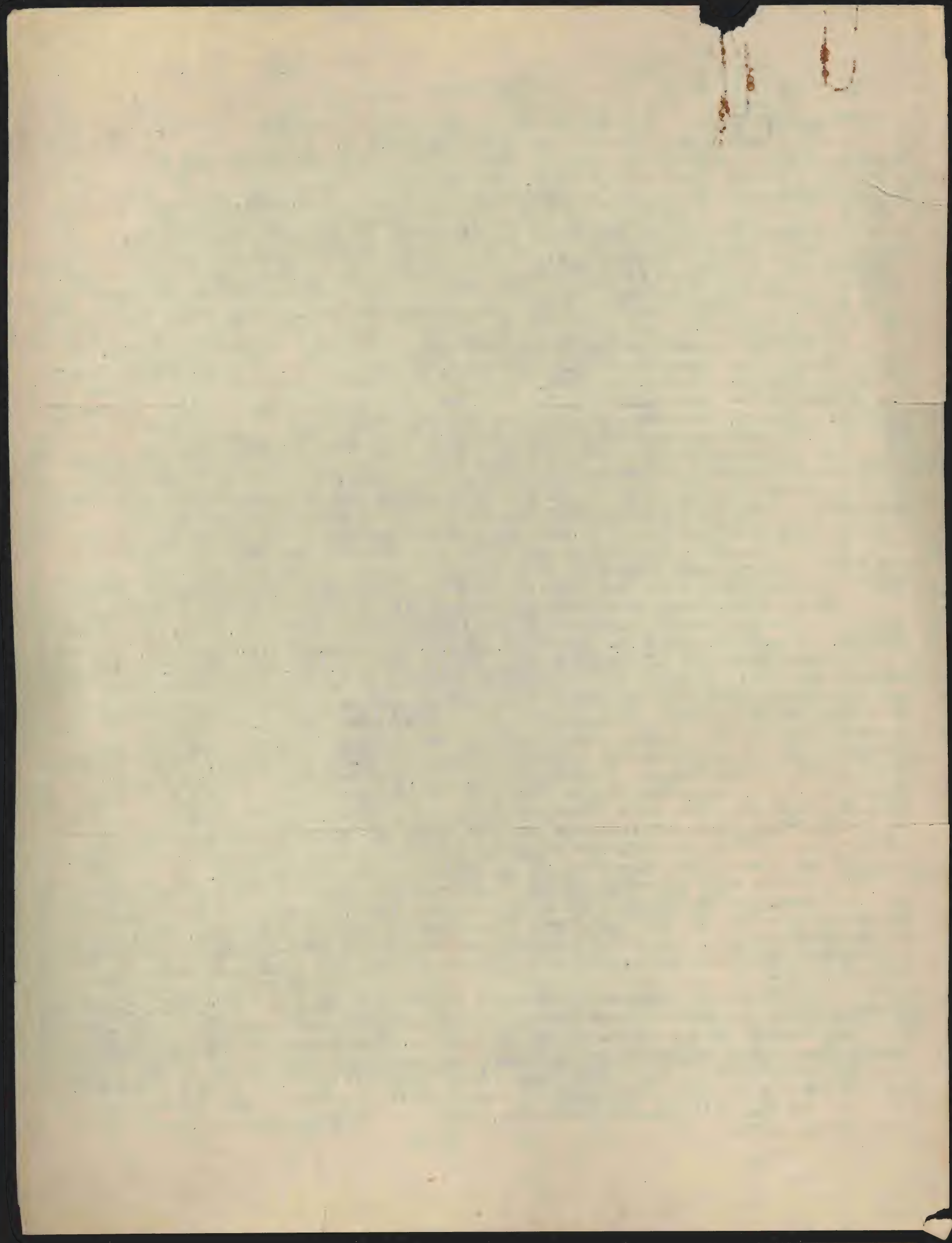
Since then, in my cold mercury therapeutic units, I have used vacuum tubes containing mercury ionized with a mixture of inert gas. (F.F. Strong: Med Herald, March, 1929, xlviii, p. 86; April, 1929, p. 117; June, 1929, p. 171; July, 1929, p. 208)

The difficulty of working fused silica tubing, and, especially, the technical problems involved in the matter of sealing in the electrodes, delayed my researches in the short-wave ultra-violet region of the mercury spectrum made accessible several years ago by gas ionized in quartz. However, in 1927, I constructed a laboratory apparatus of glass and quartz, the quartz being sealed to the glass by means of laboratory cement. Dr. J.R. Ellis, Professor of Physics at the University of California, L.A., made a series of spectrograms from this tube, using the Hilger Quartz Spectrograph. A minimum exposure was used so that only the more powerful lines were shown. Dr. Ellis' spectrograms served to show that the wave-length at about 2537 Å. U. in the gas-ionized mercury spectrum is relatively stronger than the other lines are. This band, it will be remembered, marks the most active germicidal region.

My first working model of the Cold-Quartz Light was made in 1927, from 4 ft. of 6-mm. quartz tubing bent into a spiral grid. Suitable electrodes were inserted by means of the lead seal described by Keys in his book, "High Vacuum." A few months later, the first model of an official cold-mercury apparatus was constructed from 4-mm. quartz tubing bent into the form of a narrow hairpin.

Many years' experience in the use of the air-and water-cooled quartz-mercury vapor generators have given me a background that enables me to evaluate the merits of the cold-mercury apparatus. In my practice I use Cold-Quartz generators exclusively for every purpose for which ultra-violet rays are therapeutically indicated. While it is possible that, in some conditions, the quartz arc may have advantages, I am unable to state them. Certain unique features of the Cold-Quartz apparatus, which are at once apparent, are briefly enumerated as follows:





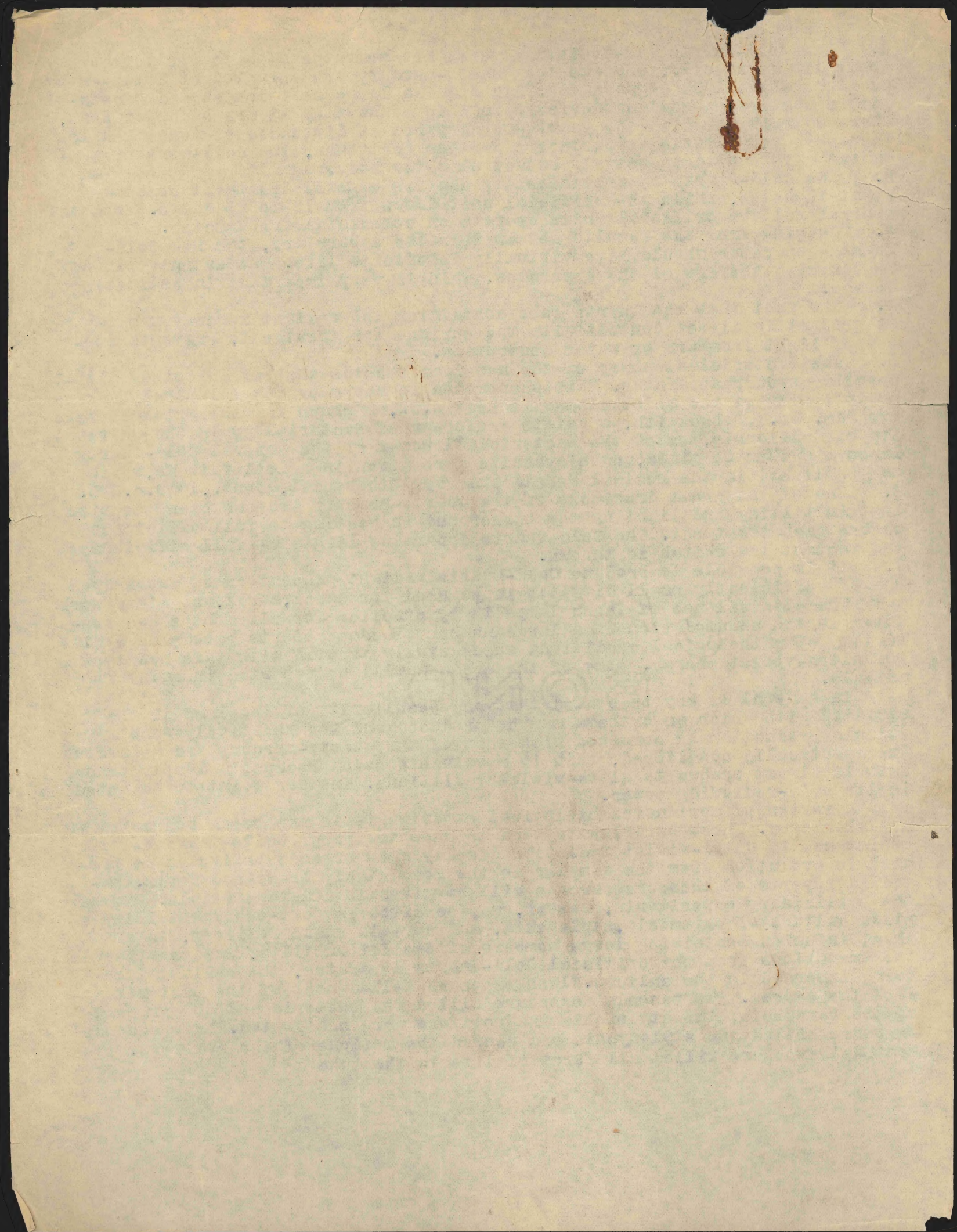


1. The Cold-quartz gas-ionized mercury arc operates at a temperature of about 115 degrees F., whereas the quartz-mercury arc operates at a temperature above 1000 degrees Fah. This entails large heat losses and necessitates cumbersome cooling devices. In this connection it may be noted that, whereas treatment with the quartz-mercury arc at distances of less than 15 inches is very liable to produce a serious heat burn, the cold-mercury apparatus may be used in actual contact with the body.
  2. The Cold-Quartz apparatus that I use for general treatment consumes about 75 watts, while the orificial unit draws from 15 to 25 watts. Both the general and the orificial units operate on commercial frequencies.
  3. Judging from the results obtained in the laboratory, the new Cold-quartz apparatus should have virtually indefinite life. The output does not lessen with the age of the apparatus. This is very important in estimating dosage.
  4. The fact that the Quartz tube containing the radiant mercury gas may be brought in direct contact with the surface for treatment, prevents losses of light from air or water absorption.
  5. The bactericidal power of the new lamp exceeds that of any other therapeutic mercury apparatus. This phenomenon is shown by the relatively greater intensity of the abietic band at 2537 A.U., as shown in the Erickson spectrum. Dr. T.D. Beckwith, Associate Professor of Bacteriology in the University of California, tested the bactericidal power of the general Cold-quartz lamps a number of times, and his results were given in a letter to me, which was published in the Medical Herald and Physiotherapist, Sept., 1929, p. 270.
  6. One of the great drawbacks of the quartz-mercury arc has been the time lost in tilting and lighting the burner and in heating to full efficiency before each treatment. The Cold-quartz apparatus lights at full efficiency the instant the switch is thrown.
  7. It is possible to produce Cold-quartz radiant generators of any shape and of sufficiently small diameter to be used for nasal, aural, and sinus work.
- The clinical use of these lamps in my practice for six months has resulted in the accumulation of a large number of case reports embodying a wide variety of pathological conditions successfully treated with this new type of ultra-violet energy. Some of these cases will be reported in a future article.

In general it may be stated that one peculiarity of the lamp is the rapidity with which an erythema may be produced and the relatively small melanin production as compared with that of the quartz-mercury arc apparatus. Therapeutically considered, this is a valuable point because a deeply tanned skin is almost opaque to ultra-violet radiations. Another point to be noted is its pain-relieving power.

A series of most novel biological experiments is now being conducted in my laboratory. These experiments tend to show the progressive increase of resistance to ultra-violet radiation displayed by organic bodies as we proceed in evolution from the simpler to the more highly organized forms. Detailed reports of these researches will be given in a later article. One of the preliminary experiments, however, may be cited: A test-tube containing a mixed culture of paramecia, stylenchia, and certain small rotifers, in a wheat infusion containing large numbers of Bacilli subtilis, was treated with the emanations from the orificial Cold-quartz apparatus, the radiant tube being immersed in the culture. Flash exposure killed most of the bacteria except the spores. Two seconds' exposure killed the bacteria and 60 per cent of the paramecia; the stylenchia and rotifers were unaffected. Three seconds' exposure killed the stylenchia and slowed the motions of the rotifers. Five seconds' exposure killed all forms of life in the tube.







## THEOSOPHICAL LECTURE

By Dr. Frederick F. Strong, of Boston, Massachusetts  
Lecturer on Electricity, at Tufts College

Subject: "WORLD FORCES OF THE FUTURE"  
(A Scientific Forecast)

Illustrated by brilliant experiments showing recently discovered phenonema in electricity and radium energy

WHITTIER LOWER HALL, TUESDAY, MAY 16, 1916, AT EIGHT O'CLOCK

Admission Free Public Cordially Invited

## ...Green Acre Conferences...

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July 30--August 12, 1916

"The chief objects of Green Acre conferences must be the furtherance of universal peace, investigation of reality, brotherhood, tolerance, sympathy to all mankind, the cultivation of a better understanding between the nations of the world, the elimination of dogmas and superficialities, the illumination of the hearts with the light of truth, mutual assistance and co-operation, social service, the study of the fundamental principles of all the religions and their comparative co-ordination. Green Acre must carry away this palm of victory."

—Abdul Baha.

"Religion must be reasonable; it must agree perfectly with science, so that science shall sanction religion and religion sanction science. The two must be brought together, indissolubly in the Reality. Down to the present Day it has been customary for man to accept a thing because it was called religion, even though it were not in accord with human reason."

—Abdul Baha.

### Sunday, July 30.

10.00 a. m. (Eirenon) Devotional Service Mr. W. H. RANDALL  
4.00 p. m. (Fellowship House) Informal Reception with Music  
8.00 p. m. (Eirenon) DR. CHARLES ROSENTHAL, of Boston  
"The Great Teachers"—Illustrated

### Monday, July 31

4.00 p. m. (Fellowship House) MR. SAFFA KINNEY, of Boston  
"Evolution vs. Involution" (1.) Historic Crisis of the Race Man.  
8.00 p. m. (Eirenon) PROF. C. L. HARRINGTON, of New York  
"Wireless"—Illustrated

### Tuesday, August 1.

10.00 a. m. (Fellowship House) MR. SAFFA KINNEY  
"Evolution vs. Involution" (2.) Man Sublime  
4.00 p. m. (Fellowship House) REV. GEORGE R. DODSON, of St. Louis, Mo.  
"Psychology of Religions"  
8.00 p. m. (Eirenon) PROF. C. L. HARRINGTON  
"X-Rays"—Illustrated

### Wednesday, August 2.

4.30 p. m. (Eirenon) Weekly Musicales  
MRS. GENIEVE STANLEY ADAMS, on the Drama  
Assisted by MABEL MCGOWEN, Soprano  
8.00 p. m. (Eirenon) PROF. FREDERICK FINCH STRONG, of Boston  
"Force and Matter in the Unseen"—Illustrated

### Thursday, August 3.

4.00 p. m. (Fellowship House) MR. SAFFA KINNEY  
"Evolution vs. Involution" (3.) Soul Motion  
8.00 p. m. (Eirenon) PROF. FREDERICK FINCH STRONG  
"Consciousness and Intelligence in the Unseen Worlds"—Illustrated

### Friday, August 4.

4.00 p. m. (Pines) Informal Conference MR. C. MASON REMEX  
"The Bahai Principals"  
8.00 p. m. (Eirenon) PROF. FREDERICK FINCH STRONG  
"Super-normal Powers latent in the Human Mind"—Illustrated

## SCIENCE AT GREEN ACRE

Interesting Lectures on Ether Waves, Vibrations, Etc.—Many Brilliant Experiments

[Special Correspondence of the Transcript]

Elliot, Me., Aug. 4

GREEN ACRE has been much interested during the week in lectures bearing on the scientific side of questions which are daily discussed in conferences. The lectures by Prof. Charles L. Harrington of New York, upon "Ether Waves," were illustrated by apparatus and lantern views. "The Smallest Known Thing" was an especially attractive subject and was followed by one on the making and detecting of ether waves and the application of these waves in wireless telegraphy. A third lecture on Tuesday evening explained the origin and working of X-Ray machines. This series was given in a perfectly clear, argumentative style and excited a deep appreciation of the value of electrons in all kinds of physical phenomena.

The weekly musicale was well attended. Mrs. Genevieve Stanley Adams of Boston gave a discourse on the drama, accompanied by Miss Mabel McGowen, who sang a number of charming songs. On Wednesday evening Dr. Frederick Finch Strong, Lecturer on Electricity at Tufts Medical School, delivered the first of his series of lectures on vibration.

The subject for Wednesday evening was "Force and Matter in the Unseen." The speaker called attention to the fact that science has studied sixty octaves of vibrations, of which only about fourteen produce any impression on the human consciousness—eighteen octaves as sound, three as heat and one as light. The purpose of the first lecture was to prove by experiment the existence of the inaudible, invisible waves beyond the sound waves and below the light waves. For this purpose an electrical high frequency apparatus was used which is said to be the largest ever shown on the lecture platform outside of New York city. It produces a marvellous discharge resembling a branching tree of electrical flame and nearly four feet in height.

Dr. Strong took this current through his body without injury, explaining the innocuous character of the apparently formidable current by the fact of its great frequency and alternation, it being a rapid electrical vibration rather than a true current.

Many brilliant experiments were shown, demonstrating the existence of matter and force outside the senses.

In the second lecture Dr. Strong showed how light was produced by electrical vibrations in the forty-ninth octave; and illustrated the different wave-lengths by vacuum tubes of various degrees of exhaustion; the air was gradually exhausted from the electrified tube, showing changes in color with increasing frequency of vibration. In the third lecture the speaker demonstrated the existence of forces far beyond the limits of vision, and showed many beautiful experiments with a powerful ultra-violet ray.

The X-Ray, which occupies the sixtieth octave, the highest known to man, was also used in several unusual ways, producing effects from which the lecturer deduced the probable existence of unknown rays far beyond the sixtieth octave. It was suggested that thought waves and those which produce the now well-recognized phenomena of telepathy and clairvoyance might be in this realm of vibration.

The identity of the material and spiritual conceptions of life and the idealism of modern science were the keynotes of the entire course. The lectures were well attended and much interest manifested both in the experiments and the treatment of the subject.

Supplementing the scientific lectures of the week, Mr. Saffa Kinney of Boston delivered three lectures on "Evolution vs. Involution," dealing with the various conditions of man in his progress of spiritual unfoldment.



Springfield  
Republican.  
Nov. 13-16.

THE SPRINGFIELD

## PEACE FOR UNIVERSE

### MANY BAHAI-ISTS MEET

### THREE ADDRESSES HEARD

Williams College and Tufts Represented in List of Speakers

Universal peace was advocated at a largely attended meeting of the local Bahai-ists in Odd Fellows' hall yesterday afternoon. The followers of Abdul Bahai, the great Persian peace advocate, listened to three interesting addresses by Prof. Frederick Finch Strong of the faculty of Tufts medical school, Prof. A. M. Shooks of Williams college and W. H. Randall of Boston. All three speakers developed the necessity of bringing about peace between all men and nations. This, they contended, was the great humanitarian problem of the age.

In opening the discussion Dr Strong outlined briefly the principles of the Bahai-ist movement. He was followed by Prof. Shooks, who gave an interesting resume of the evolution of the races of man. He explained the law of force by which ancient savage tribes were governed and showed why force was necessary in the times when education was unknown. He then told how civilization slowly broke through the ancient laws of savagery and forced them to give way to the early laws of civilization. The teachings of Moses and the other prophets, the great teachers of the ancient world, Jesus Christ, Buddha and other leaders, the speaker said, laid the foundation for the present movement, which is toward universal brotherhood.

Mr. Randall, the next speaker, quoted David Lloyd-George as having recently said that "Nothing but a spiritual power could save mankind from destruction," and stated that as the great power in the universe to-day was heat and nothing could be done without heat, so the great generator spiritualizing the world and bringing it to a sense of unity was love—not mere personal love, but the cosmic love for humanity. He read a clipping from a Boston newspaper of recent date entitled "Has God come back to earth?" wherein it was stated that everywhere one turned to-day a spirit of brotherhood was felt to be coming, and that the war was done to make this grow than any other agency that could have been

## WORLD FORCES OF THE FUTURE

WITH EXPERIMENTS

By DR. FREDERICK FINCH STRONG

Boston, Massachusetts

Under auspices of

THE THEOSOPHICAL SOCIETY

Sunday, November 12, 1916, 8 P.M.

ODD FELLOWS HALL, PYNCHON ST.

Public Cordially Invited

Admission FREE

At his lecture at Odd Fellows' hall last night under the auspices of the theosophical society of this city, Dr. Frederick Finch Strong, a lecturer on electricity from Tufts medical school, gave some interesting experiments showing world forces at present in use, in which he employed the high frequency current with vacuum tubes, making a display of lights of various colors depending upon the varying rates of vibration.

In speaking of world forces of the past, Dr. Strong referred to forces possessed by former races, notably those employed by the builders of the pyramids, the obelisks, the Sphinx, and the like, whereby tremendous edifices were erected by means unknown to us, and impossible to us without the aid of modern appliances. Those who know their Kipling will remember his "Tale I tell which is strictly true—" in "Rewards and Fairies." Dr. Strong described also a personal force which was used as a protective measure against hostile tribes, probably the forerunner of modern high-explosives, and stated that by the misuse of this power, the knowledge was withdrawn from the world for ages. He said this occurred in a continent known as "Atlantis," where civilization had reached a high plane, but where the people had become selfish and used their knowledge for destructive rather than constructive purposes, and so the whole continent was destroyed—this corresponding to the story of the deluge told in the Christian scriptures—and in every other religion and by every other race known to mankind.

The future forces, he believed, would be something akin to tapping wireless energy emanating from the sun, along the lines of Tesla's theories, and predicted that as soon as man was evolved to a capacity to utilize such powers unselfishly, they would be manifested through inventors "uncovering" them. Dr. Strong's lecture last night was confined to the physical forces. It is hoped to have him continue this subject later in the winter, dealing with mental and spiritual forces of the future.

## UNIVERSAL PEACE MEETING IS HELD

Well-Known Lecturers Address Large Audience in City.

Universal peace proved an interesting discussion at the meeting of the Theosophical Society held in Odd Fellows' Hall yesterday afternoon. Lectures on the subject were delivered by William H. Randall of Boston, Prof. A. M. Shook of Williams College and Prof. Frederick Finch Strong of Boston. In the evening Prof. Strong spoke to a large audience in the hall on "World Forces of the Future."

William H. Randall, who has addressed many audiences all over the country on the subject of peace and has been an active worker at the Pan-American Exposition, explained the significance of peace, saying that a great unifying power which becomes more in evidence will ultimately bring about peace the world over. "America is the great unifying power," said Mr. Randall. "It has assimilated the great host of immigrants from all nations in the world that have come here to make their homes. The only hope for permanent peace is the unification of the world into one whole, and unless this is accomplished there will always be warfare. This unifying power is the product of science."

Mr. Randall compared the men now fighting in the trenches to the early Christian martyrs in the Coliseum, gladly shedding their blood for a cause they, themselves, do not understand, but which they feel is a great cause for civilization. Peace can only be brought about by the natural laws of justice. Prof. Strong who preceded Mr. Randall pointed out that peace depends to a large extent on the individual's efforts for universal peace.

Prof. Strong who spoke again in the evening on "World Forces in the Future," showed that religion and science have a close relation, and that the great scientific inventions of the present have realized the dreams of philosophers and theologians. New electrical inventions of the future will yet transcend the scientific wonders of the present, he said, and the most important scientific advance will be the wireless transmission of power. Prof. Strong illustrated his lecture with interesting electrical experiments.

### Prof Strong to Lecture on World Peace

A lecture of unusual interest is to be given by Dr. Frederick Finch Strong at Odd Fellows' hall Sunday at 8 p. m. on "World forces of the future." This is one of a series of three free public lectures that Dr. Strong is planning to give in Springfield this winter, which are especially instructive, as they are to be supplemented by electrical experiments. Dr. Strong is a professor of physics at Tufts college and is endeavoring through the medium of the lecture platform to bring the fields of science and religion closer together into their rightful relationship. He shows how science, once laying its foundation on materialism, has, with its own discoveries undermined that foundation, but now by the means of late inventions and discoveries is reaching out into fields dreamed of heretofore only by the philosopher and religionist. Dr. Strong's lectures have been attracting much attention in Boston and vicinity, and Springfield people are fortunate in being able to hear him. The lecture is given under the auspices of the Theosophical society.

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