

REX RESEARCH P O BOX 19250 JEAN NV 89019 USA

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TITLE:

RADIONICS

Articles & Patents for Methods and Apparatus to produce remote effects via samples and resonant tuning. Topics include: Pest control...DeLaWarr's "Radiation-Therapy Apparatus (British Patent)..Korschelt's device..Hieronymous' US Patent..The DeLaWarr Radionic Camera...The Agrad Machine for pest control... Boyd's British patent: "Instrument for Detecting and Investigating Emanations"..Dr. Ruth Drown's British Patent: "M. & M. for Obtaining Photographic Images..." The B.S.R.F. "Zodiac Radiations"...Anderson's "Spectroscopic Appt."..The Alychnae "Psychic Mirror"..Baldwin's "Paralite"..Adamenko: "Device for Accumulating Bio-Electric Energy"..Burr & Northrop: The "L-Field"..Pavlita's "Vertical Biomagnetic Field generator"..Boyle: "Occult Illuminator System"..Payne's "Magnet-Pyramid Bio-Field Detector" and much more!

EVIDENCE FOR THE EXISTENCE OF AN ELECTRO-DYNAMIC FIELD IN LIVING ORGANISMS*

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Read before the Academy, April 24, 1939

There are two major classical theories of modern science: particle physics and field physics. The chief difference between them was clearly stated by Clerk Maxwell in his initial paper on electro-magnetic theory. Particle physics, he writes, considers any phenomenon "as due to the mutual action of particles," "but we are proceeding on a different principle, and searching for the explanation of the phenomena, not in the currents alone but also in the surrounding medium" or, to use the language of his third paper, "in the form of the relations of the motion of the parts." In short, particle physics directs attention to the constituent particles, whereas field physics centers theory and experimentation upon the medium in which the system as a whole is imbedded and upon its structure.

Since the fundamental problem of biology is organization, it would appear that field physics is the more appropriate for its investigation. It was considerations similar to these, together with certain facts in experimental embryology,³ which caused the writers in 1935 to propose the "electrodynamic theory of life." It was this theory in turn which guided Burr, Lane and Nims to the construction of the vacuum-tube microvoltmeter,⁵ and which suggested the experimental investigations ⁶⁻¹⁸ and findings which it is the purpose of the remainder of this paper to summarize.

In biology, the complexity of the living system is so great that investi-

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gators have been content since the time of Aristotle to analyze and describe, every biologist knows that one of the most important problems is to dein as much detail as possible, the nature of its component parts. However, electrical properties of the living system can be carried out most advanmet. As pointed out by Lund in his brilliant and meticulous study of the study this relatedness in the laboratory required that certain conditions be known to exist within cells and between them and their environment. To scribe quantitatively as well as qualitatively the relationships which are independent of current and resistance. This condition precludes the use of tageously by means of instruments which record only voltage differences bio-electric properties of the growing onion root tip, determination of the nearly all standard instruments, save the quadrant electrometer or similar

and excellent stability, it has been possible to explore the electrical properelectrical properties of the thing measured. the organism and without disturbing in any significant way the inherent ties of a wide variety of living forms undisturbed by changes in resistance in Using a vacuum-tube microvoltmeter with a high degree of sensitivity

therefore, independent of resistance changes in the measured system. silver-silver chloride electrodes immersed in physiological salt solution. draw a minimum of current from the system under measurement and is, tially a vacuum tube bridge. The input impedance is sufficiently high to Since these electrodes are non-polarizing and reversible, electrode artefacts Contact between the instrument and the living organism is made through at appropriate points so that it can be said with a fair degree of certainty are reduced to a minimum. The entire apparatus is shielded and grounded picture of the voltage differences in the living system. that the recorded deflections of the galvanometer spot give an accurate This has been accomplished by designing an instrument which is essen-

well as in plants and invertebrates, there is a relatively steady state voltage are of considerable magnitude and are changed only by alterations in the difference between any two points. These gradients are remarkably stable, in the female, and the incidence of cancer profoundly affect voltage differgrowth and development, local injuries, the menstrual cycle and ovulation extent, characteristic of the individual. In general, it may be said that characteristic of the species to which the animal belongs and is, to some the gradients are not chaotic but exist in a well-defined pattern which is fundamental biology of the organism. Moreover, in all the forms studied, ences in what seem to be a unique manner. Studies of the past five years have shown that in many vertebrates, as

determines in any fundamental sense the organization of the system. determine if the experimentally measured pattern of voltage differences Interesting as the above observations may be, it is more important to

> orientation of those components." ent mobilities. This results in an electric field whose forces determine the reactions produces active ions which pass through a membrane with differchemical components and which in part determines the behavior and electro-dynamic field, which is in part determined by its atomic physicopattern or organization of any biological system is established by a complex mental thesis of the electro-dynamic theory of life. It was said that, "the mination of the position and motion of the passive ions by the electric field theory, derived from Ostwald, Nernst and Planck, provides meaning both distribution and motion of all the passive ions in the system. Thus, his observation. this connect This, it is to be noted, is a special case that is in accord with the fundafor the determination of the electric field by the active ions and the deter-He has shown that a physical system undergoing chemical the physical chemist, Teorell,19 has made an important

ing confirmation of the field concept since the distribution of the chlorine of the organism, but also when the electrodes are from $1^{1}/_{2}$ to 2 mm. away siderable certainty not only when contact is made directly with the surface and tail of Amblystoma and chick embryos can be determined with conions in the physiological salt solution surrounding the embryo is determined measured by a vacuum-tube microvoltmeter. by the field of the organism in such a manner that it is capable of being from the surface of the embryo. It will be seen at once that this is a strik-It is not surprising, therefore, that voltage gradients between the head

corresponding oscillations of the galvanometer occur. Under these condient, on the assumption that an electrical field exists in the embryo. a phenomenon can only be explained, so far as it is possible to see at prestions the embryo is acting as an AC generator of very low frequency. Such As the head passes first under one electrode and then under the other between the tips of a pair of capillary electrodes as a result of ciliary action non which may be observed in the salamander embryo when it is revolving A further striking bit of confirmatory evidence is found in the phenome-

correlate of the menstrual cycle exists. It may be said with a fair degree of time of ovulation. All that can be done is to record the time when it oc ovulatory peak. Hence it may be said that it is impossible to predict the of ovulation. In fact, cycles occasionally appear without a bio-electric Moreover, there is no tendency for the appearance of a rhythm in the time these bio-electric correlates of ovulation may occur at any time in the cycle associated with ovulation. The findings make it reasonably certain that hours. Furthermore, it can be shown that this rise is in all probability there is a sharp rise in voltage difference which lasts for approximately 24 assurance that usually once but sometimes twice in the menstrual cycle differences in women, it has been shown that a very definite bio-electric In the course of many hundreds of thousands of determinations of voltage

of ionic transport or changes in the local chemistry is difficult. The phebe altered by changes in local constituent factors. field of the whole organism is assumed, the over-all properties of which may nomenon is relatively easy to understand, however, if an electro-dynamic field of the whole organism. which are concentrated in the main in the generative tract. However, index fingers. They, therefore, reflect changes in physiological activity these changes are so profound as to produce undoubted alterations in the These determinations have been made between the right and left Explanation of the phenomenon on the basis

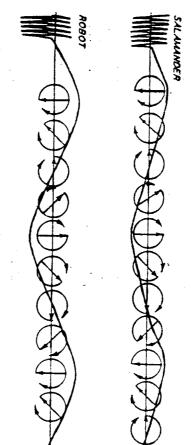


FIGURE 1

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solder robot when each is rotated. Below, the complete absence of any such phenomenon when the glass rod is rotated demonstrating the similarity between the electrical field in a salamander and a copper-A tracing of three graphs from a recording galvanometer and a microvoltmeter

sumed to be a field phenomenon, inasmuch as the measurements were made not directly on the ovary but between the symphysis and the vagina. and in man, as confirmed by Reboul and Davis and Rock, 21 may be as from the follicle, even though pickup electrodes are centimeters distant. tric correlate of ovulation is coincident with the liberation of the ovum Here it has been shown as a result of direct observation, that the bio-elec-In the same way, registration of the exact time of ovulation in the rabbit

organism of the new growth. Apparently rapidly growing masses of cells, chest occurred from two to three weeks before the new growth could be it was noted that in young mice a marked rise in voltage gradients across the detected by palpation. This rise was independent of the locus in the During an extensive study of the bio-electric correlates of cancer in mice,

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organism which effect the field properties of the whole system in such ${\bf a}$ manner as to make it possible to record the changed voltage gradients across too small for direct observation, produce local bio-electric changes in the

assumption of an electro-dynamic field in the organism. bio-electric phenomena in the living organism can best be reached by the It seems clear from the above that an understanding of a wide variety of

- * Aided by a grant from the Josiah Macy, Jr., Foundation.
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How to Make a Corrugated Round Tower Sensor

The infrared-paramagnetic round tower configuration described is based on experimentation with different forms and on experience inside the corrugated Red Tower of Delhi, the Quth Minar.

Many species of insects also have corrugated sensilla on their antenna. This is expecially true of insects such as mosquitoes that seek out human or mammalian auras. The corrugated sensor is not only more sensitive than the smooth form but also seems to store the aura energy better. Another reason for describing a corrugated configuration is that it is much easier to accurately taper than a smooth-sided sensor.

- 1. Take a 5 inch by 8 inch index card (127 x 203 mm) and fold it along the 5 inch side in 1/4 inch (6 mm) folds. You should end up with approximately fifteen corrugations (peaks) along the 8 inch length. See the Figure. An easy way to make the folds is to take the card between the four fingers and thumb of both hands and use the flat surface of a table to straightedge the fold by pressing it against the table. Turn the card over to alternate the next fold. The tips of eight fingers pressed against the fold on the table will keep the corrugations at their 1/4 inch dimension.
- Put a line of white give along the outer peak of the last edge, fold at one end and give it into the inner valley of the last fold at the other end. You now have a round corrugated tower.
- 3. To taper the tower, take a small rubber band and put it around the top of the tower so that you constrict the upper corrugations. By sliding the rubber band up and down, you can change the degree of taper. If you slide the rubber to the center of the tower, of course, you will have a smaller diameter (constricted) corrugated tower but no taper. It is interesting to experiment with different degree tapers.
- 4. In order to hold your index card tower to its shape, put a few drops of glue on the top and also glue the bottom to a little 2 inch square (5 cm²) of index card. After a couple of hours, the hardened glue at each end will hold your tapered tower to its shape. Remove the rubber band. You may wish to use your tower

- without a cone cap. The yellow fever mosquito, which alternatively scans human skin with each hind leg, has flat-topped corrugated sensilla on its legs. They look like the corrugated slope tower in the Figure (without cone).
- 5. To make the cone, cut a piece of index card about 2 inches by 3 inches (5 x 7.5 cm) in size and fold it along the 3 inch edge. Join the edge with a piece of tape. Cut the corner off (dotted line in the Figure) to fit the diameter of the top of the tower. Open the cone up and glue it in place. You now have a completed corrugated cardboard round tower.

Coating the sensor

Spray the index card tower with Scotch Spray Adhesive (photo mount) and sprinkle it with good potting soil. Ilmestone, red clay or ground-up flowerpot (clay). You may have to spray and coat several times to get a nice even layer on the corrugated surface. No adhesive spray is needed for a good wax tower sensor, just dip the corrugated tower in melted beeswax.

Testing the Sensor

Suspend the tower from a wooded L-shaped arm by heavy duty thread. Test your coated tower for paramagnetism with a 1000 gauss magnet to check if, it is strongly attracted — believe me, it will be!

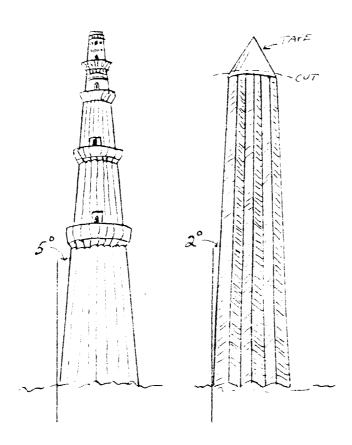
Now that you know how to construct your round tower aura sensor, begin testing it with the paramagnetic-infrared aura of your body. The force is strongest at your solar plexus. Test it in a well ventilated room, but with no breezes blowing. You must first convince yourself that it is a living force in operation and not air blowing the tower towards your body (how does one blow an object toward oneself?).

Move slowly, at about a 45 degree vector, to the side of the front cone of the suspended tower. If you do feel good, the tower will move slowly toward you when your body is four to six inches from it. It always works best at dawn or dusk in a well-ventilated room. Stale air quenches movement and people standing too close together jam each other's auras.

If you practice, you will see that your mind affects the movement. It is obviously an alternating or pulsating force since sometimes the tower moves slowly away from your body. The tower definitely stores energy as you will soon note that there is a considerable pause before it moves to your body. You will find that a tower you make works better for yourself than for your friends; although it will respond to anyone. Why does it work best for you? Obviously, because in con-

structing it, you have "doped" it with the "essence of yourself" (See Newsletter, Vol. 2, 2 and Vol. 2, 3)

Finally, of course, you can use round towers such as these for soil testing by coating them with different types of soil and using a protractor to measure the distance the various soil-coated towers rotate with regard to a fixed 1,000 gauss magnet. The stronger the attraction, the more paramagnetic the soil, and hence, the better the soil.



The taper of the corrugated Red Tower of Deihi (left) is approximately 5 degrees. Irish towers such as the Kilmacduagh one (see *Newsletter*, vol. 3, 1) taper at around 2 degrees. The Red Tower is 233 feet 8 inches (71.25 meters). Irish round towers are smooth-sided and have a conical roof and are on the average 70 feet (21.33 meters) high. The corrugated round tower sensor is a hybrid of these two forms.

INTRODUCTION TO PARANORMAL VIEWING AND THE PARALITE TA

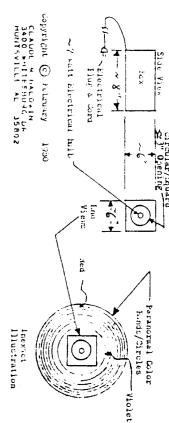
(C) Claude Baldwin 1980 All rights reserved

Paranormal viewing is an unusual type of viewing experienced by some persons, but not by everyone. The author has developed a very simple electro-optical device (PARALITE) which produces a concentric hance the ease of learning to view paranormally. The reader is hereby invited to build his or her own PARALITE for personal experimentation. The PARALITE consists of a small electrical lamp bulb inside a pattern of apparently paranormal colors, and which in many cases can en-

box with a hole in one end. The box can be made of eardboard or other materials, and is about $8'' \times 6'' \times 6''$, with a matte black interior. It cord penetrating to the outside. is completely closed (light-tight) except for a nominal 3-inch square or circular hole in one end. The lamp bulb should be centrally attached to the interior of the box end opposite the hole, with a lamp electrical

*PARALITE" design is the result of the author's private efforts and is registered with the U.S. Commissioner of Patents in Washington, D.C. Plans, kits, and assembled units for the PARALITE may not be produced by others for sale without the author's written permission. Sale of such plans, kits, and assembled units to AAMS members and SPECULA subscribers their own individual use, will be done by the author. A set of detailed plans can be turnished for \$1.00. An assembled unit, having a modded plastic case with handle, can be furnished unit, 1.00 and includes shipping charges to 0.8.A. destinations. (Allow up to 60 days for U.S. delivery, longer everywhere else, for the unit or kit. Make all instruments payable to Claude dollars.) , can be furnished tor

*FARALITE (Faranormal Light Generator)



portions of the spectrum.
The PARALITE 1s quite easy to use. to quench the paranormal pattern of colors; this may help confirm Tom Bearden's premise that excessive visible light tends to quench the para-The lamp should be less than 15 watts in output, and preferrably only 7 watts. It may be white or colored, but white is preferred. It should be of the inosted type where the filament is not visible, and it normal effects which primarily exist in the infrared and ultraviolet may be a standard or minfature type bulb. A larger wattage bulb tends

lights and closing the doors and blinds. Seat yourself across the room with the PARALITE bulb in view through the hole in the box. Relax and put yourself into a slightly altered state of consciousness similar to a mild meditative state; experiment with this until you obtain the best state for yourself in the PARALITE experiment. power outlet. or table, with the hole facing outward, and insert the line plug into a Make sure the room is darkened, by turning out the room Simply place it atop a desk

colors surrounding the box and the hole. Do not refocus your eyes, simply leave them "parked" in a focus at infinity, and only shift your mental attention onto the front of the variance the region of space surrounding it. You should be able to see bands of colors about 15 to 24 inches in diameter, varying directly with the distance you are from the lamp bulb. When a white bulb is used, these colored bands will apparently duplicate the colors of the rainbow: red in the outer band, then orange, then yellow, then green, then blue, then violet in the inter face between bands may not be sharply defined, and some persons may see additional colors. In addition, some persons may see radial rays of white and/or colors from the lamp bulb. Blocking your direct view of the lamp bulb will make the colored bands bulb, as if at infinity) and look for the concentric rings or bands of colors surrounding the box and the hole. Do not refocus your eyes; disappear. Also, notice that there is no direct straight line path from the lamp bulb to the colored bands. Now defocus your own vision (e.g., by focusing well beyond the

For example, you may wish to experiment with this type of "seeing" on other lamps in your home, with the lamp intensity low and a darker background. Street lamps are a particularly good source for further experimentation — the outer red band is so large that it touches the ground whenever you are about a block away, and the concentric colored bands are smaller to maller the concentric colored bands. get smaller as you approach the streetlamp. After you have succeeded with the above experiments, you will probably be able to notice concentric colored bands about other lamps. cantly determine the colors seem in the bands. The lamp type will signifi-

the colored bands. To me they appear as huge circles with diameters of about 8 to 10 moon diameters. Eventually you will be able to see the concentric color bands about almost every lighted lamp you see, and it makes an interesting diversion from ordinary viewing. Each new expertence and the moon is at least one quarter full, it is relatively easy to see mentation. On a clear night, when the background sky is not too bright in paranormal viewing is another step along your journey into the para-Also, Good luck! the moon can serve as a light source for further experi-

manner then theorize the paranormal/normal principles governing the phenomenon, and correspond with the author, Claude Batdwin, P.O. Box Readers are encouraged to experience paranormal viewing in this

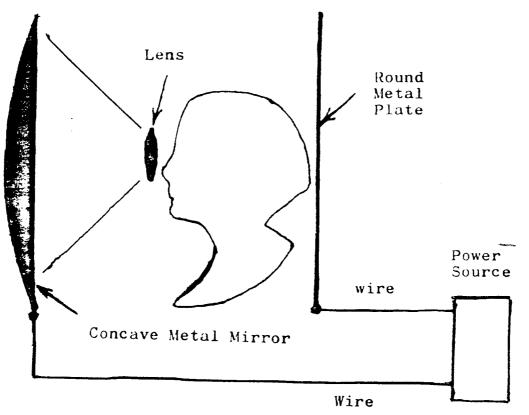
PSYCHIC MIRROR

Answering to both electrical (nerves) and optical (eyes) in living substance, we have produced the drawing using physical equipment to produce the power of the image. Only the past is clothed in secrecy, the future has no bounds. Who has seen their own spirit?

We hope some of our associates can work with this. idea. The drawing depicts a device with two metal plates. This makes a two plate capacitor. Voltages, and polarities, would have to be worked out on this idea. Certainly anyone with a lick of electrical sense would realize they must not contact both plates at the same time or they might be electrocuted.

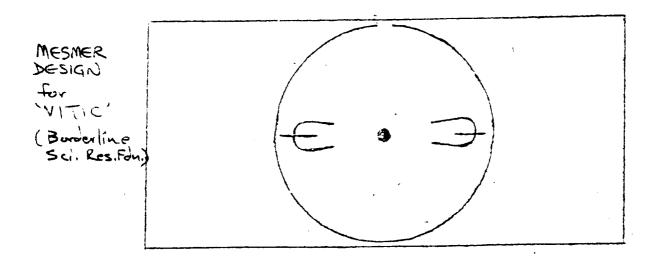
This drawing would put both the brain and the optical system inside of the plate radiations. Possibly this would give the subject an "inside out look" at the "other world", or it might be an "outside in look".

Tests conducted with this device should be conducted by experienced electrical researchers. If anyone gets any results we would appreciate their writing to us.



'ALYCHNAE' Psychic Mirror (Proc. Coll. Universal Wisdom)

a



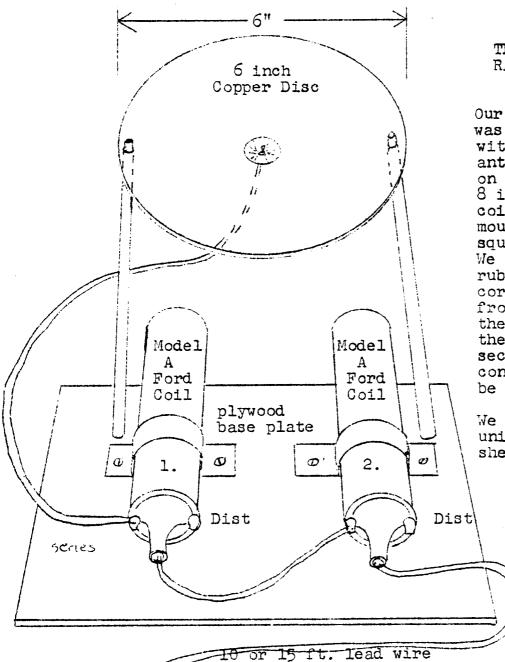
"The mounting board preferably of oak wood, two horseshoe magnets of sufficient strength to lift $2\frac{1}{2}$ lbs., the wire loop of #12 copper wire or heavier, the steel rod in the center is 3/4 in. in diameter. Magnets are to be placed in slots so they can be moved toward or away from the steel rod. They should also be pivoted so the North and South poles can be set so as to attract or repel, as indicated by the polarity of the receiver or subject. Distance of the magnets from the steel rod to be adjusted for greatest benefit to receiver. It is suggested that the birthstone of the receiver be attached to the end of the steel rod with putty or clay. Experiment will show best results."

Mesmer gave no dimensions for his design. The size of the mounting board will be determined to some extent by the size of the pair of horseshoe magnets used. Perhaps these should be bought first. There are several obvious differences here from the design given in the October Journal. There is no break or overlapping in the copper wire loop shown above but we feel this is essential for the pulsed or oscillating effect of a wire coil, a basic electronic device. We believe the Lakhovsky circuit will give the multiple magnetic field rhythmic oscillations which make it much more effective than a simple magnet. Because it is alternating, from positive to negative and back again, millions of times a second, it doesn't matter which hand holds the steel rod. I believe this is an alternating current circuit of magnetic energy.

In the above material there is no hint by Dr. Mesmer of the need for a carbon rod to complete or augment the circuit. Either he didn't know about it, or felt that it was not important. We believe that the use of a carbon rod for the other hand is highly important and do use it. Both the Sun and the Moon are important to life on this earth, and in this body! Neither is it suggested that the steel rod be covered with copper or some other diamagnetic material. This covering probably

helps to contain the charge in the steel.

You will note that Mesmer's wire loop is <u>outside</u> the magnets, rather than <u>inside</u> them as in our design. Which arrangement is more effective remains to be proven and we'll welcome the reports of Associates who take part in Project Vitic. We know our design works. Five minutes in circuit with carbon and magnetically charged rod gives the nerves a charge of mana which lasts for hours. Most people whom we've tested have reported favorable results. Some report no reaction whatever. For these a rearrangement of the components may be necessary. This is why the Vitic device should be made adjustable.



THE ZODIACAL or RAINBOW COLOR TONER

Our experimental Toner was assembled like this with the copper disc antenna mounted flat on wooden dowels about 8 in. above the Ford coils. These were also mounted flat on a 9 in. square plywood board. We used standard, white rubber insulated lamp cord for all wire leads. from the antenna to the first coil, between the coils, and from the second coil to the lead contact plate. It can be other metal.

We set the assembled unit up on a closet shelf out of the way.

All lead wires are single, by the way. We split the lamp cord down the middle. The lead wire from

Coil No. 2 to the body contact plate should be long enough to easily reach from location on shelf or high dresser to

a subject lying comfortably on a bed. three contacts on the top of each Ford coil. Do not

use the one marked Dist. Remember, there is no measurable electricity flowing in this circuit; so there's no use in arguing with anyone about it. This is not just a mental device and the parts must be kept in a logical relationship, though their dimensions are not critical.

change planty if = (-) -> (+)
by connecting to sky

Metal con-

tact plate 2x3"in.

ET COORDE TO

There are

Antenna should be 5'+ above ground

THE ZODIAC RAINBOW TONER

The theory is that Healing Color Rays from the 12 constellations of the Zodiac, coming from all directions of the compass are picked up by the 360 degree antenna, concentrated and funneled down the copper wire attached to the dimpled recess in the center of the antenna. From there it is stepped or augmented as it passes through two Model A Ford Coils before being absorbed by the body through the metal plate electrode.

Referring to the diagram you will see that the wire lead from the antenna goes into the plus side of the Model A coil. The cosmic current is drawn off the center tap of the first coil and into the plus side of coil number two. The augmented current is then drawn off the center tap of coil number two through a long, flexible, insulated wire lead to the body of the subject.

The Rainbow Toner doesn't seem to be effective as a device for changing or balancing unbalanced conditions in the body unless it is placed at least five feet above the ground, to a height where the cosmic rays are not polarized or neutralized by the earth. So, if the device is used on the ground floor, there should be a long lead from coil number two to body-contact plate, with the device high above on a shelf.

A larger diameter antenna and more Model A coils do not seem to increase the effectiveness of this borderland gadget. There is no measurable electricity flowing in this circuit — at least not measurable on standard equipment — so there's no use arguing with anyone about it! And with no standard current going through the coils it's debatable whether anything is being stepped up. Certainly, according to electronic principles, coil two will not step up whatever current is coming out of coil one because the two coils are identical; but the volume of coiled wire in the circuit may in some way unknown to us at present increase or augment the "amperage". In any event the pragmatic test is the only way to prove, or disprove, its effectiveness.

It should be obvious to the researcher that the Rainbor Tonex is a universal treatment device, equally applicable to any and all conditions. But there are those who prefer a "rifle" to a "shotgun" and the Radionic Treatment Instrument does have more direct and specific application. The difficulty is that the treatment rates for a specific silment change from day to day as the treatment is effective! This is why the Toner was developed.

And this is why no Treatment Rates were included in the Atlas when this work was first released. Now it has been decided to add the Rates developed years ago by the designer of the Instrument, because it has been found by experience that these fixed rates do help in many cases.

THE ACCUMULATION OF BIOELECTRICAL ENERGY

V. G. ADAMENKO†

U.S.S.R. Institute of Physiology

Two experimental procedures are described by which human bioelectrical energy can be studied. One procedure involves obtaining electrical current from acupuncture points while the other involves a metallic hand directed by a human hand enclosed in a dialectric glove.

The amount of bioelectrical energy produced by human beings is very small under most conditions. For this energy to have practical applications in such areas as healing, methods need to be developed for augmenting the energy and accumulating it in various devices. Two approaches which may attain these goals have recently been instigated.

ACUPUNCTURE ELECTRODES

An electrical current has been obtained from acupuncture points of the human body through the use of electrodes. In this process, nickel and silver electrodes are attached to 10 or 12 acupuncture points. A voltage of hundreds of millivolts is obtained with a current of about 100 microamperes. This current is sufficient to charge an accumulator or a battery of capacitors.

Conductivity of the acupuncture points changes, depending on the organism's psychophysiological states. For example, when the subject is emotionally aroused, the current's power increases by 200 to 300 per cent in comparison with the same subject in a relaxed state.

This arousal can also be produced volitionally. After electrodes are connected to a battery of capacitors and to the subject's acupuncture points, the subject is told to attempt charging the capacitors with bioelectrical current. Then the capacitors are connected to a microampermeter through a switch and are disconnected from the tested subject. The value of the charging current registered by the meter is proportional to the amount of the subject's volitional effort.

Since the conductivity of acupuncture points

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of each subject is different, the initial charging current is different. Therefore, the degree of volitional effort is evaluated by using a non-dimensional coefficient of K, which is a relative value of:

$$K = \frac{i_v}{i_n}$$

where K = coefficient of volitional effort,

 i_v = charging current with volitional effort,

 i_n = charging current without volitional effort.

Coefficient K of people not capable of a volitional effort equals "1." Subjects with volitional abilities have coefficients which equal "2," "3," and "4." or more. It has also been noted that a subject's volitional effort depends on one's psychophysiological state. Subjects who ordinarily can obtain a coefficient K of "2" often obtain a score of "1" when they are fatigued.

On the other hand, some subjects can obtain a coefficient K of "1.5" or "2" even when fatigued; after resting, their score usually increases to "3" or "4." This procedure can be used for research purposes in psychoenergetics.

MOVING DISTANT OBJECTS

Another method of accumulating bioelectrical energy involves the ability some people have to move small objects at a distance without touching them. Some of these subjects impart an electrical charge to the objects while moving them. It is likely that air ionization is created around the objects due to the electrical field produced by the subject. In any event, another subject, can usually approach the object, once charged, and cause it to move merely by bringing

one's hands near it. This movement will continue until the object is discharged; then the first subject must again impart an electrical charge to it.

A simple device has been built which facilitates this effect mechanically. The device consists of a closed dielectric box with dimensions of 140 mm. by 140 mm. by 100 mm. The top of the apparatus is covered with a transparent organic glass, underneath which a metallic hand weighing one gram is fastened to an axis. The structure of the hand insures great mobility and flexibility.

If one wears a dielectric glove and electrifies it on the organic glass, one can cause the metallic hand to move. One can also control the metallic hand's movement by selecting the position of the hand in the space away from the device. The magnitude of the electric field tension in these experiments averaged about 1,000 volts per centimeter.

As a result of experiments with the metallic hand, it was conjectured that the effect of the electrical field could be magnified. Consequently, the mechanical apparatus should help subjects to move objects without touching them.

To test this conjecture, matches were placed in the dielectric box and, with the help of a human hand in a dielectric glove, its walls were electrified to obtain a high field tension. When the field reached a tension of about 5,000 volts per centimeter, movement of the matches was observed.

These experiments are easily repeatable and demonstrate that electrical field forces can be used for physical modelling of distant influences. Electrical forces effect magnetic energy as well as magnetic objects and could play an important role in understanding one of the mechanisms by which energy is transmitted at a distance.

A Comment

JOHN C. PIERRAKOS, M.D.

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The concept of bioelectrical energy has been elusive to study and objectify. In this article, two very ingenious approaches are presented obtaining electrical currents from acupuncture points and dialectric apparatus.

The construction and effects of the dialectric apparatus appears to be very similar to the approach Wilhelm Reich used in the construction of the orgone accumulator and his studies on its effect on the bioelectrical effects of the human organism.

While the article is very exciting and has ingenuity in the experimental approach, not enough specific information is given about apparatus and experimental arrangements. Such information would have made the basic concepts easier to understand and would have made the experiment reproducible. With the present information it would be very difficult to verify the experiment. It is hoped that in future articles Dr. Adamenko will expand upon the material introduced in this paper.



POLARISED LIGHT AS PK DETECTOR

Herbert, Benson, M. Sc., B. A. (Oxon). Director, Paraphysical Laboratory Downton, Wilts., England

Throughout 1974 we have been carrying out experiments at the Paraphysical Laboratory, Downton, England to ascertain if PK agents can influence in some manner a beam of plane-polarised light. After trying many arrangements we found the most convenient method, and easiest to control, was to pass a beam of polarised light vertically downwards thru a beaker containing some test fluid, say glucose solution; the polariser itself could be rotated thru measurable angles and was situated above the beaker. as part of an optical focussing system and light source of controllable intensity. The voltage across the light source was monitored continuously, the current being supplied by a freshly-charged accumulator which could be replaced by another, by a simple switching arrangement, if the voltage began to fall. The capacity of the accumulator permitted continuous usage for up to four hours without change of voltage, within permitted tolerance required by the proper functioning of the remaining apparatus.

On passing thru the test liquid, the beam entered a brass tube, 2.5 cm diameter, 7.5 cm long, shielded by heat radiation by a thick cardboard tube and several layers of insulating tape, and finally

emerged upon a photodiode detector connected to a control box containing a 'Darlington pair' amplified which registered a current upon a microammeter of value depending upon the intensity of light transmitted thru the test liquid. An optic analyser could be inserted in various positions, usually inside the brass tube, and by crossing the polariser and analyser at various angles, it was possible to calibrate the instrument by plotting a graph of current against the square of the cosine of the angle, this squared cosine being proportional to intensity of transmitted light.

The whole apparatus was solidly clamped to an upper bench while the PK agent satwith elbows testing upon a lower independent bench, with hands cupped round the brass cube. The hands rested upon guard-rings to maintain a constant distance between hands and tube and to prevent any accidental contact which may have disturbed the collimation of the beam and so produced a spurious reading on the meter. As an added precaution, a watch-glass floated upon the surface of the test liquid, and the slightest touch created oscillations of this watch-glass of characteristic frequency, which was faithfully duplicated in fluctuations of the meter reading. Thus the instrument was equipped as it were with a built-in seismometer.

The control box also contained a voltmeter which continuously monitored the voltage of the battery powering the photodiode; with the minute current drawn by the phototransistor, this voltage remained steady for up to a week before having to replace the battery. Temperature, humidity and atmospheric pressure were all recorded.

The effects of increasing temperature were observed by surrounding the brass tube with two metal

found that a temperature rise of 10°C above blood hear did not produce any marked change upon the microameter reading; and as the inner can was in the same position as that normally occupied by the hands of the agent, and encased about the same volume as did the hands, this was taken as sufficient evidence, that the temperature of the agent's hands could not influence the instrument.

At various times up to 20 subjects attempted to influence the instrument without success; only one agent, Miss S. Padfield, was able to produce consistent and repeated effects; with a full scale deflection of 1 millampere, on setting the controls to centralise the needle at 0.5 mA, characteristically, within 30 to 60 secs. of placing her hands in position, the needle would dip steadily usually in less than a minute to 0.2 or lower; and would remain there until she removed her hands, after which the needle would more slowly rise to its former reading 0.5.

In one remarkable session lasting from midnight to 5 a.m., she achieved this result 24 times out of 24 trials. It of the results being slightly weaker; while no other subject could achieve any movement at all of the needle. During this session spontaneous PK acting upon light dielectric objects in the room were clearly observed.

In order to discover what precisely she was accomplishing, we altered the conditions stage by stage in systematic manner, thus, on removing the analyser, she could still produce the result which showed that she was not in fact rotating the plane of polarisation. On replacing the optically active glucose solution with distilled water, the effect continued as before. But on removing the water, leaving only gir in the beaker, the needle this time did not move.

On removing the polariser so that ordinary randomly polarised light passed thru the beaker, no effects were produced whether or not the beaker contained any liquid. So then, for the effect to take place, plane-polarised light must be employed, and some clear liquid must be present in the beaker. The only method of simulating this phenomenon normally would be to insert a horizontal sheet of polaroid in the liquid and cross it to an angle of 75° with reference to the polariser. In the opinion of Professor Dubrov, who has expressed interest in these experiments, the effect can only be attributable to biogravitation.

In general, we found that plane polarised light is a more sensitive detector of fluid turbulence than randomly polarised light.

An anisotropic beam passing thru an anisotropic medium is more likely to yield optic-thermal coupling and therefore energy absorption.

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In the case of surface ripples it is easy to see how this effect occurs; for simplicity imagine a plane wave-front on water surface upon which impinges a plane-polarised light beam; if the angle between these two places differs from a right angle, then one edge of the beam will strike the water surface at an angle differing from that of the other edge, so the refracted angles of the portions of the beam will vary from point to point, i.e. a diminished intensity will reach the photo-eye; on the other hand with randomly polarised light, there exists an increased probability that more of the light will reach the 'eye'.

We demonstrated this practically by dipping a tuning fork, of pirch 256 herz and amplitude which could be monitored by means of a microphone connected to an oscilloscope via a suitable amplifier, just under the surface of liquid in the test beaker. Without polariser there was no influence upon the meter, but on introducing the polariser and striking the fork, a marked deflection.

INSTRUMENTATION

A New Device Which Detects and Measures An Energy Field Around the Human Body

. Buryl Payne, Ph.D.
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Abstract: This device, called a "biofield meter" consists of a pyramid-shaped frame suspended by a nyion fiber. It detects and measures an energy field around the human body which is associated with the geomagnetic field. In use, a subject sits under the frame with the head just within it. Rotations of up to 40 degrees are observed. The amplitude of the rotation varies with the geomagnetic field activity. Magnets placed on the frame increase the rotational torque. The biofield is not magnetic, it is approximately one million times larger than the human magnetic field. Typical data is shown in tabular and graph form along with the geomagnetic activity. Control studies are described and suggestions for further research are given.

WHILE investigating pyramid forms and their possible connection with magnetic fields, the author discovered an apparatus which can be used to measure a field effect around the human body. This effect was eventually found to be related to Earth's magnetic field and to vary as Earth's field varied, the changes being most pronounced during magnetic storms, and at times of new and full moon.

Developments in instrumentation have often lead to new discoveries. Yogis and psychics have claimed that an aura exists around the human body, but only in the last decade have instruments begun to detect effects which could be related to such an aura. Kirlian photography seems to detect an interactive electric field. Earlier work by the author used sensitive amplifiers to detect two aspects of human "fields;" one related to transmission of emotional changes between one person and another, and the second related to some "field

effect" between two people which is enhanced if they first synchronize heartbeats. In these earlier experiments the energy transmitted could not be accounted for by known electromagnetic field effects. The detectors were first human bodies which in turn exhibited changes which could then be monitored by standard biofeedback instruments.

The apparatus described in this paper seems to measure some effect around the human body related to magnetism. The observed effect cannot be accounted for by ordinary electric or magnetic fields, however, and its exact nature remains a mystery as of this writing (February, 1982). The device has been called a "biofield meter" or more simply, a bf meter. It provides repeatable, quantifiable data and opens up the possibility for many avenues of investigation (patent applied for).

Material and Method

The edges of the pyramid are about 45 cm long. Twenty ring magnets of about 300 gauss field strength each are placed at each corner, north poles pointed towards the apex. A small focusing mirror of the type used in ladies compact sets is placed at the apex of the pyramid. A light mounted on a nearby wall is reflected from the mirror and focused on a scale mounted on the wall about one meter from the pyramid which is suspended by a

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nylon line. When a person sits under the pyramid with their head just into the frame, the spot of light will move along the scale a few inches (Fig. 1). These movements are easily observed and recorded.

Construction requirements for the biofield meter are not critical. Materials can be wood, metal, plastic, or glass, and the magnets can be of any type of strength, although stronger magnets produce larger rotations. Placing magnets along the base of the frame will work about as well as at the slant edges. Direction of polarity is not important, but the apparatus will not work unless the magnets are all aligned in the same direction. The apparatus will operate with no magnets, although the effects are weaker. Any type of frame can be made. The effects have nothing to do with pyramids or so-called pyramid energy.

The biofield meter is activated whenever a person sits in a chair under it with the head a few inches up into the frame. After a few seconds the frame will rotate several degrees. The amplitude of the initial deflection is recorded along with the time of day and comments of possible relevance such as the weather, lunar aspects, mood of the experimenter, etc. Observations are usually made around 7 a.m., as well as at other times during the day.

The biofield meter weighs over 10 kg and has a time constant of many minutes. It is not deflected by drafts and usually does not vibrate or move by itself when a person is not nearby, although the zero point shifts from day to day by a few centimeters.

Results

Initial observations were casual and nonquantitative, but more careful observations were made when it was discovered that the apparatus responded most during the magnetic storms following solar flares. Gradually the observation process was standardized.

A smaller version of the biofield meter (sealed in a bottle free from air movements) showed large responses 11 times out of 15 magnetic storms during the first six months of 1980. Observed rotations of the small pyramid

in the bottle varied from a few degrees to over 90 degrees during strong magnetic storms.

Observations made with the larger version during the month of December, 1981 are shown in Table 1.

Geomagnetic data from the Space Environment Center² was graphed along with the responses of the biofield meter (Fig. 2).

Clearly, the greatest response of the biofield meter occurs during the time of magnetic storms. Just as variations in the geomagnetic field are continuous, so are responses of the biofield meter. I would conjecture that there are daily, lunar, and seasonal variations in the data from the biofield meter along with the peaks related to solar flares. In general, variations in the response of the biofield meter are greater than the variations in the geomagnetic data as measured at Fredricksburg, Maryland (several hundred miles distant), or at Weston Observatory (70 miles distant).

The biofield meter indicates a polarity reversal every few days. This frequently takes place during magnetic storms and just before or after new or full moons.

Of a total of 640 observations including 23 new or full moon periods, the biofield meter was observed to reverse polarity 87 percent of the time. At times other than new or full moon, polarity reversals were only observed to take place about 15 percent of the time. A change in the response of the biofield meter either in direction or amplitude has occasionally been observed exactly at sunrise.

The amplitude of the initial response varies slightly among adults, and children frequently have larger responses. No systematic effects have been observed related to emotional or mental state, or sex of the experimenter, health, alertness, or any other parameter studied. However, such effects probably exist and have not yet been observed with this instrument in its present primitive design. On two occasions two different individuals have shown reversed polarity from others who were measured at the same time.

One German researcher³ reports that the presence of some individuals induces movement in a mechanical balance suspended in a vacuum. If one sits for a long time (30 minutes

or more) under the biofield meter, it will usually come to a new zero point displaced in the direction of the initial deflection and about 1/10 of the amplitude of the initial deflection. This would suggest that the biofield has a steady-state component. At other times it appears that the biofield meter never stops oscillating while a person sits under it. This result suggests that there is a time-varying or pulsing component to the biofield.

The smaller version sealed in a glass bottle is quite portable, and measurements have been made on the coasts and in the mountains of the United States, in Mexico, Puerto Rico, Egypt, and New Zealand. In general, the amplitude of rotation is less near the oceans and greater in mountainous regions. Since the Earth's field changes rapidly at times, simultaneous measurements would be helpful. Since this apparatus provides more information and more variability than the geomagnetic indices, perhaps some other aspects of the geomagnetic or solar activity fields are more closely related to this energy field around the human body.

Several individuals have smaller versions of the instrument and have reported casual observations. A large version was built in the Washington Research Laboratories in San Francisco, and by an independent researcher and former EEG analyst on Cape Cod. Both versions, while slightly different than the one used by the author, show the same general effects. A psychologist in New Zealand has built a biofield meter and reports that the direction of the initial rotation is in the opposite direction as in the northern hemisphere.

In its present form the biofield meter is comparable to the first light beam galvanometers used by early experimenters in the study of electricity. Further refinements in the instrument are obviously needed. For research purposes a form of the device has been built which consists of a copper coil wound about a pyramid frame. This form is also observed to rotate when no current is applied to the coil, more so when current is applied, and to vary with the geomagnetic storms. Current research is in progress to determine the effects of various waveform inputs to the coil.

Discussion

Many parameters and control studies were made to rule out alternative explanations. For example, different shapes were tested. Most worked, and the pyramid structure worked as well or better than most and was easy to construct. However, "pyramid energy," if there is any such energy, is probably not related to this effect.

Biofield meters suspended in sealed bottles provided proof that air currents were not responsible. In this configuration, rotation is observed when a person placed both hands around the bottle without touching it. Responses are much too fast to result from thermal effects. Electrostatic shielding did not diminish the effect, nor did electrical grounding of the subject. Magnetic shielding did stop the effect.

In one control study, four glass jars with hanging pyramids were placed about 10 feet apart on a concrete wall. One pyramid had double magnets on each corner, one had single magnets, one had the magnets alternating north pole up and south pole up, and the fourth had two heavy steel nuts on each corner, of about the same weight as the ring magnet. Double magnets increased the deflection. The unit with alternating polarity of magnets did not move, nor did the one with steel nuts in place of magnets. However, the large model of the biofield meter does rotate when there are no magnets. Magnetism must therefore be only partially related to the observed effects.

At times of intense magnetic storms the effect has been observed when the experimenter was more than two meters away from the apparatus. Rotations of up to 1/4 turn have been observed. Observations with binoculars on both the small and large instruments have repeatedly shown that rapid movements rarely take place when a person is not nearby. The zero point moves a degree or two from day to day, perhaps reflecting changes in the Earth's field and/or changes in the temperature and humidity which effect the nylon suspension line.

Since the measured human magnetic field is only on the order of 10⁻⁵ gauss,⁴ it could not

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possibly be affecting the biofield meter. The effects of a human being on the apparatus can be duplicated by gently moving a 300 gauss magnet about 15 cm from the corner of the biofield meter. Whatever the nature of the biofield, it is large and only weakly interactive with ordinary magnetism.

Suggestions for Further Research

At this time, conclusions are only tentative. These initial observations need to be verified by other experimenters. The apparatus needs to be refined and improved. Individual differences need to be carefully studied and measurements need to be taken on plants, animals, and perhaps water and other substances.

In the theoretical realm, many questions need to be addressed. For example, an English biologist 5 has postulated the existence of a non-electromagnetic field around all living organisms. He calls his theoretical field the "morphogenetic field." The biofield postulated by the author may be equivalent. These are just words, after all. But if the biofield does prove to have physical reality, how is it related to classical fields of physics? Does the biofield obey inverse square laws? Is it AC or DC? Does it have a spiral structure—a vortex form? Can it be focused? Collected? Used to store or extract energy? Can it be made artificially? There are hundreds of possible experiments to do.

In the realm of biology, physiology, psychology, and sociology, there are many important connections to explore. The biofield meter clearly shows variations with solar activity and lunar phase. During solar flare activity, charged particles stream towards Earth in greater abundance, producing so-called magnetic storms. Human health and behavior, as well as animal behavior has been linked to solar activity and geomagnetic storms by many studies.^{6, 7} During magnetic storms people are more psychologically disturbed, and the weather is more likely to be severe.⁸

International battles are more likely during solar magnetic changes which take place every 22 years. The next solar magnetic change is expected around 1985. Will this change the human biofield?

In lesser ways, the geomagnetic field is often disturbed just after every new or full moon and the human biofield also undergoes a temporary polarity shift. Many studies have related destructive behavior of people to lunar cycles. ¹⁰ Research on magnetic effects on living organisms is mushrooming rapidly now and we appear to be at the threshold of many new discoveries. ¹¹ Clearly, something is going on in this area which is important. Perhaps the apparatus described in this paper may help unravel links between the Sun, Moon, and life on Earth, giving us a greater understanding of our place in the solar system.

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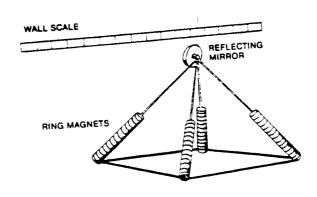


Fig. 1. The Biofield Meter.

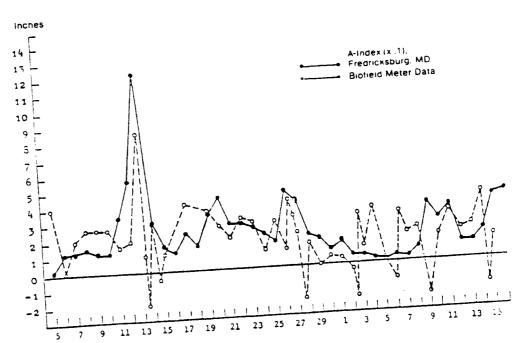


Fig. 2.

Geomagnetic Index (A) and Biofield Meter Deflections.

Table 1. Recorded observations on the Biofield Meter, December 1981.

Date	Time (Greenwich)	Intitial Deflection (cm)
12 / 09	1:24 p.m.	4.5
12 / 10	1:31 p.m.	5.0 left
12 / 11	12:13 a.m.	8.9
12 / 11	3:42 a.m.	(Full Moon)
12 / 11	8:48 a.m.	5.7
12 / 12	5:06 a.m.	3.8
12 / 13	11:30 a.m.	19.0
12 / 13	12:04 p.m.	19.0 left
12 / 14	4:10 a.m.	2.5 left
12 / 16	12:18 p.m.	0
12 / 16	4:34 p.m.	2.5 left
12 / 17	3:12 a.m.	22.0
12 / 17	4:57 a.m.	17.8
12 / 17	5:00 p.m.	6.4 left
12 / 18	2:28 p.m.	15.2
12 / 19	11:41 p.m.	1.2 left
12 / 20	6:03 p.m.	0
12 / 21	3:00 a.m.	2.5
12 / 21	11:33 a.m.	14.0
12 / 21	12:11 p.m.	25.4 left
12 / 22	12:12 p.m.	11.4
12 / 24	10.08 p.m.	1.9
12 / 25	9.42 p.m.	10.2
12 / 25	10:45 p.m.	10.1
12 / 26	2:06 a.m.	12.7
12 / 26	5:11 a.m.	(New Moon)
12 / 26	12:42 p.m.	2.5 left
12 / 26	4:14 p.m.	10.1
12 / 26	11:10 p.m.	7.6
12 / 27	4:02 a.m.	1.3 left
12 / 27	12:56 p.m.	8.9
12 / 28	1.27 a.m.	12.7
12 / 28	2:07 p.m.	26.7
12 / 29	6:08 p.m.	30.5
12 / 29	2:00 a.m.	10.1
12 / 29	8:50 p.m.	2.5 left

The average response is about 10 cm and the maximum is over 30 cm.

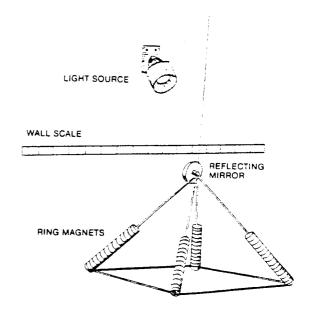
One cm = 0.3° rotation.

THE BIOFIELD METER

A measurement device for what has heretofore been unmeasurable - an energy field around the human body.

The Biofield Meter is simple to use, rugged, and stable in operation. To make a measurement, a person sits under the instrument with eyes at the level of the frame and reads the degree of initial rotation on the scale provided with the instrument. Usually the initial amount of rotation will be between 1 and 7 degrees.

The discovery of this instrument opens up a whole new area of scientific investigation.



WHAT IS THE BIOFIELD?

The term "Biofield" is merely an abbreviation for biological energy field. The biofield is related to magnetism, yet different from it. It may be related to what people have called the human aura. It seems to be a spinning force or torque around the body. Further research is needed to determine the nature of the biofield.

WHAT IS THE SIGNIFICANCE OF THE BIOFIELD?

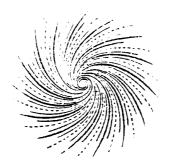
- * Measurements of the biofield have shown that it is highly variable and closely associated with magnetic changes of the Earth's field.
- * During strong geomagnetic disturbances the biofield will vary in both amplitude and polarity.(that is, initial direction of rotation of the Biofield Meter.)
- * There is a polarity change 85% of the time around new or full moon.
- * People are more stressed and hyperactive during periods of geomagnetic disturbance. Accidents, illness, crimes, and international battles are all more likely at these times.
- * Weather storms often are more severe at times of geomagnetic disturbances. The Biofield also varies accordingly.

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PLANETARY ASSOCIATION for CLEAN ENERGY

Newsletter Volume 1, Number 3 September 1979

RADIONICS: The Sane Alternative to Pesticides

An alarming, world-wide insect, plant and rodent resistance to chemical pesticides (including the novel or unconventional ones such as chemosterilants, hormones and growth inhibitors) is being registered. At the same time, more cases of human death and disease as well as severe ecological imbalances directly related to petrochemical pesticide applications are being monitored throughout the planet. Ancient plagues such as malaria and rodent infestations recently considered to be under control are again on the upswing due to resistance to pesticides. To these critical developments, radionics and psychotronics offer a sane alternative. This issue of the Newsletter covers the theory of radionics and its monitered application in a severe Spruce Budworm infestation in New Brunswick, some insights from an entomologist, and finally, a sober report from the United Nations Environmental Programme.

Basic to radionic theory and practice is the concept that all life-forms and matter are submerged in the electro-magnetic energy field of the earth; and further, that each life-form has its own electromagnetic field with its own particular frequency or vibration which can be expressed in a numerical value and which is known in Radionics as a "rate". This energy is, for our purposes, still as yet unidentified with no conventional instrumentation being available to measure it. Another important concept is that the electro-magnetic or life-field of the earth, with its subtler variety of frequencies beyond the electro-magnetic spectrum, provides the link between subject and the radionics practitioner during analysis and interaction.

The energy field of a specific thing and the information it contains is detectable by the human mind/nervous system acting as a sensor and is quantified by a device, a radionic instrument, acting as a tuneable antenna. In this analytical mode, the developed super sensible faculties of the operator play a significant role.

Conversely the energy field of a life-form or thing can be affected by a device acting as a resonant tuned circuit to its frequencies and modulated further by other frequencies. In this transmission mode the faculties of the operator do not appear to be a factor and, furthermore transmission seems to be effective regardless of distance.

This simplified interpretation of Radionics is

offered without going into the full theory to provide a background for this paper. Those interested in more depth on the subject of Radionics, also called Psychotronics, are referred to the bibliography. The book The Secret Life of Plants gives the history and describes the early agricultural success and development of Radionics. These were characterized by the use of an electronic radionic transmission instrument which "tuned" to the specific crop being for insects by means of the energy information contained in a photograph and modulated by the energy frequencies of a "reagent" found to be effective in repelling or controlling the insect pest.

Spruce Budworm Experiment

In the Spruce Budworm Experiment conducted in New Brunswick a different Radionic approach was taken. Unlike an agricultural crop harvested in one season, forest growth requires protection on a long-term basis and so the objective was to protect the foliage of the trees, and not necessarily just the killing of the pest insect. A dual approach was formulated specifically;

- the strengthening of the tree vitality and the provisions of any deficiencies in nutrient or hormonal energies.
- the devitalization of the target insect by the use of very specific techniques rather than using broad spectrum reagents which might also affect the target specie's predator insects.

In the case of the host tree White Spruce, in its early growth it actually manufactures an insect hormone Juvabione, which forestry research has shown to be a powerful ovacide, or insect egg killer. The young trees manufacture their own insect control protection. As a tree matures production of the hormone diminishes so that mature stands of forest create the conditions for a natural cycle of insect infestation. These cycles have become a virtual plague due to the interference in the cycle for valid economic reasons of forest harvesting. Compensating radionically for this deficiency, and others that were found, improved the vitality and the survivability of the trees.

The effectiveness of devitalization of the insects was shown in the experiment where the insect population in the control and test area was the same however in the test area the insects had stopped feeding as witnessed by partially eaten new foliage buds and had not gone to the next stage of development as was found to a greater extent in the control. The test was done very rapidly and late in the season so that the full effect of a proper program was not determined.

Other Experiments

Other experiments conducted at the same time included the repelling of Spruce Budworm Moths as measured by counts of egg masses deposited by

moths and done by offical Forestry survey teams. The results were certainly indicative of success, but were not as definitive as first appeared because of lack of comparison data from previous years.

As well considerable research was done on the Dutch Elm fungus and a double blind experiment conducted which showed success using some techniques but not with others. Since them preparatory research and small scale experimentation has taken place with mosquitoes, black flies, and the area control of biting insects.

Observations

The emphasis throughout our work has been on thorough research into the nature of the insect pest, its cycles, the host plant or tree and the most effective timing and approach to the problem. As well, and almost as important, has been the checking of treatment against companion trees, plants and insects to ensure the selectivity of the control. But most of all has been the effort expended to attempt to solidly substantiate all experiments wherever possible by means of the scientific method with statistical techniques and independent observers. Nonetheless, the following observations are shared at face value without much explanation, but hopefully with some meaning to other researchers.

- Treatments using the "complimentary rate" to cancel out the basic frequency rate of the insect, or fungus, were considerably more effective than treatments using only a reagent in the treatment.
- Treatments against the insect/fungus were found to be more effective if put on for a period of time and then repeated at 24 hour intervals for 3 or 4 times. The decreasing vitality of the insect/fungus followed a step-function with some bounceback occuring when treatment was stopped.
- Experiments and observations on fungus colonies specifically, indicated that the colony was not demolished outright but stopped growing and expanding and then decayed rapidly. This is also corroborated by the interruption of the developmental stages of the spruce budworm.
- Any experiment must be very carefully designed, with the proper experimental protocol being established—or it is unacceptable as proof of what is occurring and is dismissed as being of anecdotal value only.

Future Directions

At the present time there are upwards of 17 commercial enterprises doing radionic agricultural insect control for individuals on private land in the United Staes. It is estimated that in the world, 30-50% of all food grown is destroyed by insects and plant diseases. The applicability of Radionics to agricultural insect control is of prime significance.

However there are a number of other areas in

which Radionics research is also heading which include:

- the "fertilization" of large tracts forest otherwise not amenable to fertilization by affecting tree vitality, a 10% increase in growth could bring a forest to maturity in 30 years instead of 45.
- area control of biting insects such as mosquitoes black flies, tse-tse flies to make areas more habitable for man and livestock, and in the control of diseases such as malaria and others.
- suppression of growth of plants known as "weeds" where they affect crop production.
- control of aquatic "weeds" which are a currently unmanageable problem.
- control of plant diseases, viruses and fungii, which are very amenable to radionic methodology.

It is in these areas of the application of Radionics on a large scale to areas which are essentially public lands where the jurisdiction of the public government agencies is encountered.

It is here that the need for a theory to explain the concept of Radionics is paramount. The lack of an explanatory theory, and the fact that it appears on the surface to be an impossible concept, is a stumbling block to scientific recognition of the viability from displaying an interest of scientific objectivity in Radionics for fear of ridicule. In this regard we leave the pioneering work of explaining Radionics/psychotronics in terms of quantum physics and photons to people like Dr. W. Tiller of Stanford, Tom Bearden and to the Russian scientists who are publishing a tremendous variety of papers on the many aspects of the total area of mind/matter interaction known as Psychotronics/Radionics.

(Ted Klich)

Radionics: Here's what tests showed

A report on radionics testing in Kings-County in 1976 indicates that the experimental treatment of trees affected by spruce budworm had some influence on the trees.

The report was prepared for the radionics company, Kilmac Management Associates Ltd. of Downsview, Ont., by Maritime Pest Control Ltd., of Fredericton, and made available to *The Record*. The report was written by N.R. Brown, of Fredericton, a University of New Brunswick forestry professor.

Radionics is based on the theory that plants emit distinctive impulses the same way that radiation impulses are emitted throughout nature. A machine

pinpoints these wave lengths and the frequency of the plant's vibrations and transmits energy using the earth as a conductor. The plant, acting as a tune receiver, is strengthened against disease, or, in this case, the attacks of the budworm.

The original plan was to conduct the tests in an area located at White's Mountain near Sussex, made available by J.D. Irving Ltd. But on May 25, 1976, the area was sprayed with fenitrothion so it was abandoned.

Next 150 acres located on Route 880, Lester Road, near Berwick, were selected. After an initial malfunction of equipment on May 30, T.J. Klich, an officer of the Klimac Company, reported treatment had taken place June 11-13 on some 200 trees.

The report concludes that while spruce budworm populations were roughly equal on both trees treated with radionics and those in the "control" or untreated areas, the treated trees were able to produce better foliage.

Specifically eight trees from each of the treatment and control areas were sampled. The report said: "For eight trees in each there was no appreciable difference in spruce budworm populations."

Estimates of defoliation in trees sampled were divided into 10 categories depending on the percentage of defoliation. The categories were: 0—no defoliation; T—one to 5 per cent defoliation; one—six to 15 per cent; two—16 to 25 per cent; three—26 to 35 per cent; four—36 to 45 per cent; five—46 to 55 per cent; six—56 to 65 per cent; seven—66 to 75 per cent; eight—76 to 85 per cent; nine—86 to 95 per cent; 10a—96 to 100 per cent (needles almost all missing but some six axils remaining); and 10b—96 to 100 per cent (nearly all needles and axils destroyed).

The report said: "Despite similar spruce budworm population of the treatment and control areas, current defoliation on the trees sampled in the treatment area ranged from Category 1 (6 to 16 per cent) to Category 4 with two trees in Category 1. On the control area, current defoliation on the trees sampled ranged from Category 5 to Category 8 with five trees in Category 5 and one each in Categories 6, 7 and 8.

"Vigor or recovery on the trees sampled in the treatment area was fair on seven of the trees and good on one tree. All eight trees sampled on the control area showed poor recovery as compared to the 1975 condition."

The report said: "It would appear that the trees on the treatment area, with the same number of feeding sites available for spruce budworm in 1976, and the same spruce budworm population in 1976 (at least at the time of the pupal survey) were successful in producing a noticeably and significantly better crop of foliage by the end of the spruce budworm feeding period in 1976 and are thus in a better, healthier condition at this time. July 19, 1976."

Moth repellant tests were then carried out at the University of New Brunswick forestland last July 5. Canadian Forest Service egg mass counts per 102

metres on the treated blocks were: 63,62 and 97. On the adjacent untreated block areas, they were: 1,308, 273, 156, 83, 194, 326, 197, 511, 163 and 654.

Both Mr. Klich and Dr. Brown told *The Record* the results of these tests should qualify radionics for further tests. But while the provincial government has expressed interest, their federal counterparts are not interested. So while potential alternatives to chemical spraying such as bacteria and sex attractions are being tested under federal auspices, radionics is not.

Dr. Brown said, "I certainly do (think there should be more tests). It's an unexplored area with potential."

Mr. Klich said the radionic experiment near Fredericton "had the lowest egg count anywhere." The experiment was carried out "in haste" and what he is advocating is further experiments.

One of Mr. Klich's strongest supporters for more testing in Newfoundland is Senator Chesley W. Carter, chairman of the Senate Health, Welfare and Science committee.

In a letter to *The Record*, dated June 18, Senator Carter said: "Personally, I think the results that have been achieved so far fully justify further experimentation, sufficiently extensive and carried out under such conditions as to provide definite proof either for or against the efficacy of the radionics method.

"Dr. Ray Brown of the University of New Brunswick and Dr. Frederick Conron (of Quebec City), deserve medals for their courage in making positive statements about the radionics. Most scientists are so fearful of the risk of losing face or of tarnishing their image that they prefer to remain anonymous, or even to be negative, regardless of the cost to their country...

"I have talked with Dr. Klich and I know he has become discouraged with the present setup. It appears that provincial forestry authorities depend on the federal forestry authorities and the refusal of the federal forestry division to explore the radionics method while at the same time endorsing the chemical method, raises the suspicion that there may be a tie-in somewhere with the chemical industry, similar to the experience of the United States Department of Agriculture as described by Dr. Conron.

"The cost of the radionics method is only a fraction of the cost of chemical spraying and the potential savings alone justifies a fuller investigation into the radionics method. If there is truth in it, sooner or later the truth will come out because the truth cannot be suppressed forever, and I am therefore grateful to you for keeping this subject alive..."

The theory of radionics has been known for years, but it was discredited 50 years ago when it failed to live up to exaggerated claims. Like electricity, no one can explain it." (John Everett, *The Kings County Record*, Sussex. New Brunswick)

THE INCREDIBLE HIERONYMUS MACHINE

ULTIMATE DOOMSDAY WEAPON OR SAVIOR TO MANKIND?

by Joseph F. Goodavage

Not far from the Pennaylvania Dutch Country, a converted military reconnaisance aircraft flew over rolling hills of verdant farmland in the Cumberland Valley. A camera in the wing faithfully recorded the topography, including brown-grey areas where blighted crops were being attacked by hungry inaects. The film was developed, shown to a local farmer, and the sections he wanted "treated" were outlined. A technician from the Homeotronic Research Foundation in Newport, Pa., clipped out the chosen sections, kept the negative, and placed the selected cuts in the small well of a black box.

"Every morning from 8:30 to 11 for a week," the technician instructed the farmer, "turn this large dial on the top all the way to the right."

Several days later every corn borer, Japanese beetle, even the nematodes in the soil of the selected area, were thoroughly dead -- exterminated in some strange way by "something" (but what?) from the box.

In central Florida, Dr. William J. Hale, Chief of Dow Chemical Company Research, photographed a blighted citrus orchard. He daubed a powerful reagent (a chemical deadly to the insects) on the images of several rows of infected trees. The slender, thread-like nematodes in this warm climate are among the world's most destructive and ineradicable parasites. They bore into the soil to a depth of 14 feet and are impervious to the most virulent pesticides.

Dow's chief chemist placed the photograph into a device similar to the one used in Pennsylvania and gave the citrus grower these instructions: "Turn it on for two hours every morning." The "machine" looked electronic, but there was no visible power source.

A week later, every <u>second</u> row, the "treated" areas <u>of the photograph</u>, was free of all parasitic infestation. The insect destruction in the adjacent (untreated) rows had progressed without interruption. In addition, countless numbers of dead nematodes lay underground --killed by some invisible force from the "machine" -- in soil that had been their haven and breeding ground.

The Journal of Paraphysics (Nov. 3, 1969) reports the extermination of termites -- at a distance and without pesticides -- at the Municipal Works in Rosenheim, West Germany. The electrical system of a power plant in California experienced crippling breakdowns with no known cause until a troubleshooter inserted detailed photographs of the installation into a mysterious, box-like "dowsing" device. Within hours, all circuits and malfunctioning relays were back in normal operation.

Similar experiments in California and Arizona resulted in successful treatment of more than 50,000 acres of diseased and infested trees.

Sometimes the leaves or sap from a plant or tree are used as a "resonant point of contact." A blood sample from a human patient, a lock of hair, or skin scrapings have also been used to establish a "link" to the subject. A photograph is equally effective -- if the negative isn't destroyed:

In another experiment in Pennsylvania, a lily seed was placed in the well of a paionic device (a device whose mysterious power derives from the affinity between similar matter); when the plate was developed, the bulb period of its life cycle clearly appeared in the photograph. Using the same seed, the operator concentrated on a later period, and "tuning" to the correct vibrational rate, developed a picture that revealed a flowering, fully-developed lily!

At a laboratory in Oxford, England, a man put a few drops of a woman's blood into the receptacle of an odd-looking electronic device. Concentrating intently, he turned a series of dials. A white-coated lab assistant loaded a photographic plate into a side slot. They silently timed the exposure. The developed picture revealed the profile of a woman's lower vertabrae and pelvic region. A semi-transparent human fetus, as in an X-ray picture, was definitely visible.

"About six weeks gone, I'd say," the assistant remarked. "Lets see if it progresses normally...set it at four months..."

What's happening here; what do all these various experiments have in common?

"A new force, an energy connected with people, an energy known or unknown that can be directed by mind," wrote Lynn Schroeder and Sheila Ostrander in Paychic Discoveries Behind the Iron Curtain. "That's why interest is running high...why even the Soviets are trying to find the general laws behind spectacular feats (such as making objects sail through the air, killing living organisms at long range, tracing and locating foreign agents in distant cities lust from their photographs), just as flying a kite to catch a spark of lightning is important only because it led to the discovery of the...laws of electricity."

From available evidence, the human race appears to be on the brink of a discovery that dwarfs the combined invention of the wheel and the discovery of fire, electricity -- and atomic energy!

"My personal hunch," wrote trailblazing editor John Campbell in one of his "Astounding Science Fact" editorials back in 1956, "is that these individuals and groups are prodding at the edges of a new field that will open a totally new concept of the Universe. And that, within the next 20 years, the barrier will be cracked; a reproducible machine will be achieved when a valid theory of operation is achieved -- and not before. But I believe that that can be, and will be, done before 1976.

And the man most likely to do it is T. Galen Hieronymus, an amazing inventor whose creative history goes back at least 60 years. Hieronymus began working on new methods of broadcast techniques during 1919-20 when he was in the Army Signal Corps as a radio operator and electrical engineer with the Rainbow Division in France. He'd had his own ham radio license since 1913 and was with station KDKA, Pittsburgh, Pa., and took part in the first radio broadcast. He was also trying to develop a wireless telephone in early WWI when he first discovered some peculiar properties of certain metals and minerals. This led him to experiments with paionics, then called radionics, and the work of other early pioneers inspired him.

In 1956, Hieronymus presented Campbell with a copy of his patent for exactly the kind of device the editor wrote about -- a patent he had applied for in 1946, which was granted in 1948. Hieronymus was careful to introduce his patent principally as an instrument for detecting new, unknown emanations from inert matter, mainly minerals. For very good reasons Hieronymus deliberately kept any life-affecting abilities of his device a secret.

In London two decades ago, George De la Warr made the startling discovery that the emulsion on a photographic plate was somehow linked to the person whose photograph was taken -- or to anything or anyone else in the photograph. Science invariably rejects such obviously "impossible" notions. Scientists know such devices are mere figments of the imagination, so why bother investigating when there are much more important fields of inquiry?

If "magic" exists, then the laws of Sympathetic Magic would come into play, the rule being that "the Symbol is the Object (both in its present actuality and future potentiality). Therefore, whatever is done to the Symbol also happens to the Object!"

Western scientists shrug this off as ritualistic superstition camouflaged by nonfunctional mechanisms used mainly by frauds, medical quacks, and charlatans.

"It's based on voodoo," says the American Medical Association. "...Clap-trap invented by quacks for the desperate and gullible..."

"Quacks" like the Soviet Academy of Science, maybe? To their immense satisfaction, Russian scientists experimenting with parapsychology have established the reliability of the most unlikely phenomena; ESP, psychotronic generators, PK (i.e., psychokinesis, the ability to move physical objects with mind power), and interplanetary telepathy.

British and American scientific institutions insist that an "acceptable" theory must precede experimentation. Those who know the stakes realize how dark the future could be for the Western nations, particularly in high-risk national security matters, or -- as it is now called -- ESPionage. It makes relatively little difference whether you establish a link between a man and his photograph or use the picture of, let's say, a foreign agent to pinpoint his location anywhere on Earth.

In a similar exercise, Hieronymus "eavesdropped" on the flights of Apollo 8 and 11. By tuning his device to the Mitogenic Emanations (also called Odic Force, Helioda Waves, or Eloptic Radiations) of the American astronauts, he monitored their physiological conditions and changes throughout the lunar voyage and return -- even after splash-down and during the ensuing quarantine periods.

Most important, the test data from Hieronymus's device was in complete agreement with NASA's own medical telemetry system. In this instance, however, Hieronymus is one up on the experts. With his device, he detected the presence of an unknown, mysterious belt of radiation surrounding the moon.

This radiation, he says, is harmful -- possibly deadly -- to human beings.

"We're beginning to find hidden barriers and limitations in unexpected places," Hieronymus claims. "Humans are pretty adaptable creatures...on earth. But what kind of energies will we find in other planetary fields?"

Experimenters such as T. Galen Hieronymus, George De la Warr, and Ruth Drown have discovered how people respond to the geomagnetic field, the celestial environment, and...to the mental and emotional attitudes of close friends and co-workers.

"Every living thing radiates this Odic Force," said Baron von Reichenbach (a well-known chemist who invented creosote). He was so impressed by the work of Dr. Albert Abrams, an early radionics pioneer, and Austrian physician Dr. F. A. Mesmer (of "animal magnetism" fame), that he devoted his life to the study and practice of radionics.

"No matter how small or diluted it may be, there's a resonance between the whole human body and each of its parts," Ruth Drown, inventor of a radionics receiver-transmitter device, wrote before she died in a California prison. The hostile American Medical Association protested about her methods and devices, and she was charged and convicted for fraud and medical quackery. Her device, of course, was "obviously" a fake, according to the AMA and the authorities. Nothing could possibly do what her patients claimed the Drown Machine did for them. No point in engaging in useless tests, either. Case closed.

There's no resonance, subetheric or otherwise, in blood samples or tissue grafts from different individuals no matter how closely they are typed. In a series of tightly controlled experiments carried out on plants at the Delawarr Laboratories in Oxford, atrange new facts began to emerge. The growth and health of plants could be influenced by indirect color irradiation from a distance!

Langston Day, in his book <u>New Worlds Beyond the Atom</u>, wrote: "After discovering that the emulsion of an ordinary photographic plate is somehow linked to the person in the photograph, we found that the same rule applied to plants. Later we discovered that plant growth could be stimulated by irradiating (allowing light to strike) its photograph with a device called a Colorscope."

"How can there be a link between a plant and its photograph?" he wondered. "The image on the plate is formed by the multiplicity of reflected light rays coming from the cabbage," De la Warr explained. But in addition to light, other kinds of vital radiations are also emanating from the cabbage; these are received by the emulaion.

"...Each molecule of matter carries an electric charge which is apecific for that particular molecule; this charge acts as an inconceivably tiny radio station which both transmits and receives its own particular signals. When these countless myriads of charged molecules are broadcasting, they build up a Generic Pattern which is the means whereby form or shape appears in the material world.

"Furthermore, since each tiny molecular charge is also a receiving station, the Generic Pattern of a plant or a human being governs the pattern of signals received from outside. This is where a photograph plays its part. The emulsion retains the Generic Pattern of the thing which is photographed, and therefore it acts as sort of a tuned transmitter. If a radionic broadcast is projected through it, this Generic Pattern will transmit exactly the pattern of radiations suitable for affecting the plant (or human being) at a distance."

Probably the most outstanding fact about psionic researchers -- according to my own investigations -- is that so many are hard, practical, let's-see-if-it-works types, not the ivory tower theoreticians lost in dust-covered tradition and completely guided by Authority. The comfortable Establishmentarians naturally won't rock the academic boat; not only do they refuse to investigate, they won't even listen to those who have experimented.

That, unfortunately, has been the all-too-prevalent attitude of the hide-bound establishment scientist -- more of a corporation man than an honest seeker after truth.

When Ed Hermann, an engineer at McGraw-Hill, Inc. publishing company in New York requested that Hieronymus treat a caterpillar-infested tree on his lawn, he never expected anything as far out as "long-distance extermination." Everything else had failed. For several years, in spite of all the pesticides he and his neighbors used, every wild cherry in his northern New Jersey neighborhood was under the murderous attack of hordes of voracious tent caterpillars.

Hermann happened to be investigating psionics and was currently collecting information from Hieronymus. The Florida inventor was visiting Brig. Gen. Henry R. Gross's Homeotronic Research Foundation at the latter's farm near Harrisburg, Pa. Gross, then State Director of Selective Service, was working with psionic devices. (To his neighbors' astonishment, Gross was invariably successful in exterminating insects from a good distance on more than 90 farms in the Cumberland Valley alone!)

"Send me a photograph of your tree," Hieronymus wrote Hermann. "Put some leaves and a few caterpillars in a box and mail them along. And don't forget to include the negative," he added.

This struck Hermann as odd, but he complied with the request. Three hundred miles separated his home from the Gross farm. Yet, a few days later as he pulled into his driveway after work, he hit the brakes and stared in wide-eyed astonishment. Seemingly everywhere he looked there was a "carpet" of many thousands of caterpillars. The furry horde lay in a full circle around the cherry tree and beneath the branches and leaves from which they'd fallen -- struck dead by some mysterious force!

"For your records," Hermann wrote Hieronymus later, "I think you should know that whatever you did to the cherry tree on our lawn was good. We don't have a caterpillar in sight! This isn't normal: last year we were still burning off caterpillars in late June and early July with flaming kerosene torches... Something definite and specific was done here..."

Over the years, individual, widely separated researchers in psionics have been discovering and rediscovering that all matter emits radiations. Meamer's experiments goaded von Reichenbach into studying people who obviously had ESP. With the help of these "sensitives," von Reichenbach accumulated a wealth of data proving the existence of something he called the Odic Force. He discovered it in crystals, in heat, light, magnets, and in living cells; he also found itself manifesting itself wherever chemical reactions were occurring.

Other scientists have reported this Mitogenic Radiation occurring from the growth of living cells. At Columbia University, three scientists, I. I. Rabi, P. Kusch, and S. Millman, developed a new apparatus which conclusively proved that some kind of ray or vibrations pass between one molecule and another. They showed that each molecule, living or inert, is a small radio transmitter (and receiver) that broadcasts continuously. These waves range over the entire electromagnetic spectrum -- often beyond: The sheer volume of these vibrations is apparently limitless. A single molecule can give off rays of a million different wavelengths, but only on one frequency at a time.

When the Hieronymus device operates, the Eloptic Radiation stimulates the Generic Pattern of the subject and some kind of psychic bond or link is established between the emanations of the atoms and molecules of matter and the mind of the operator. Even prior to 1946 when Hieronymus (who is a Fellow in the Society of Electrical Engineers) patented his invention, he had learned that any mineral or chemical compound could be identified by placing an ore sample on a tray, concentrating on the element he was seeking to identify, and turning a dial. When the fingers of the hand stroking a small plate on the machine "stuck," he knew the dial was tuned to the right frequency. Everything has its own "rate." It makes no difference who does the tuning. If the operator concentrates on "copper," the device will detect the presence of copper (if any is present) in the ore sample.

As a detector, it operates in much the same way as a dowsing rod. Everyone who duplicates the experiment will obtain the exact same dial setting (or rate) for the vibration of copper. Interestingly, neither silver, nor gold, nor anything else will cause a "stick" unless it is consciously being sought.

All independent psionic researchers are in unanimous agreement (here and overseas) that Eloptic Radiation of all matter can be caught on a photographic plate and the detector will react to a <u>photograph</u> of a mineral specimen as it would to the mineral itself.

Like De la Warr's camera, the Hieronymus machine also detects emanations from blood samples, minerals, plants, insects — anything at all — that cannot be recorded by any other known method. Moreover, as John Campbell discovered, the device works even when disconnected from its power source (regular household electric current). Since both devices operate on the same psychic principle and can be used as receivers and transmitters, physical illnesses can be influenced even when the patient is in another town or city. This is the most powerful obstacle to the minds of strictly materially-oriented people. The idea that a bit of saliva on a blotter, a lock of hair, or skin or blood samples (to say nothing of a photograph!) could have any connection with a distant patient is enough to cause the most obstinate reaction even among ordinarily reasonable people.

Yet the emanations from all matter anywhere and everywhere in the Universe -- as far as is known -- can be directed along a wire, like electricity, or transmitted from the subject on light waves. This is why Hieronymus called von Reichenbach's Odic Force "Eloptic Radiation." It can be transmitted as an electrical charge, as a radio wave, or as light waves.

To the astonishment of experimenters who sent 50 cents to the Patent Office in Washington and received schematic drawings and a description of Patent No. 2,482,773, the Hieronymus machine did seem capable of receiving and transmitting Eloptic Energy. The problem was (and is) that the operator needed some practice to become "skilled in the art." Moreover, some experimenters seemed to have more natural talent (and patience) than others.

When John Campbell built the device and encouraged Ed Hermann to test it, the "stick" occurred at the right point on the dial every time.

Admittedly, it is a baffling, paradoxical and altogether incredible invention. It can't really be called a machine because it operates as well without connection to a source of power. In this respect, it's a tool. The key to all paionic devices is the Mind of the operator, which is usually attuned to the emanations of whatever object is under analysis. Man's first really powerful tools for aiding mental activity were the equivalents of paper and pencil. Nearly anyone can perform impressive mental feats with pencil and paper -- feats that would be impossible without them. Adding four seven-digit numbers, for example. The paper and pencil, though, have nothing at all to do with the function of the mind. They don't do the calculating, yet most people couldn't do the job without them.

"Psionics," declared Dr. William J. Hale when he was Chief of Dow Chemical's Research Division, "is the field of human achievement beyond science. Only after several thousand years has science been put into some kind of reasonable order. Anyone who thinks this completely

new field -- at least as broad and deep as all known science today -- can be thoroughly investigated in just a few decades is sorely deluding himself."

In his book <u>Farmer Triumphant</u>, Dr. Hale demonstrated how thoroughly familiar he was with the beginnings of paionics in the U.S. and England.

"The human mind, capable of modulating an energy pattern, has a direct connection with <u>physical</u> forces," he said. "Universal Mind is able to manifest through an energy pattern as matter. The Hieronymus device connects a purely mental function, which we call extrasensory perception, with an image on a photographic plate. These paionic devices provide us with an extradimensional tool which is able to probe the gross material results to see what is happening a little higher up on the ladder of Causation."

The fact that a psionic device in unscrupulous hands might enable an operator, theoretically at least, to <u>kill</u> another human being, has never been squarely faced (publicly, at least) by anyone in the field. Yet this apparently unlimited power of life and death resides in the mind of almost any highly skilled psionics operator.

The truth is wholly beyond the comprehension of scientists steeped in traditional attitudes and approaches. Therein lies the margin of safety for the potential killer. He can cause the death of another human being in any number of ways and literally get away with it.

Whenever men have dealt with a power beyond human knowledge or experience, no one paid the slightest attention to the fact that "Here's something that works, by golly! I don't know how or why, but see for yourself..."

As long as Big Science knows for "sure" that it's impossible to cause any physical effect from 300 miles away with a box, a dial, and a photograph, the guy with the device will get nowhere. It seems incredible, but it's true. Any machine that repeatedly does what its inventor built it to do, and predicts it will do, but whose effect is unexplainable in terms of what we know now, will never get a fair test. The prestigious, lavishly funded National Science Foundation will not even look at a practical demonstration of the Hieronymus machine. And the fact that the Soviet Union and other Eastern European countries are developing psionics at a fast pace cuts no ice with corporation executives and government bureaucrats.

"Radiesthesia or whatever you call it," snorted one executive when he heard about it, "is nonsense. It's magic, and grown men know there's no such thing as magic!"

More than 20 years ago, skilled professionals and psychics such as Eileen Garrett and Martin Ebon issued clear warnings about the all-out Soviet effort in training psychics, mediums, and clairvoyants, and developing psionic devices and their psychotronic generators. At the same time the Pentagon pointedly turned down Hieronymus's offer to test his invention. The brass still seems totally indifferent to

learning whether it is capable of more than just making chemical and mineral analyses.

When John Campbell heard about it, he sent for the patent, built his own device according to specifications, tested it repeatedly, and induced everyone who visited his home in New Jersey to experiment with it. For a big, tough-minded, individualistic (often eccentric) acience-baiter, he was absolutely fair and acrupulously honest when it came to facts. Here's what he wrote Hieronymus on June 4, 1956:

"If you can kill insect pests by working on a photograph, and at a distance of thousands of miles -- if I accept that -- it implies that you can kill me with such a machine, despite all that I might do to hide, without my having any chance whatever of protecting myself, without my knowledge or opportunity to defend against the attack. The more you prove you can kill living entities at a huge distance, without any understandable linkage that can be defended, the more you prove I am helpless to defend myself. The more you make a man know that such forces exist, the less he can feel that he lives in a world of reasonable security, wherein he can, at least, have warning of attack and prepare to meet it.

"True, you're attacking only insects; you're <u>helping</u> human beings. But the inherent implications are there, and cannot be denied. You cannot tell me how to defend myself against such an attack; if I acknowledge the reality of those forces, I acknowledge that I am helpless and know of no defense.

"...I selected your machine among the many possible psionic machines available because: 1) it was patented; 2) the patent specified aimply a mineral-analyzer, and the <u>life-affecting characteristics</u> could be ignored; 3) it looks like an electronic-physical machine — it appears to make some sort of almost-sense at the purely physical acience level.

"A man can learn only at the boundaries of the known; your machine appears to be right on the boundary between pure electronics and paionics. Therefore, it appears as though this were a learnable-understandable device that can, with a little extension of already-understood concepts and a little study, be comprehended.

"The therapeutic and diagnostic aspects of the machine -- the life-force aspects -- could be totally ignored, and so physical scientists could attack the problem without stirring deep, and extremely powerful, fears.

"That machine of yours is almost pure magic. In the old, real, and potent sense, it casts spells, imposes death-magic, and can be used for life-magic. It operates on the anciently known laws of Sympathetic Magic; it, like voodoo dolls, applies the law that "The Symbol is the Object, and that which is done to the Symbol occurs also to the Object."

"That's a law, too -- a real one. The primitive human tribes all over the world, from Eskimos through Hawaiians, Africans, Incas, an-

cient Greeks and pre-history European tribes, all independently came to the same fundamental conclusions. It must be that the Laws of the Universe are, in fact, involved.

"You're scaring hell out of the people who understand what you've got. You may be using it well, but release it, and what limits it? If a magician can destroy a man tracelessly, who is safe from threat, from ransom demand, from the vengeful hate of an unjust enemy?

"You're scaring people, and they have reason for their fears -- while you can name no limits to this powerful technique!

"When I began working with the machine, I learned that it didn't need a power supply. Then I learned it wouldn't work if a tube was missing or defective. I saw some of the paionic machines and saw that they worked, despite the fact that their wiring system made absolutely no logical sense. From that, I derived a new concept, a theory, and made a crucial experiment.

"I have a model of your analytical machine, simplified and streamlined to the ultimate. It consists solely of the circuit diagram. I have a symbol of a prism, not a real prism, mounted on a National Velvet Vernier dial: that, and a small copper loop, alone appear on the front aurface of the panel. Back of the panel, the circuit diagram is drawn in India ink on standard drafting paper; the prism-symbol rotates in its appropriate place in the circuit diagram. The spiral coil is drawn in India ink on paper glued to the back of the panel; it is connected with the symbolized vacuum tube plate through a condenser-symbol by means of a nylon thread. The other end of the coildrawing is connected to the symbolized vacuum tube cathode by a second nylon thread from my wife's sewing kit.

"The machine works beautifully; the consistency of performance is excellent.

"We're working with Magic, and Magic doesn't depend on matter, but on form -- pattern rather than substance.

"Your electronic circuit represents a pattern of relationships; that is important. The electrical characteristics are utterly unimportant, and can be dropped out completely. The machine fails when a tube burns out because that alters the pattern; it works when there is no power because the pattern of relationships is intact. My symbolic diagram works because the pattern is present...

"...If you can \underline{do} at a distance through barriers, it is implicit that you could $\underline{observe}$ at a distance through barriers. Clairvoyance means the end of personal privacy. The fact is implicit in the action at a distance without mechanism at the other end. It's frightening."

When Hieronymus filed the patent application for his psionic device in 1946, he was acutely aware of its potentialities. It could be used for great good -- or terrible evil. This, he explained later, was why he <u>deliberately</u> omitted some critical factors. "Those were crucial times," he said. "There was a realignment of political and military power after WWII and I was afraid it might get into the wrong hands."

Whatever the extent of his knowledge then, Hieronymus may have used psionics to learn that the Soviet bloc was even then pursuing serious, state-supported research in the practical use of parapsychology as a tool for ESPionage on an unheard-of scale. He's noncommittal about it, but did admit it was a tough decision to make. In light of what we now know of Russia's research in parapsychology, this could be the understatement of the century.

He realized that once his device became publicly known, sooner or later somebody was certain to realize that unlimited power might be available. There are enough intelligent, clever, often unprincipled individuals (as well as nations) who wouldn't hesitate to use his invention for personal gain or power -- at everyone's expense.

In spite of the great dangers, an unusually quiet cooperation seems to exist among the working paionics experimenters in the U.S. A kind of underground "reservoir" of physiciats, biochemists, engineers, skilled technicians, and science-oriented laymen are alerted to the danger of Russia's near mastery of paionics. Nearly everyone with whom I've discussed the problem has expressed this fear.

Anyone with half a buck for the patent, some odds and ends from a workshop or basement, and several hours to spare can build his own Hieronymus device.

"We've never found anything we couldn't analyze, chemically or otherwise," Hieronymus said. "Distance is a negligible factor, too. When we analyze our physical world we find practically nothing physical, just the manifestation of energy when we divide things down to their ultimate particles."

Describing radionics in his book <u>Psychical Physics</u>, Prof. S. W. Tromp reported "With an instrument, the etheric energy pattern that corresponds to any given object, substance or condition can be artificially simulated. The process is not on the physical level. It lies beyond the limits of the five known senses and seems to be outside the measurable electromagnetic spectrum."

Nearly every honest report about Eloptic Radiation is a mind-bender that shatters all precedents. They are so strange, in fact, that Hieronymus and his colleagues were obliged to establish the Advanced Sciences Research and Development Corporation, Inc.

He published a 22-page consolidated statement containing "Vitality Intensity Values" of the astronauts of Apollos 8 and 11 -- from lift-off to splashdown and through the quarantine periods.

"Of all the data collected and information uncovered by us during the flight of Apollo 11," Hieronymus wrote, "the most important and startling is that there is a lethal radiation belt on the Moon, apparently extending from about 65 miles down to approximately 15 feet from the surface...

"There was a noticeable drop in the general vitality (of the astronauts) and an increase in carcinogenic readings. The pathologies

increased until the men actually stepped onto the Moon, then everything reversed. This situation was similar to all other lunar landings."

Only 500 copies of this report were distributed to interested medical men and scientists willing to study, check, and evaluate the data.

Hieronymus's description of Eloptic Energy specifically states that "it is in no way related to Alpha or Beta particles or to gamma rays. It does not fit into any part of the electromagnetic spectrum. It operates in an entirely <u>different</u> media."

The healing powers of the mind over the body are well-documented, as are its negative, destructive abilities. If we have this capacity to control our own health and disease conditions, including that of life and death, the logical extension would be that some of us should also be able to exercise control over others. If it can be done, it almost certainly is being done! But without using psionic power, it is almost impossible to determine how sophisticated or powerful a stage the evolution of psionics has reached during the past two decades.

Evidence now available seems to indicate that a powerful effort is being made to keep the facts from becoming widely known. Ridicule, suspicion, and discredit have befallen men who reached these conclusions. This is extremely difficult to prove, but this writer has personal knowledge of five very suspicious incidents involving the untimely, mysterious deaths -- several called "natural" and two listed as "suicides" -- of psionics investigators.

Until very recently, this could be done at any distance without the knowledge or consent of the victim, and with absolutely no danger of detection or retaliation. A "psionic shield" is the only conceivable protection against such deadly onslaughts. But such a device would have to be operating all the time -- 24 hours a day, 365 days a year!

Several versions of just such a "psychic shield" are now being secretly developed. Moreover, Bell Laboratories and amother electronics corporation are bidding for the rights to produce the Hieronymus device on a commercial basis (for "scientific purposes," it is said).

Before such things are mass-produced, we need to learn much more about the strange similarities among the deaths of Dr. Morris K. Jessup (listed as a "suicide" when found dead in his station wagon in Dade County Park, Florida, on the evening of April 29, 1959), the prison death of Ruth Drown, and the suicides and deaths of three other investigators whose researches brought them close to almost complete understanding of paionic powers.

Before he died, a physicist friend of this writer was a red-hot amateur astronomer who analyzed light coming in from nearby planets and distant stars by connecting a paionic device to his telescope.

By concentrating on a mental version of the Twenty Questions game, he was able to learn and report that life exists on two planets

(other than Earth) within our solar system. One of these is Venus, but Venusian life forms are unlike anything we know. He detected Mitogenic Radiation resulting from the growth of living cells -- "most probably the cell division in the roots of extremely large plants," he claimed.

Other researchers have analyzed the emanations from relics of the past. In this respect, all psionic devices, including the Hieronymus machine, are also <u>Time Machines</u>! With a De la Warr adaptation, radiations from the fossils of prehistoric creatures which existed on Earth millions of years ago have been caught on film and developed!

Using blood samples taken from his wife and himself, George De la Warr once tuned his camera and concentrated on their wedding day, an event that had occurred nearly thirty years previously! The picture was developed in front of skeptical witnesses and was recognizably that of a young couple in somewhat outdated wedding outfits. He used this same photograph for "positive" identification that the couple were in fact himself and Mrs. De la Warr.

Part of the emerging theory concerning psionics shrinks the significance of Time and Distance to almost pure illusion. This has many fascinating possibilities. Among practitioners of radionics and psionics, the 18th Century concept of the Interplanetary Ether has replaced astronomy's theory of a "dead vacuum" to explain the properties of empty space. It is from this Ether, claim psionics experts, that all life and Consciousness comes into material existence and to which it returns (in a higher state or vibrational plane) after physical "death."

All this makes a compellingly difficult kind of an almost-sense. Hardly anyone whose views have been shaped by orthodox science is able to cope with it, even the most stubborn materialist. At the same time, it holds forth some hope that all is not chaos after all -- and throws a new, excitingly different light on the anciently known concepts of Karma and reincarnation.

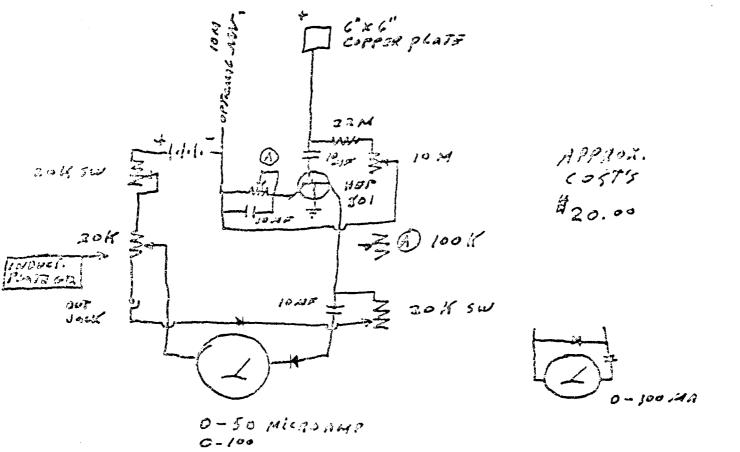
"As the Universe is without beginning and without end, so are all its parts -- equally Eternal." Or...in the words of British cosmologist Dr. Fred Hoyle, "When science begins the study of nonphysical phenomena, it will make more progress in one decade than in all the centuries of its existence."

If my own intelligence, information, and hunches are accurate, that decade is upon us.

+=+=END=+=+

J. G GALLIMORE: HANDBK. OF UNUSUAL ENGRGLES

BIOLOGICAL FIELD EFFECT NETER
SENSITIVITY TO SIX FEST J.G. GALLIMONE 1974



EKG PICKUP FOUR FEET, EEG AT THREE FEET CONTION- WISTER OVERLONDING METER, DO NOT USE AROUND EXECTRICAL APPLIANCES.

PS, QUOTES & COMMENTS —

DEVELOP THE KEELY FORCE YOURSELF

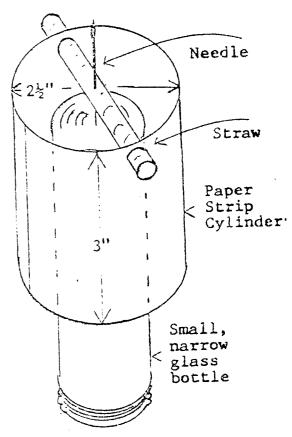
(Psycho-kinetic energies of the kind demonstrated by John W. Keely with his etheric motors can be developed by anyone who really wants to! From Lord Dowding's "Lychgate", pub. 1945 we offer the beginner's exercise outlined below. Good luck.)

To revert now to the subject of magnetic healing. I expect that some of you have thought that I have been making an unwarranted assumption when speaking of the "etheric body", or the etheric counterpart of the physical body. If I tell you that this body provides the ectoplasm out of which materializations this body provides the ectoplasm out of which materializations are built up, you remain unimpressed because you have never seen a materialization and possibly do not want to do so.

Now I tell you that this etheric body is continuously exuding its substance from the finter-tips or toes of the physical body, and that this substance is physical (that is to say, it does not long survive the physical body) although it exists in a gap between the gaseous state and the ultimate physical atom, a gap of which scientists are hitherto ignorant.

You say "Prove it," and I reply "You can prove it for yourself with the homeliest of materials."

Take a strip of paper about 82 inches long and 3 inches wide (the exact dimensions are immaterial, but the paper should be fairly stiff and preferably rough-surfaced) and gum the ends together so as to form a cylinder 3 inches deep and about 22 inches in diameter. Pierce the cylinder as near as possible to its upper rim and pass a stiff straw through from side to side: take care that the straw passes through the axis of the cylinder, or it will be lopsided. Now push a small needle down through the straw at its middle point and at right angles to its length: the point of the needle should protrude about & inch below the lower side of the straw. Now get a thin medicine bottle and stand it upside down on a table, and set the point of the pin on the centre of the glass bottom of the bottle. You will now have your cylin-



der balanced on a practically frictionless pivot and free to revolve under the slightest impulse.

Cup one of your hands round the cylinder with the fingers horizontal, but without touching it, and the cylinder will begin to revolve. If it doesn't revolve for the right hand, it will for the left.

Now if you put the bottle and cylinder in the middle of the room on a small table round which you can easily move, you will find that the direction in which you are facing makes a considerable difference, and if (for instance) you get the maximum rotation with your right hand when facing East, that will be the direction of minimum rotation for the left hand; whereas, if you change round and face West, you will get the maximum rotation for the left hand and the minimum for the right.

This opens up a new line of thought; because it would seem that not only is something coming out from your fingers which is sufficiently substantial to make the cylinder revolve, but that "something" is kindred in its nature to another "something" which varies with the points of the compass.

A later development has been that the cylinder can be made to revolve, without any human influence, under the impulse of that "something" in the atmosphere, in suitable conditions (i.e. when the "current" is flowing strongly). It is only necessary to shield the East or West half of the cylinder with a semi-circular screen of tin or cardboard or glass, so that the current can operate on the exposed half only.

If you play a little with this toy, I think that you will soon convince yourself that draughts, or the warmth of your hands, cannot account for the motion, although the former have of course to be guarded against. The maximum rotation which I have generated in this crude apparatus is about 40 revolutions per minute. This was obtained in both directions with a cylinder made of paper in which I had stabbed a multitude of holes with a pin, in order to increase its surface roughness. The cylinder can be made to revolve, by the influence of the screen, under a draught-proof cellophane cover.

* * *

I believe Lord Dowding was overly optimistic about the possibility of just anyone getting the paper cylinder to revolve, with either hand, sitting in any direction, on the first, or second, or even third try! Nevertheless, this is excellent training in the development of the physical will and every student should add this to his daily routines until he can demonstrate to his own satisfaction that psycho-kinetic energies can be released from his body or aura and directed to do constructive work, especially in the field of healing -- keeping in mind that Spirit help is essential to success!

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VKACO

on the research done with it and its effectiveness as a broadcast treatment instrument. The technical name for this in psychic research is Psycho-kinetics, action-at-a-distance with an invisible force.

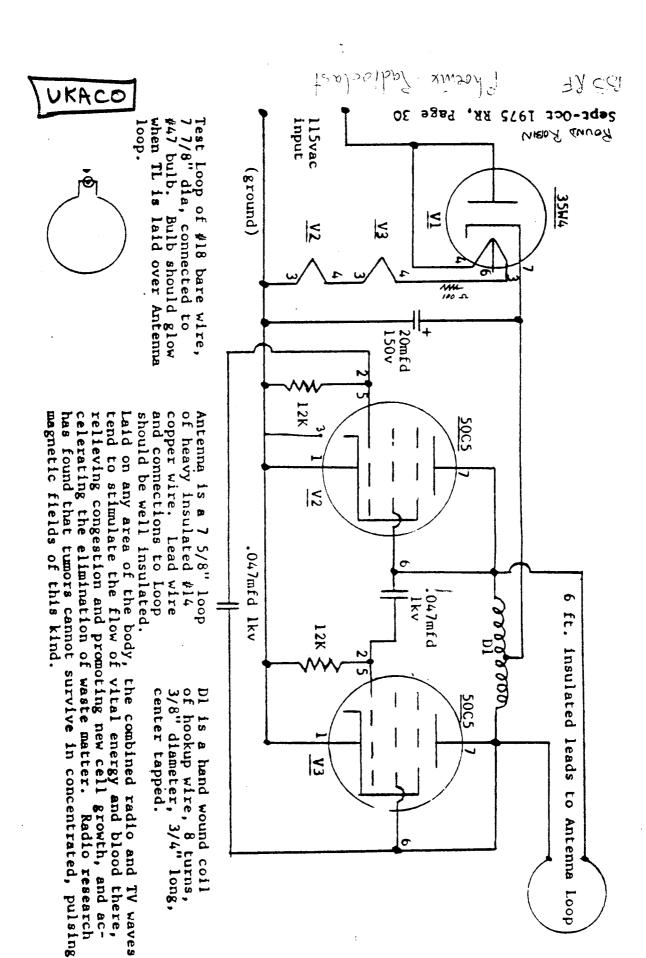
"Fortune" magazine did an article on UKACO in 1952 and the University of Pennsylvania farm burean published a bulletin on it to encourage more experimentation and research. But the Radionics treatment of plants was a major threat to the Oil and Chemical trusts, to their multi-million dollar annual sale of pesticides.

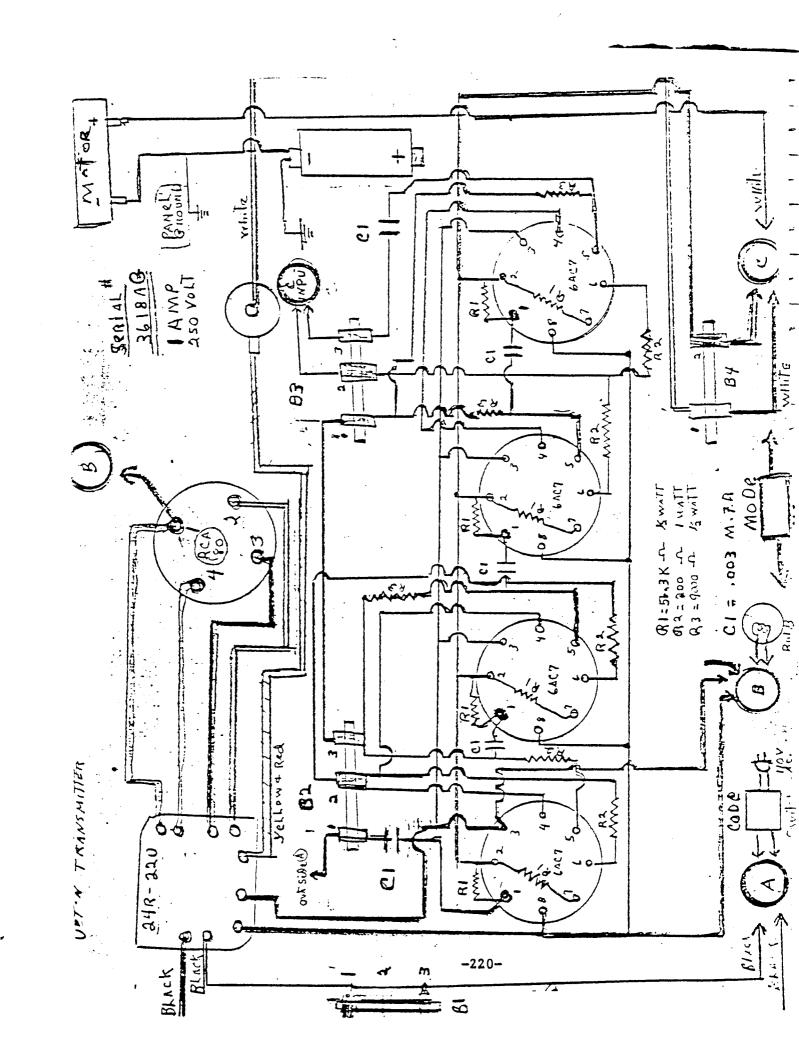
The Santa Cruz area artichoke growers were losing over 90% of their crop to pests when Curtis Upton came along and persuaded one grower to give UKACO a try. It worked, of course, and the farmer harvested over 90% of his crop! So, Upton had eager customers for his services for the next growing season. But he was too successful. There was massive over-production of artichokes that year and the bottom fell out of the market. Nobody made any money but Upton.

A gleeful chemical salesman told his customers: "I warned you guys what would happen if you all went for that new-fangled contraption!" And to make sure that it wouldn't happen again the Oil and Chemical trust put their very effective lobby to work in California's state capital, Sacramento. Now, in this state, it is illegal to do any electronic or Radionic broadcast treatment of plants except for research purposes. More than likely there are similar laws on the books of Texas and other agricultural states.

Now, with pollution of air, water and soil so much in the news, it is time to take up the torch laid down by Upton and Knuth at their passing years ago. Goodavage's articles on Radionics in the nationally distributed "Saga" magazine have helped renew interest in this Aquarian Age science. We do our bit with the addition of the Gerald article and UKACO schematic to this brochure, enough to give any dedicated borderland researcher a start.

Note that the UKACO device is basically an amplifier, not a transmitter. The 6SJ7 tubes called for, sharp cutoff Pentodes, are generally used in amplifier circuits. These are the old, large tubes of the 1940s, as is the 6X5 rectifier. They may still be available but expensive. Acceptable miniature substitutes would probably be the 6X4 and 6EJ7s, and they're cheaper. At inflated 1970s prices, cost of parts will probably be over \$40. The later, miniature tubes have a different internal structure so be sure to consult a tube manual for proper connections. Triad's modern R 104A power transformer has the same characteristics as the older, obsolete R4A. Good luck.





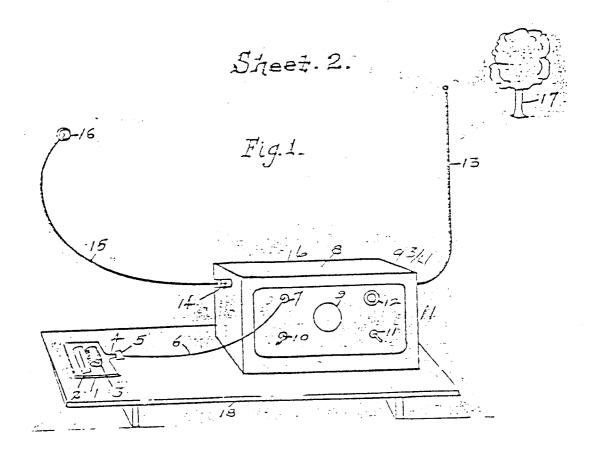
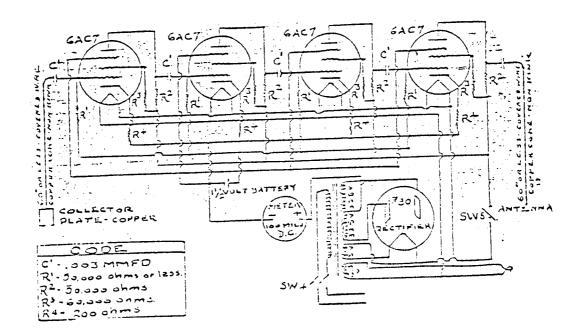


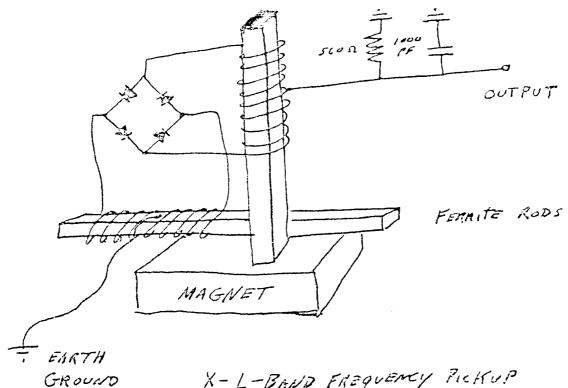
Fig. 2.



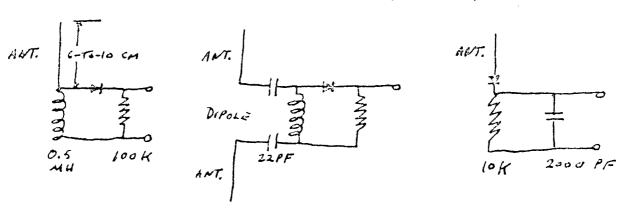
R'- Red-Violet-yellow
R2- Brown-green-orange

UKAKu Homeotronics funndation Penn.

JB Gallimere: Hundbki of Unusual Energies



X-L-BAND FREQUENCY PICKUP WITH MODULATION DETECTOR CONNECT TO TAPE RECORDER FOR RAUDINE VOICES - OR USE FOR ESP DEVICE.



OTHER HI-FREQ. DETECTORS

Busians

BUILD YOUR OWN RADIONIC TUNER

by PETER A. LINDEMANN

1BR /B& RF May : 86

Recently, a number of people have inquired to BSRF how to build your own Radionic device. It seems that the schematics that have been published in the past are some how unclear or that the rates that go with them are not understandable. Therefore, I am undertaking this project, to write a article that clearly makes available to the beginner, a useful, easy to understand device for experimental work.

MY PHILOSOPHY

It should be noted that the FDA, US CUSTOMS and the AMA all frown on these devices. Ruth Drown was jailed for treating her patients with one. And many other horror stories can be recounted as to foul treatment of those who use them openly in the treatment of human disease. Most people get into trouble because they make wild claims and actually obtain only average results. The other way people get into trouble is that they do not understand the LAW concerning the practicing of Medicine without a License. I recommend that anyone building one of these devices use it only on yourself. That way you will be very careful what you do and you will not make any claims that you cannot substantiate. Also, you will not be breaking any LAWS, written or unwritten. With that in mind, I gladly make this information available to the experimenter associates of BSRF.

THE BIO-NORMALIZER

I call my system a Bio-Normalizer because it is a bio-feedback device of the subtlest order. It is based on my own researches but is heavily influenced by the work of Ruth Drown, L.E.Eeman and Dr. Bruce Copen. The device, when complete, works very well with rates published by Ruth Drown or Bruce Copen. Since the Drown rates atlas is available from BSRF, this is a good place to begin.

MY PHILOSOPHY CONTINUED

Radionic devices don't do anything. In this sense they are not machines by the classic definition. Neither do the rates represent the various body parts and diseases. The tuners are made of electrical components that perform no electrical functions. You can see why the FDA might have a little trouble with them.

From my point of view, and the point of view of many radionic practioners, Radionics is a form of CEREMONIAL MAGIC. The tuner is only a SOLIDIFIED THOUGHT FORM and the rates represent AGREEMENTS with the subtle nature SPIRITS. Although some radionic practioners are angered by this type of discussion, others are quite comfortable. One thing everyone agrees with; the more people who use a particular system, the better it works for everyone. I believe that each one of us has the ability to make ourselves sick or well. Most of us have resistance to releasing our own inner healer. That is, we don't give ourselves permission to heal ourselves or others unless some "THING" satisfies our analytical mind's doubt. The thought that the "RADIONIC DEVICE" is healing me is often all that is required to release one's own inner healer from behind the wall of doubt. The results can be incredible, but only when you "agree."

Underneath this simple philosophy, there is an intricate ART OF HEALING. The body built itself from scratch in the first place and it can repair itself easily when all the CAUSES for disease are removed.

A Radionic Tuner may be just what some beginners need to discover these subtle laws of living. The mind is the real Radionic Tuner, and what you think about it makes all the difference in the world.

A VITAL RADIONIC SECRET REVEALED

Eight years ago, on the Island of Hawaii, Marty Martin and I were engaged in some serious research into the operational mechanisms of Radionics. Without going into his proceedures at this time, maybe some future article, Marty first isolated a profound discovery. When, for any reason, the RNA function of the body is depressed, Radionic treatments were almost always uneffective. But, when the RNA was first stimulated by a specific treatment of the RNA only, then all other radionic treatments became effective. After seeing this phenomena a number of times, we finally interpreted it this way. ALL REMEDIES ARE MADE IN THE BODY BY THE DNA! The radionic method is simply a way of "talking" to the DNA. If the DNA could not get its message out into the cell through the RNA, the treatment seemed not to work. This one piece of information may help you get more consistant results in your work. For us , it eliminated almost all the times that our proceedures did not work.

RUTH DROWN REVISITED

In my estimation, all students of Radionics should study the methods of Ruth Drown, especially her discovery of the rates for the Brain Activity Centers. In 10 years of work, I have learned that it is almost never needed to treat a specific organ or gland that is dis-functioning. It is almost invariable underactive because of a SHOCK or a CHOICE has shut down the Brain Activity Center governing that part of the body. By treating the BAC, the body normalizes automatically. Discovering exactly what is obstructing the BAC is sometimes a little challenging, but then no one ever said being healthy was going to be easy.

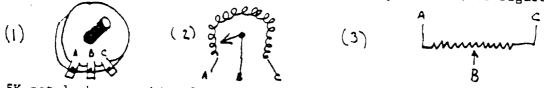
THE CIRCUIT

I could go on and on about proceedures, but lets get down to the hardware. A Bio-Normalizer consists of a main rates tuner, a potentizer, over-function and under-function dials, a specimen or witness plate, a detector (either a shtick plate or pendulum plates), and a broadcaster system. With these features and the Drown Rates Atlas, a beginner is well on his/her way to lots of fun and discovery. Like Ruth Drown, I prefer to connect the human body directly to the circuitry. For this I use a modified Eeman "relaxation circuit" to promote movement of the living energy of the body. With all of the body's vibrations circulating in "relaxation circuit," the tuner then becomes simply a modifier that is tuneable. The body is wired to itself - hand to opposite foot, hand to opposite foot, and the head and sacrum pads connect to the tuner. This system brings the full power of the body energy on to the detector plates to exagerate the indications, thereby helping to eliminate errors in analysis.

The parts list for a 15 dial tuner with pendulum indicator is as follows.

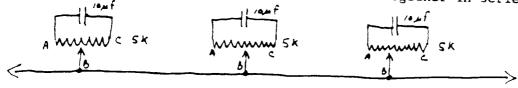
- 17 5K variable resistors
- 17 10 uf capacitors
- 3 one inch square metal plates (stainless steel is nice)
- 2 banana or RCA plug recepticles
- 1 variable capacitor from an old AM radio
- 1 on/off switch
- 17 dials with numbers 0 10
- l dial with line indicator
- l copper plate two inches square
- l briefcase and front panel

The circuitry is of the variable resistive type, with a few differences. First, I realized some years ago that the body energy moving in the circuit is not resisted by the resistors. Since resistance is not the function of the resistor in this case, having the energy flow through the resistor is not necessary for proper function. It is sufficient that the resistor simply make contact with the energy in the circuit. After a lot of research, I devised this wiring method. The variable resistor used is a 5K ohm linear potentiometer. It has three (3) leads or contact points. (see figures 1-3.)



The 5K pot looks something like the figure in drawing (1). I have labelled the three leads A, B, & C. A and C are the two ends of the fixed resistance, and B is the movable member that can sweep around to change the value of the resistor. Drawing (2) is a symbolic diagram of the 5K pot in the same shape as the pot. Drawing (3) is a simple schematic of the same thing.

Next, I attach a 10 of capacitor across the 5K pot from A to C on all the pots in a row and then attach all the B leads together in series as shown.



The living energy in the circuit travels along the wire attached to the B's but does not actually go through the variable resistors. When you turn the dial, it impresses into the life force a subtle CHANGE OF RELATIONSHIP between the two halves of the resistor and capacitor set. This is all that is required for tuning. I use dials with numbers already on them for convenience.

Now that you have a rates tuner, you need some way to raise the potency of any given tuning. For this I use the big variable capacitor out of an old AM radio from the junk yard. When you get one of these, you will probably find four or five possible leads to wire it from. Just pick any two that connect to each half of the capacitor.

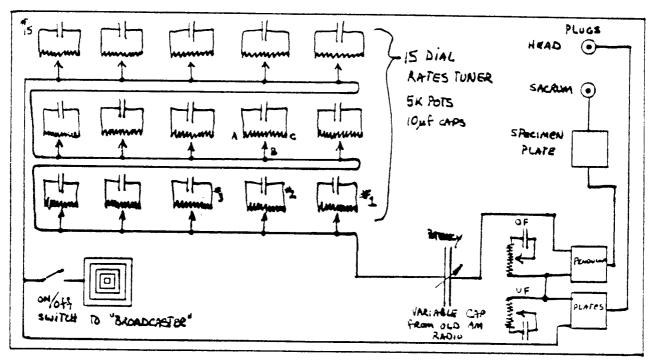
To get a vitality reading on your tunings, we use two more dials; one for OVER-FUNCTION and one for UNDER-FUNCTION. These two dials are wired together and parallel the main tuner.

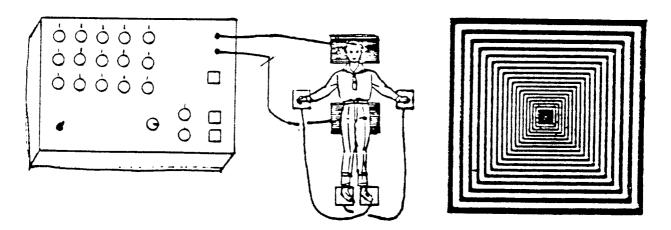
Next, you need a detector. For this system, a set of two plates, one before and one after the tuner, create an energy field to influence a pendulum. The pendulum movements indicate whether or not the energy quality on the two plates is the same. If the energy is the same, the pendulum will swing freely over both plates, breaking into a clock-wise circle if they are exactly the same. This indication means that the tuning on the tuner is already present in the person's energy field, that is, the tuning hasn't changed anything. If you tune to something that is not present in the person's energy field, the pendulum will swing sideways between the plates. This means that the energy on the plates is different, that is, you have added something with your tuning. Other angles of the pendulum swing usually indicate that your tuning is present but that it needs further development, such as compensation on one of the over or under function dials or the potency dial. With this system, you either want a sideways swing or a clock-wise circle swing meaning NO or YES.

Next, you need a specimen plate (for witness or remedy) and a way to connect the body energy directly to the circuit. These are self-explanatory and are indicated on the schematic.

Finally, you may want to "adjust" your energy quality when you are not in the same place as your radionic tuner. For this you may want a method to impress your tunings into the greater "life force" thereby affecting your intentions at a distance. The best low cost method for this use is a YANTRA or POWER DIAGRAM. The simple concentric squares pattern works very well and can be mounted on a copper plate and wired to the circuit through an on/off switch. A strong magnet placed behind the YANTRA strengthens the effect. There are lots of ways to effectively "broadcast" your tunings, so you may want to experiment with this section of the unit.

Well, this should keep you do-it-yourselfer's busy for a while. One last note. The rates are dialed on to the dials so that all the unused dials are INFRONT of the rate desired. The easiest method for this is to dial the rate up backwards beginning from the right and moving left. If there are any other questions, just call Tom at BSRF Headquarters. Have fun!





drawing to Harry C. Gardner. Mr. Gardner went to Brooklyn and saw the Commonder who turned over the drawing or, more correctly, a tracing as the original had been lost. So Mr. Gardner and I are now in possession of possibly the only drawing of Edison's idea extant! I say this confidently as I am now in touch with Miss Mary Childs Nerney who has been assigned the job by the executors of the Edison estate to cull Edison's effects with a view to publishing a book on the inventor's work in the realm of the psychic. It will be a 'Scientific Book of the Month' choice. Apparently his notes were scanty and thus far she has not found any reference to the drawing in question.

Now for the background. Shortly after Edison's death a society was formed to investigate occult things from the physical standpoint. They called themselves: The Society for Etheric Research and it was incorporated under the laws of Delaware. The original members were:

Commander Wynne.

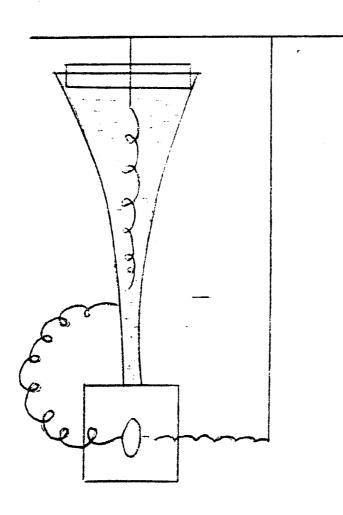
Ralph Fash (Not Fascht as spelled by Edison. He died some time ago; a fact apparently not known to Edison).

Bill Gunther, and

Edith Ellis. She was psychic even then!

They did not get anywhere. The Edison device did not work.

Thomas A. Edison Device

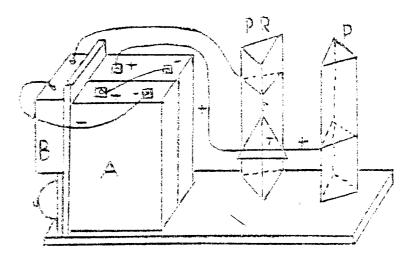


It consists of a cubical box in which is placed a microphone. In the top of the box is a hole from which rises an aluminum trumpet. The dimensions of the box are 4" x 4" x 4" and the trumpet about 18" in height. The wide end has a wooden plug inserted therein and an aerial comes down thru the middle of the plug to half way down the trumpet. The outside of the trumpet and the aerial are connected to two terminals respectively of the microphone. The trumpet is filled with potassium permanganate, whether in solution or in crystal form is not stated. It is clear what Edison had in mind.

The aluminum wall and the interior wire form the opposite poles of a battery or primary cell - the potassium permanganate being a strong exidizing agent and is the electrolyte. The imagined etheric waves which were to actuate the microphone were thus to be amplified by the electrolytic action of the battery. "So communication would be taking place while the reaction was going on!" Recall Panton's remark. It would seem to be an acho of what was once in the inventor's mind. Oh these Akashic records! Also note that in the Olson seance, Basil Valentine says he is helping. Panton says: "There is now a foreign influence, French and perhaps a little Italian, but I have to go back far." Basil Valentine flourished about 1260 to the best of our knowledge and his first books were published in French.

Commander Wynne speaking: "Although the Edison device did not work, here is something that did! And he turned over to Mr. Gardner an original Belgian patent, written in French and granted to a Belgian boy of fifteen by the name of Henri E.G.B. Vandermeulen. Mr. Gardner does not know French and now we may see perhaps why Mons. Huguemont was drawn into this as well as I. Herein follows M. Huguemont's translation:

Vandermeuler Signalling Device



Supplement du Bulletin du Conceil de Researches Metapsychique de Belgique.

January 1, 1931

Instructions for mounting the Vandermeulen Signalling Device.

1. Invention of Device.

This apparatus was conceived on December 16, 1929 by the Henri Vendermeulen, who sied on July 31, 1929, at the age of 15. It was constructed by his father, who completed the work on Sunday, December 22nd, 1929, according

to the accurate indications given by the inventor and communicated to his father by means of a only board.

II. Construction of the signalling device.

The signalling device consists of four main elements:

- (1) Two prisms of glass, 15cm. in height and 3 cm. in width, one of which is completely coated with rosin (P and PR in the drawing);
- (2) An ordinary dry cell for ringing the bell (A);
- (3) An ordinary commercial electric bell (B);
- (4) A triangle made of iron or tinned copper wire, which must be very fine and light and equipped with a suspension hook (T).

The prisms rest on a wide base, insuring their stability.

The rosin-coated prism can be obtained by covering by means of a brush, the three faces and the base by means of commercial rosin rendered fluid or molten on a low fire, the prism being heated prior to the coating.

while cooling, the rosin tends to crack; to avoid this short-coming it is advisable to add, while still in the molten state, one cubic centimeter of turpentine for every 25 grams of rosin, the quantity which is required to cover one prism including base. The rosin must be very hot but must not boil.

When the coating is about 1 cm. thick, the whole is heated so as to equalize the rosin on the glass surface.

The prisms having been thus prepared, are placed on the board which is to act as support, so that there is a distance of 5 cm. between the circular feet and so that one of the faces of the bare glass prism be parallel with one of the faces of the rosin-coated prism; one of the edges of the inster must be directed towards the copper wire which connects the glass prism to the positive pole of the cell.

This copper wire of about 1 mm. diameter starts from the positive pole of the cell and is bent downward prior to terminating at the prism P (bare glass), around which the end is securely fastened; it must pass 2 cm. in front of the edge of prism PR.

The dry cell A, consisting of one of the two elements (depending upon the resistance of the bell), is placed on the prolongation on which the prisms are mounted, and the bell B is mounted on the vertical board.

From the prism PR goes a copper wire, which surrounds solidly that prism at a distance of about 4 cm. away from the upper end. This copper wire is connected to one of the terminals.

The end of the copper wire, which is attached to prism PR, is terminated by a little hook, another hook is attached, terminating the light triangle T, which is made of very thin iron or tinned copper wire, so that the triangle will hang at a distance of about 15 mm. from the prism's edge, and 5 mm. from the horizontal positive wire. The base of the triangle is about 6 mm. below this positive wire.

In this way, the triangle hangs between the prism PR and the positive wire, and at rest its base must be parallel with that wire.

Finally, the negative pole of the cell is connected by means of a copper wire to the other terminal of the bell. When mounted in this manner, the signalling device is ready to operate.

III. Operation of the Device.

The entities which desire to communicate must cause the bell to operate by pushing the light triangle T against the horizontal positive wire.

To this end, they project against the two prisms a flux of energy which electrifies positively the glass prism P and negatively the prism PR.

The positive electricity of prism P passes along the positive wire attached thereto, while the negative electricity of Prism PR flows thru the wire and the hook to the light triangle suspended thereto, and acts as switch.

The triangle which is negatively charged is thus repelled by the negative rosin-coated prism and is drawn by the positive horizontal wire; the triangle and the wire make contact, and the circuit of the cell is thus closed; the current flows thru the bell and causes it to ring.

IV. Purpose of the Signalling Device.

The purpose of the signalling device lies in informing persons who are busy otherwise, that an entity desires to make a communication. To this end, the entity causes the bell to ring, and if the person called has the required faculty of taking a message by oui,ja or automatic writing, the latter may be received.

On the other hand, if a person is near the apparatus and a present entity desires to make a communication, it informs that person, and the latter may then receive the message by the means that have been outlined.

If while a person is present the bell does not ring, it is because the entities do not wish to communicate.

In the case when a person who is near the apparatus desires to receive a message, several minutes are needed sometimes before the entity who wishes to communicate has enough dynamism to cause the bell to ring. One sees then that the triangle moves, and finally makes contact with the positive wire.

According to recommendation by the inventor, the signalling device will not be placed on the market in its entirety. Only the elements will be found on the market unich are required for its construction. The device will have to be assembled by those who desire to posess it.

The writing or this description has been onerous but this is the first time I have attempted to write up the story and I wanted the record complete. I am keeping a copy for future use. The document is unnecessarily wordy but patent law makes no concessions to literary form. The device is really quite simple as can be seen from the attached photostats.

In talling the above story to Mrs. Gwendolyn Kelley Hack, I learned she knew all about the devace, baving experimented with it at 'Villa Serena' above Florence in Italy, and afterwards at the residence of Dr. and Mrs. R. Assagagioli at Arraggo in 1938. Mrs. Hack's notes taken at the time, state that the machine 'worked lustily' in a small room used freely for meditation

Then in March, 1952 Mr. Holland summarized additional information which had come to light, both from his own sources and from those Associates who had written to Meade and to him of their efforts.

A TELEPATHIC COMMUNICATING DEVICE

"Project Hermes is a telepathic communicating device. While primarily intended for use between persons on this plane, it can if tuned to the proper frequency, reach any intelligent entity on any plane. The information concerning it was given, by para-normal means, by friends on another planet and plane.

"It creates a high frequency field which will sensitize indiwiduals to such contacts by stimulating some ordinarily unused
pertion of the brain. There may also be some heterodyning involved.
The frequency used is one which carries only a short distance and
is easily stopped by solid objects. Thus it will ordinarily influence only those in the immediate vicinity. If, however, it is
tuned to the exact frequency of another similar instrument, or
to the natural mental frequency of some other being, then by the
law of resonant rapport its range becomes theoretically unlimited.
For the intended use, however, exact resonance is not mecessary
and quite a large frequency tolerance is permissible. In some
cases it may be necessary to make slight tuning adjustments in order
to produce identical results in different individuals.

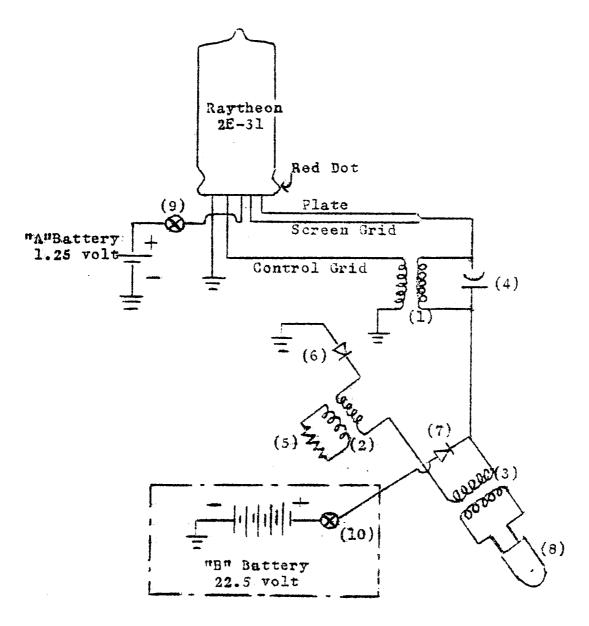
as a fully and immediately workable device, but merely as a basis from which to begin experimentation. The actual device used by the communicators could not be exactly duplicated by us because the parts are not to be had here. On the other hand electronic components available here are not available too the communicators, so they can do no experimental work with them. Such would be useless even if it were possible. Due to differences in the natural mental 'wave lenghts', a device suitable for them would produce no results for us, and vice versa. They have attempted to select components which are commercially available to us, and theoretically work out a circuit which will produce essentially the same result as the device used by them. They do not claim to be infallible, and some changes may be necessary.

"While many persons may be interested in the possibility of communication with entities on other planes, the communicators regard this of minor value. They are, however, particularly anxious to have it developed and universally used as a personal communication device between persons on this plane. This would eventually result in the greatest and most rapid changes for the better in our social, political, economic and human relationship systems this world has ever seen.

"Crime, sin, duplicity, and other unworthy deeds flourish only in secrecy and anonymity. Few are so deprayed as to commit such

deeds in the full light. In any form of telepathic communication the minds of both parties are laid bare. It is impossible to conceal any evil or low intent. If a man wanted to be a stinker; but he could no longer, as now, masquerade as the Honorable So-and-so from here-or-there. His own awareness of his intent and purpose would be so vividly in his mind that anyone who contacted him would instantly be aware of it. Few could stand the resulting contempt.

"If, on the other hand, the device were developed secretly and monopolized by any group or nation, it could result in the greatest evil the world has ever known, since it could be used to hypnotically control the thinking of others. It is essential, therefore, that the information be so widely distributed that it will be impossible for any one person or nation to monopolize it.



Page 24

DATA ON PROJECT HERMES DEVICE

- (1), (2) & (3) Coils. Original information specified Meissner Co. Nos. 14-1074, 14-1072 and 14-1071, respectively. It now appears that these are probably too low in frequency to work. See possible alternate coil data below, worked out by Ed John.
- (4) 3.9 to 14.5 variable condenser, Hammerlund BFC 12 or equal.
- (5) Carbon resistor, 3 to 6 megohm, exact value not critical.
- (6) Crystal diode, Raytheon CK-705 or Sylvania 1N34.
- (7) Crystal diode, Raytheon CK-708 (might sub CK-705 here).
- (8) Cartridge unit only from variable reluctance phono pickup.
- (9) Rheostat, exact value not critical.
- (10) Push button or momentary contact switch.
- Indicates ground to chassis. If metal chassis is not used, connect these points together with wire.

ALTERNATE COILS - The only experimenter who secured any results made his coils as follows: (1) & (2), 10 turns on each primary and secondary of #17 silver wire, $\frac{1}{4}$ in. diameter of coil, and spaced to occupy a total length of about $\frac{1}{2}$ inch. (3) same as above except that 12 turns were used on each primary and secondary. The primary and secondary of each coil were placed side by side about $\frac{1}{4}$ in. apart, and the coils were arranged in triangular fashion to prevent induction from one to the other. (Note: primary and secondary coils could be placed end to end if desired.) To wind coils use two pieces of wire and wind side by side on a round rod or pencil. Slide both off the rod and unscrew one out of the other, giving you two matched coils.

The above coils produced somewhat erratic results and rather weird psychic phenomena, and are perhaps too high in frequency, which may put them into an undesirable astral range. It is suggested that several different size coils be tried. For convenience these can be arranged on some sort of a plug-in mounting board for quick interchange.

TUBE NOTE - The 2E31 tube is a sub-miniature tube developed for pocket size radios, and available only from Raytheon. It has wire leads long enough to permit connecting into the circuit without a socket. Sockets are available, however, which would make tube replacement easier; in which gase the leads are cut shorter to form pins. Almost any small tube could be substituted in case of necessity. (And now in 1960 Transistors and GE Tunnel Diodes are available for operation in this ultra high frequency range, with far less battery drain than the Raytheon tube. Crabb)

BATTERY AND SWITCH NOTE - A standard flashlight battery, when new, has a voltage $\frac{1}{4}$ volt higher than specified for the tube. A penlight cell may be used, however, as the voltage soon drops under load. The "A" battery leads could be soldered directly to the battery, or some sort of string mounting clip

devised. The power should be turned on by a small rheostat, rather than a switch, as the first inrush of current might otherwise be excessive. To prevent the possibility of tube burnout the "A" battery should always be turned on before the "B". A momentary-contact or push-button type switch is recommended in the "B" battery lead. Then, in event of undesirable psychic results, the natural reaction would be to release the switch, thus shutting the device off.

GENERAL NOTES - Ultra high frequency devices such as this are very sensitive to induction between parts. In circuit diagrams lines are often shown parallel as a matter of drafting convenience. In actual construction they should run at angles to each other and be kept as short as possible.

The most desirable construction would be to mount the device on a metallic chassis (copper or aluminum), with each of the three sets of coils in their own shielding cans, which should connect to the chassis. It would also be well to enclose the entire device in a metallic box or enclosure, with only the controls and items (5) and (8) projecting outside. These shielding parts could be bent up out of thin sheet aluminum, or made of foil covered cardboard.

MODULATOR NOTES - (Items 3, 7 & 8) Communicators advise that the frequencies involved are intermediate between radio and optical waves. To quote the remarks of Associate John, these are in the "dog house corner of electronics"; too high for wires and too low for wave guides. Since there is no available component (1952, but who knows what's available now in 1960? Crabb) which would respond to the fundamental frequency, communicators are attempting in their circuit to pick up and use as a modulating frequency one of the lower or higher harmonics. The phono pick-up cartridge listed is about the most compact and the cheapest device which would respond to the lower electro-magnetic harmonics. Certain types of magnetic or dynamic microphones might work equally as well. Only the coils and cores function. All other parts are surplus but need not be removed unless desired.

It should also be possible to make the device function with the upper harmonics: in the sub or ultra optical, or the heat, range. Certain types of photo-electric cells will respond to frequencies outside the visible spectrum. To eliminate possible undesired interference from visible light rays, communicators suggest using either infra-red or ultra-violet filters, both plain and polarized. If any change is made in part (8) it will probably be necessary to also make changes in coupling coil (3) which must have the proper characteristics to match (8) to the rest of the circuit.

CAUTIONS - Experimenters should have considerable background in psychic and occult matters, as some possible results might otherwise be a severe mental shock. Most effective use of

PROJECT HERMES, A MECHANICAL AID TO TELEPATHY

Additional Information and Suggestions by Associate William F. Zwirn

In the book "The Mysterious Past" by Robert Charroux, Berkley Publishing Corp., 200 Madison Ave, New York, NY 100,6, paperback, \$1.50, French title "Le Livre Dupasse Mysterieux", there is a short paragraph on thought waves, page 156: "The Russian scientist professor Kogan has put forward the theory that thoughts can be transmitted by using electro-magnetic fields on waves of extremely variable length, ranging between 25 and 965 kilometers. Successful experiments have been carried out between England and the University of Los Angeles involving a distance of 8,000 kilometers".

25 to 965 kilometers equals 300 to 12,000 cycles and this is our Audio spectrum! (In the beginning was the Word and the Word was with God. Speech is the Carrier and thought is the Modulator! RHC)

In the book "Extra-Sensory Perception, Witchcraft, Spiritualism and Insanity", by A.W. MacLellan, I quote in part: "In order to make it possible for an agent to influence another individual at a distance the Vital Force or Magnetic Aura must first be generated from the living brain (and second from the solar plexus, the power center)". MacLellan wrote that this magnetic radiation was obtained through the witch's familiar, her cat -- praising it, or pinching, a whack on the head, etc. Of course the successful witches were mediums, but we can learn from them. (And what we learn is that Vital Force is necessary to the success of any magickal operation, whether it is drawn from a human being or an animal. This is why the Witch deliberately irritated her cat. That force doesn't come from the mind but from the emotions. (The Christian Bible says it well: "Make a joyful noise unto the Lord."-- if you would have your prayers answered. RHC)

If we study how we hear it could help. A sound is a mechanical vibration coming to our ear. The ear turns it into an electrical vibration for the brain and we "hear" it; so it shouldn't be very difficult to send a message electrically to the brain or inner hearing center, bypassing the outer ear. Call this Clairaudience. Let's see how the Hermes device creates these vibrations from the required parts.

Meissner Coils, Nos. 14-1074, 14-1072, 14-1071 Hammerlund BFC 12 or equal Variable Condenser, 3.9 to 14.5

These can be obtained from the Thordarson Meissner, Inc., Electronic Center, Mt. Carmel, Illinois 62863 -- the coils:

Meissner Coil No. 3, 14-1071 -- 132 to 290 MH (Microhenries) No. 2, 14-1072 -- 132 to 290 MH No. 1, 14-1074 -- 110 to 190 MH

Hammarlund Manufacturing Co., Inc., 20 Bridge Ave., Red Bank, New Jersey 07701, Variable Capacitor -- 3.9 to 14.5 pF (pico farads)

Item 4 and Item 1 in the schematic, Page 24, Capacitor 3.9 to 14.5 pF and Coil 110 to 190 MH

Resonant Freq. =
$$\frac{1}{2\pi\sqrt{LC}}$$
 or $\frac{1}{2(\frac{22}{7})\sqrt{.000110\text{Hx}3.9\text{x}10^{12}\text{F}}}$

The Resonant Frequency I get is 3,000,000 to 8,000,000 cycles. Square waves have already been discussed by another BSRF member and I have nothing to add thereto. So far I need to know why the coils #2 and #3. My electronics knowledge is a little rusty. Now let's go to Page 28 of "Two Inventors". It discusses the frequency of thought waves as 10 to 80 Myriacycles. A Myriacycle is 10,000 cycles so we have 100,000 to 800,000 cycles.

To summarize: Mechanical Sound -- 300 - 12,000 cycles
Project Hermes -- 3,000,000 - 8,000,000 cycles
Nikola Tesla -- 100,000 - 800,000 cycles
BSRF A-F -- 60,000,000,000 cycles (Harmonics)

If I left anyone's frequency out, please add it so we dont miss anything. When the answer is found it probably will be a simple solution that does it. Maybe it's more "how to" rather than frequency.

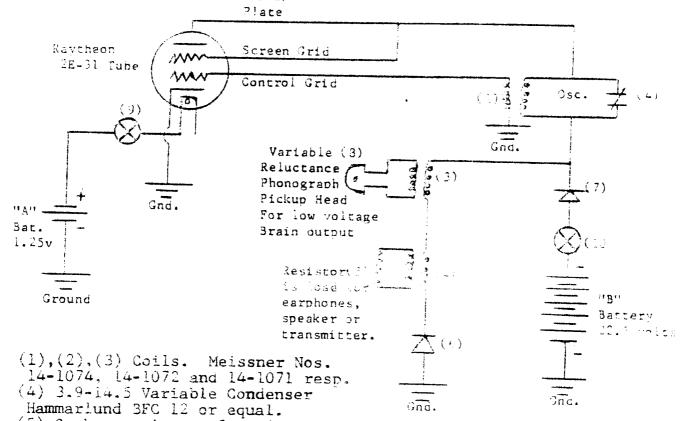
"Extra-Sensory Perception, Witchcraft, Spiritualism and Insanity" by Alastair W. MacLellan, M.A. (Edin.) was published in 1958 by the C.W. Daniel Co., Ashingdon, Rochford, Essex, England. It's a small book, 82 pages, and probably out of print now.

MacLellan heard voices in his head, bypassing the outer ear, and finally learned how he heard them, and was able to duplicate the action. He was an Army captain. He was thought insane but of course was only mediumistic. It is my opinion that this book could help advance Project Hermes considerably. It has the only intelligent explanation of the Witch's Familiar I have come across and it makes sense. It does not give the telepathic frequencies, but it could help once we have them, which is most important. MacLellean does give a useful discussion of frequencies.

REVISED SCHEMATIC OF PROJECT HERMES DEVICE

This is a suggested circuit. It needs modification probably. Nothing is changed from the original except a question about Cathode and Filament in the tube, as you can see. I present it as an educated guess or speculation. Let's see what we have: an oscillator within

PROJECT HERMES SCHEMATIC (revised)



- (5) Carbon resistor, 3 to 6 megohm exact value not critical.
- (6) Crystal diode, Raytheon CK-705 or Sylvania 1N34
- (7) Crystal diode, Raytheon CK-708
- (8) Cartridge unit only from variable reluctance phono pickup
- (9) Rheostat, exact value not critical
- (10) Pushbutton or momentary contact switch.

the frequency range of thought waves and audic waves, also modulation possibilities of oscillator frequencies with audio frequency, and we can transmit or receive this information. At this point it does not marter that the circuit is or is not absolutely correct. Testing, refinement and improvement will come.

REMEMBER THE TITANIC?

People on both sides of the Atlantic received psychic calls for help from the drowning passengers. How! According to the book I referred to previously there was a highly charged atmosphere at the scene of the sinking ship. Everyone there was radiating electromagnetic waves. Prayers, voices were everywhere. The electromagnetic fields of the victims radiated to the brains of the passive receivers on land, where they were modulated by voices reaching the brains. The rest is history. Those at home who were tured in or in a properly relaxed mental frame received accurate audio and visual pictures.

- 34 .

Since we have a magnetic cartridge let's be practical and use it where we always use it, on a phonograph recording; and if the device is working we should hear it talk, inside our heads. Experimentation is required.

Of course, once it starts working life will be different. The moral nature of man will be improved. Evil will be revealed and discredited. Telephone and television will be outmoded. Sickness could be healed by tuning in on offending vibrations and changing them. Like radio in the beginning, many researchers are better than a few. If it works in a room it will work anywhere.

Identified Brain Waves: Alpha, 8 to 13 cycles per second, 50 Micro volts; Beta, 15 to 60 cycles, 5-10 Mv; Delta, 1 to 5 cycles, 20-200 Mv; Theta, 4 to 7 cycles; Gamma waves 14 cycles.

WHAT ARE THE WAVE FORMS?

An oscilloscope of wave forms is needed, especially where the diodes are concerned. Once the circuit works properly in producing the oscillator wave form, and can be modulated with the magnetic cartridge sound frequencies (voice) -- plus being able to transmit then we are on the way. The next step is to experiment with oscillator frequencies. Here the laboratory expert in brain waves can help out. Even if we dont yet hear it in our brain, is it coming through?

There's a good reference to this in a 1974 "Fate" magazine by Mary Margaret Fuller, "A Physical Explanation For ESP". The basis for her article is "Perceptual and Motor Skills", Monograph Supplement 3-V36 1973, \$1.00, Laurentian University, Sudbury, Ontario, Canada. Dr. Michael A. Persinger is one of the three authors.

These two references state that "Scientists have attempted to find some physical mechanism to explain telepathy. Most theories suggest some radio wave-like connection between a sender and a receiver. Recent work with Extremely Low Frequencie (ELF) waves and pulses in the frequency band between .01 and 100 cycles a second may be involved". These are our brain waves since we have identified the ones from 1 to 15 cycles a second. Also "the VLF pulses although thousands of cycles per second can occur as so many pulses per second -- in theELF waves. Despite their low intensities, ELF electro-magnetic waves can travel thousands of miles. . "

I do not understand all this yet. It appears that many different frequencies are going to be discovered, involved from simple brain to brain communication to higher manifestations such as teleportation and creating things, using mind power only. Healing will become a thought eliminating illness and it will begin with our knowledge of Project Hermes. It is important that we develop this communication device. It may also finally solve the mystery of the Flying Saucers. Incidentally, the solving of this problem will also develop the mechanical series.

Besides being a man of varied talents and striking personality, the late Robert T. Nelson was a great talker. Before his death in 1935, he awed his friends by being able to discourse windily for hours on almost any subject. Among his accomplishments was his "discovery," around 1918, of an "element" now called vrilium, to which he attributed prodigious curative powers. Nelson did not explain exactly what he thought vrilium was, but he did claim that it was "radioactive."

In the early '20s, Nelson started packaging a pinch of vrilium inside an ordinary two-inch-long brass cylinder. Popularly called "The Magic Spike," the cartridge was sold to people suffering from a variety of painful diseases. Nelson was always happy to explain how it worked; when the cylinder was attached to the lapel (or hung around the neck), there were "emanations" into the atmosphere for a distance of 20 feet, discouraging all sorts of disease germs. Meanwhile, the vrilium was supposed to "emanate" inward, restoring the buyer's sick body cells to normal.

The Markup. So many ailing people in & around Chicago flocked to buy that in 1944 the Vrilium Products Co. was

formed to manufacture and seil more Magic Spikes. Former Mayor Ed Kelly wore one to the 1948 Democratic National Convention, and credited the healing of a bone abscess to its power. Other wearers included Municipal Court Bailiff Al Horan and Illinois State Senator William J. Connors. Exact sales figures on the Magic Spike are unknown. Osteopath Raymond Kistler of Wyandotte, Mich. admitted that he bought 150 at around \$150 apiece, resold them at \$300.

Last week in Chicago federal district court, the U.S. Government was finally taking official, disapproving notice of the Magic Spike. Inventor Nelson's son, Robert T. Nelson Jr., and his partner George C. Erickson were on trial, charged, under the Pure Food and Drug Act, with "false



ROBERT T. NELSON JR. For violets, vrillium.

and misleading" claims about the gadget's powers (maximum penalty: a year in jail, \$1,000).

The Lowdown. The prosecution called half a dozen disease-ridden Magic Spike buyers to the stand, all of whom testined that they had been relieved of nothing but their money. Dr. George L. Clark, head of the division of analytical chemistry at the University of Illinois, reported that the Magic Spikes he had tested contained no vrilium-whatever it might be-but merely 1/2,000th of a cent's worth of barium chloride, a cheap rat poison. Dr. Bernard Waldman, head of the nuclear physics laboratory at the University of Notre Dame, aimed a Geiger counter at six "radioactive" Magic Spikes in the courtroom. The judge and jurors heard no telltale rat-tat-tat.

Undaunted, the defense sent a parade of satisfied Magic Spike customers to the stand. One man testified that a Magic Spike had cured his dachshund. Hector, of paralysis of the hindquarters. He also declared that until he bought the gadget in 1939, he himself had been short of

TIME, APRIL 10, 1950

breath and unable to walk against the wind. After he got the spike, he said, he walked against the wind fine. Another witness testified that a Magic Spike not only cured his arthritis but also made his wife's violets blossom three times better than normal. Another man simply told the jury that a Magic Spike had improved his wife's disposition.

When young Nelson took the stand, he seemed unimpressed by the fact that his Magic Spikes had got no response out of the Geiger counter. Said he blandly to the jurors: "I believe we have an unrecognized form of radioactivity."

こう でんちなぎ

- Transmitte

Chapter 10

1-8610 by HILARION

Marcus BKS Toronto CAN M4C

Thought-Forms

associated body part, and some kind of chronic imone or more of the major organs or systems of the back to the bodies of their originators, with the result balance, disease or affliction typically results. proceed to alter the structure or function of the body. From this installed position, the thought forms pity will project onto the aether a pattern which is vibemotion like hatred, grief, resentment, worry or selfenergy patterns which arise through man's misuse of that the forms end up connected in some manner with thought-forms, if intense enough, tend to be attracted rationally at the same level as the emotion. These thought and emotion. More specifically, any *negativ*e through this channel will recognize what is meant by the term thought-forms. Thought-forms are aetheric Those familiar with Hilarion's earlier writings 3

auras, devic entities and the like, but also these same tend to be associated. negative thought-forms with which chronic conditions Christine, it turned out, was able to see not only

specific complaint. cellent general health, and apparently without any 11. The children — a boy and a girl — were both in extunity to spend some time with two children aged 8 and summer of 1980, when Christine and I had the opporperiments I am about to report occurred during late The initial impulse to conduct the series of ex-

density of about 200 Gauss in the gas chamber. magnet was able to produce an average magnetic flux a small, hollow, two-inch long brass cartridge. The ing a permanent magnet. The Argon was at 1,300 psi in I had with me a small Argon beam generator,* utiliz-

lie down still on a cot which was oriented north-south One day we asked the younger child — the boy — to

> sketch in Figure 14 indicates the general shape. centrated. She saw a yellowish, vertically elongated the neck of the child, to which it was attached. The thought-form extending upwardly about one foot from Christine sat about seven feet away in a chair and con-

delay of about 7 seconds. thought-form returned to its previous condition, after a became less distinct. When the beam was removed the seen to expand laterally, and to 'fuzz out' so that it also the effect of the inert gas beam on the thoughtchild's head. Figure 15 shows the arrangement, and magnetic field pointing from north to south toward the form. After about 10 seconds, the thought-form was magnet up to the cartridge with the axis of the I then turned the beam generator on by bringing the

age span from 3 to 5 years. susceptibility of his throat region to infection, aside boy. To the present, there has not been any unusual other respects, however, he is a normal, rambunctious from a tendency toward severe tonsillitis during the pitched voice than usual for a male of his age. In al is interesting in that the child has a more highly-The thought form's attachment at the neck location

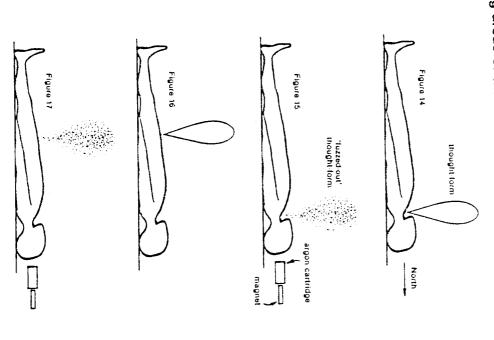
Aquarius and the Moon at 25 Leo. out the gas beam on, Christine saw an orange thought-3, 1969, and has Mars at 19 Scorpio exactly conjunct the mid-heaven, in a T-square with the Sun at 13 point was at the genitals, (This child was born on Feb. form, in the shape shown in Figure 16. The attachment The 11-year-old girl then lay down on the cot. With-

pause of about 10 seconds, and seemed to 'fuzz out' with the other child, the same effect was noted: the thought form gradually expanded laterally after a When the Argon beam was projected and aimed as

ting them to high pressure and magnetism. Argon, can be excited to produce energy fields or 'beams' by subjec-*The book, The Inert Gases, explains how the inert gases, including

pause, by the return of the thought-form to its previous 17. Removal of the beam was followed, after a short and become indistinct, more 'see-through'. See Figure

condition. ing areas of this child's body. ing yet manifested in relation to the genital or adjoin-I know of no physical abnormality or condition hav-



were able to produce from Argon, with the equipment Argon to create a beam of energy capable of destroy week or two of the inert gas treatment. problem or condition re-established itself within a ary change, but in a majority of such cases the physical cure of the various conditions on which they were tried. we then had, failed in many cases to effect a complete become clear to me that the energy beams which we ing these thought-forms. However, it had gradually Hilarion had clearly suggested the possibility of using In many instances the beams brought about a tempor-Back in the early phases of this channel's activity,

destroying the thought-forms which we sought to were soon reconstructed by the conscious or subconsremove, or b) the thought-forms were destroyed but I concluded that either a) these beams were not

cious thought-patterns of the subject.

connected with a particular person, then presumably a over, if the beams were able to destroy a thought-form fect of the inert gas beams on thought-forms. Morean excellent opportunity to determine the precise efceive thought forms directly, I realized that here was nımself. later inspection by Christine would reveal whether that person had reconstructed the same thought-form for When I discovered that Christine was able to per-

appears as Figure 18. The length of the Argon chamber side diameter of one-half inch. The pressure of the was 18 inches, and the brass tube defining it had an invery powerful Argon-beam projector, a sketch of which gas within the pipe could be strongly ionized. Argon (pure) was about 1,300 psi. By applying a high brass wire and the brass pipe surrounding it, the Argon p.C. voltage of around 5,000 volts between the central In preparation for this series of test, I constructed a

gas determines what percentage of the gas atoms will be stripped away from their contained 'vibratory (Theory indicates that the degree of ionization of the

may not be a linear one.) the stronger the beam — although this relationship gas beam will be. The greater the degree of ionization, determines to some extent how strong the generated points' (see Chapter 2 of The Inert Gases), and thus

trode and the brass pipe defining the chamber in which the Argon gas is placed under pressure. ever, ionization could be enhanced by imposing a high atoms within the cartridge. In this new design, howcame about merely due to collisions between the gas ionization voltage between the central brass wire elec-In our previous inert gas beam generators, ionization

ert gas energy, exactly in line with the axis of the brass generated parallel to the magnetic lines. This would with the long axis of the Argon chamber, on the theory then produce a laser-like, highly collimated beam of inthat the most useful fraction of the emitted beam is to set up a 'straight-through' magnetic field parallel used (instead of a permanent magnet). It was desired To create the magnetic field, an electrical coil was

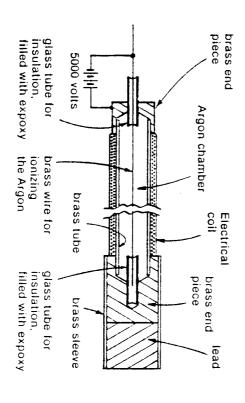


Figure 18

beam was likewise pulsed at 120 cycles per second. second, and we assumed that the Inert gas energy within the Argon chamber was 'pulsed' 120 times each By using a 60 cycle A.C. source, the magnetic field

seen to be located outside of the physical bodies all of the tests we carried out, the thought-forms were It to pass through the physical body of any person. In of the subject. thought-form without having the beam touch the body (though often joined to them), and thus it was a simple ted axially by this device, we were careful not to allow matter to direct the Argon beam at and through the Because of the assumed strength of the beam emit-

Example I, Obesity:
Subject A, female in her early thirtles

History of the condition

and other methods for losing weight, generally to no most of her adult life. She has attempted various diets avail This subject has been considerably overweight for

Initial trials with the Inert Gases

completed. Instead, we utilized a beam generator cartridge containing pressurized inert gas could be placed next to one pole of the iron core. See Figure 19. of magnet wire wrapped around a 2" pure Iron core, which included an electromagnet consisting of a coll tion, the device shown in Figure 18 had not yet been this being arranged so that a 2" diameter hollow brass In the early sessions of this phase of experimenta

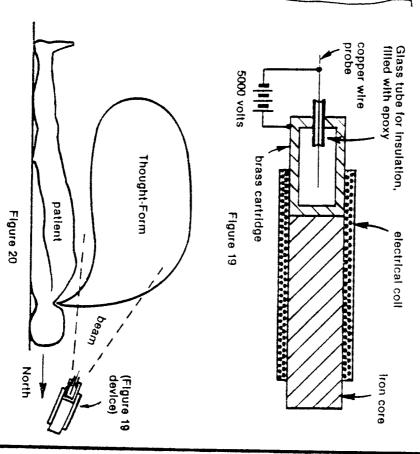
vided with a short copper electrode projecting central modified in the manner seen in Figure 19. It was proapplied between the cartridge and the electrode in through to the outside, so that a high voltage could be ly into its inner chamber. The electrode extended One of the brass cartridges we used had been

140

order to increase the ionization of the gas. This modified cartridge was filled with pure Argon at 1,300 psi. During the first session with Subject A, we had her lie down supine with her head to the north. The apparatus of Figure 19 was positioned beyond her head, aimed toward the south. The arrangement was as seen in Figure 20, which also shows what Christine perceived: an immense thought-form, positioned above the subject, attached to the subject at the neck.

.....

Our first trial was with the Figure 19 apparatus on to maximum magnetic field, but without the application



of any ionization voltage. After a few moments, the thought-form was seen to be 'undulating', almost as if it were squirming in discomfort. However, there did not appear to be any lessening of its intensity, nor did it fragment or break up.

apparatus was turned off, the thought-form returned to bombardment for a total of about ten minutes, but did its original state. not manage to produce any lasting damage. When the a central vertical plane. However it quickly re-united one point the thought-form actually broke in half along seemed as if the form were being attacked from within, the two halves. We subjected the thought-form to this could be seen within the mass of the thought-form. It in some way. This continued for a few minutes, and at later, tiny bright bursts of light, like tiny explosions, volts between the copper electrode and the cartridge. to be squirming even more than previously. Moments time, the thought-form, after a few seconds, was seen The magnetic field was maintained as before. This We next applied an ionization voltage of about 5,000

A week later we held the second session with this same subject. Upon initial examination, the thought form was unchanged from the week previous. Before trying the inert gases, we attempted to have the subject herself use her visualization ability to attack the form. She proceeded to picture the form being 'folded up' like a napkin into smaller and smaller outlines. According to Christine's observation, this mental activity on the part of the subject actually succeeded in reducing the size of the thought-form by about 10%.

Next I attempted to use 'hand-healing' with the guidance of Christine in terms of colors to visualize. The recommended colors were first green, then blue. My hand was held palm down just above the throat of the subject — the location where the thought-form was attached. The effect was that strands of color threaded themselves through the thought-form, and seemed to

Today's Health

The Incredible Drown Case © 1968 Ralph Lee Smith

Mrs. Jackie Metcalf, a 22-year-old Torrance, California, housewife, mounted the steps of a white one-story building on LaBrea Avenue in Los Angeles and entered a door marked "Dr. Ruth B. Drown, Chiropractor." Inside she gave three small pieces of blotting paper to Doctor Drown and her daughter, Dr. Cynthia Chatfield, also a chiropractor. The stains on the blotters, Mrs. Metcalf said, were samples of blood from her three children. She asked to have her children's ills diagnosed from the blood samples and paid \$50 for each diagnosis. The date was May 23, 1963.

In a few days she hear([from Doctor Chatfield that analysis of the blood samples showed the youngsters to be coming down with chicken pox and mumps. On an earlier visit Mrs. Metcalf had purchased from Doctor Chatfield a "little black box" -- a \$588 Drown Therapeutic Instrument -- to treat herself and her family at home. Doctor Chatfield told her how to set the dials on the machine to cure the children.

Mrs. Metcalf, however, was not just another patient -- she was an undercover agent for the California State Department of Public Health. Her three children were not ill. And the blood samples she gave to Doctors Drown and Chatfield were not her children's blood -- they were the blood of a turkey, a sheep, and a pig.

On the basis of Mrs. Metcalf's experience and other evidence, Los Angeles deputy district attorney John W. Miner and a squad of police and public health inspectors swooped down on the LaBrea Avenue building, arrested Doctors Drown and Chatfield and all assistant, Mrs. Margaret Lunness, and took into custody enough Alice-in-Wonderland machines to fill a wing of the Smithsonian Institution. Doctor Drown died in 1965 while awaiting trial. Doctor Chatfield and Mrs. Lunness were convicted of grand theft for their part of the operation and in 1967 were sentenced -- Mrs. Lunness being placed oil probation for three years and Doctor Chatfield receiving an indeterminate prison term. They are appealing the conviction.

The case is a vivid reminder that pseudo-scientific health quackery is still a major activity in the United States. At the time of their arrest, Doctors Drown and Chatfield had treated 35,000 persons from all over the country, and had sold their devices to other fringe practitioners who had treated an unknown number of other patients. The devices allegedly could diagnose and cure nearly every known affliction from jealousy to cancer, plus a few ailments -- which medical science has yet to discover. Actually, expert witnesses testified that the elaborate machines that form the basis of the Drown treatment are a hoax. In finding the defendants guilty, the judge stated that the theory of the treatment is no more valid than "voodoo or witchcraft."

Ruth Drown got some of her ideas from Dr. Albert Abrams, king of 20th century gadget quacks, who died in 1924 after having made millions leasing his machines and treating patients with them. According to the Abrams "theory," which he called ERA, all parts of the body vibrate and emit electrical impulses of different, ascertainable frequencies, What's more, he maintained, diseased organs emit impulses of different frequencies from healthy ones. To diagnose illness he "tuned in" the patient's blood specimen on an Abrams ERA machine, noting where abnormal vibrations were occurring and pretended to pinpoint the nature of the illness from the rate of vibration. The "cure" consisted allegedly feeding proper vibrations

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into the body with another Abrams machine, thus overcoming the improper ones.

The American Medical Association's Department of Investigation has estimated that the Abrams contraptions inspired at least 50 imitations. In state and federal legal actions against such devices, experts repeatedly testified that both the machines and the theory behind them are sheer nonsense. This did not deter Ruth Drown, who took the old master's notions and added many colorful and imaginative twists of her own.

At Drown Laboratories a patient was told to sit beside an impressive console and put his feet on two footpads made of German silver. The console had nine knobs arranged in three rows of three, and each knob had settings numbered from zero through 10, On the console panel there was also a micro-ammeter. Near the right-hand corner of the desk on which the console was mounted was a small rectangular rubber membrane clamped down by a metal frame. Next to this was a cylindrical well about an inch and a half deep.

Seated at the console, Doctor Drown placed an electrode on some portion of the patient's body, Usually his abdomen. This immediately caused a movement of the needle on the ammeter. With her right middle finger, on which she wore a rubber covering, Doctor Drown then stroked the rubber membrane while making adjustments on the nine dials with her left hand. When her finger began to "stick" or squeak on the rubber, this indicated that the dial settings were beginning to approach the vibration rate of the part or organ of the body that she was supposedly testing.

Next she would open a drawer of her desk and draw forth a number of sealed glass vials, each containing a different chemical. These she would insert, unopened, into the well in the desk, one by one, while continuing to make delicate adjustments on the dials. By this means she supposedly arrived at the exact vibration rate. She would then read off the numbers at which the dials were set, beginning with the upper left dial and proceeding horizontally across the three rows to the lower right. This composite number, taken down by an assistant on a large chart, represented the vibration rate of the illness, which could be looked up in an immense "rate book."

The "rate book" also indicated the "normal" vibration rate to be fed back into the body to restore health. In treatment, the patient lay down in a small cubicle in the Drown Laboratories, placing his feet against footpads, and applied an electrode to the area designated by Doctor Drown. Wires led from the footpads and the electrode to a Drown treatment machine in another room, which was essentially the same as a diagnostic machine except that it had no rubber plate. The nine dials of the treatment machine were set to the numbers indicated in the rate book and the patient supposedly received healing vibrations of just the right frequency.

Another Drown treatment device was a tremendous hollow coil into which the patient, lying on a slab, was bodily inserted. "All we know about it," Doctor Drown told investigators, "is that a coil with a charge in it seems to straighten up people who walk lopsided." State officials who impounded the device at the time of the arrests promptly dubbed it "The Tunnel of Love."

If a patient wished to do so he could buy a nine-dial treatment machine for home use. After being, diagnosed at the Laboratory the patient would be told, often over the phone, where to

set the dials for regular treatment sessions at home.

Even this, however, was only tile beginning. If a patient didn't want to bother being hooked up to a machine, either for diagnosis or treatment, either at the Laboratories or at home, he didn't need to. Doctors Drown and Chatfield kept dried specimens of each patient's blood on pieces of blotting paper. If it patient felt ill he could call Drown Laboratories, and the blood sample, instead of the patient, would be hooked up to the diagnostic machine. The blood sample supposedly remained in some kind of continuous communication with the rest of the patient's blood, wherever he might be, and thus reflected any current illness.

Treatment, like diagnosis, could also be "indirect." For \$35 a month, Drown Laboratories would insert the patient's blood specimen into a treatment machine at a specified time each day, set the dials to the indicated healing rate, and broadcast an hour's worth of treatment to the patient, which would supposedly reach him anywhere on the face of the earth.

Ruth Drown also claimed her machines could take photographs of the diseased organs of patients, wherever the patients were. She called the process "radio-vision." Several such photographs were exhibited at the trial, including, one allegedly taken by a Drown machine in London showing a blood clot and cancer in a patient in Connecticut. One medical expert called it "completely unintelligible." Another said that it looked to him like a Rorschach inkblot.

In a University of Chicago demonstration similar photos were produced merely by exposing photographic plates to light momentarily.

Doctor Drown had lots of other ideas. One of them was that jazz music was a cause of cancer. Cancer caused by jazz, she said, could be dissipated by playing such soothing tunes as Carrie Jacobs Bond's "Perfect Day."

She also said that each human body is surrounded by a magnetic field, and that people should be taught how to care for their magnetic fields properly. One of her publications, the Drown Atlas of Radio Therapy, says:

Any patient who is weak and depleted should never take shower baths and stand in the water over the drain, because the patient's magnetism is washed down with the water through the drain, leaving him depleted.

Also, a weak patient, after having had a tub bath, should leave the tub and have someone else drain the water and clean the tub. If it is necessary to do this himself, he should leave the tub and put on a robe before starting to drain the tub. Too many people sit in the tub and drain the water while finishing the bath, and their own magnetism is sucked away through the drain pipes to the ground, leaving the patient with that much less reserve.

As early as 1949, the Drown devices had been shown completely incapable of diagnosing illness. At a University of Chicago experiment Doctor Drown was supplied with blood samples of a number of persons and asked to diagnose their conditions. In one case, after working over her dials for an hour, she announced that the patient had cancer of the left breast which had spread to the ovaries uterus, pancreas, gall bladder, spleen, and kidney; that she was blind in her right eye; that her ovaries were not functioning properly; and that there

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was reduced function of various organs including the stomach, spinal nerves, and heart. Actually, the patient was suffering from tuberculosis of the upper lobe of the right lung.

In 1951 Doctor Drown was tried on federal charges of introducing a misbranded device into interstate commerce. At the trial one of the government's expert witnesses, Dr. Elmer Belt, described tile Drown device as "perfectly useless." "You just do not seem to think much of the instrument, do you, Doctor Belt?" the defense attorney asked. "I couldn't even use it to amuse the children," Doctor Belt replied. Doctor Drown was found guilty by the jury and was fined \$1000. She stopped shipping her devices across state lines but otherwise carried on business as usual.

In 1966 Doctor Chatfield and Mrs. Lunness went to trial in Los Angeles on the state charges. In addition to receiving Mrs. Jackie Metcalf's firsthand account the court heard a procession of witnesses relate astounding stories. One testified that Doctor Drown assured him that his son, a diabetic, could reduce his intake of insulin, prescribed by a doctor, if lie took the Drown treatment. Another witness, an epileptic, was told by Doctor Drown that she could cure him; she said that he would be able to stop taking the drug diplenylhydantoin prescribed by his physician, and she continued to treat him even after he had a severe seizure in her office. In another case, a chiropractor who used Drown therapy instruments on her patients brought a man to Drown Laboratories who had polyps in his lower intestinal tract. A diagnosis by Drown instruments showed no cancer, and the chiropractor therefore continued to treat the supposedly benign polyps with a Drown therapy device. The patient worsened and died. A biopsy, done by a medical doctor, had shown the growths were malignant.

A dramatic highlight of the trial was the testimony of Dr. Moses A. Greenfield, professor of radiology at the UCLA School of 'Medicine and a consultant to the Atomic Energy Commission. Disassembling a Drown device in open court, Doctor Greenfield explained that all it basically consisted of was a length of wire linking together two pieces of dissimilar metal -- the German silver of the foot pads and the lead of the electrode. The only function performed by the patient was to complete the otherwise broken circuit. With the circuit complete, a small electric current flowed between the two metals, which registered on the ammeter on the console. The entire device therefore operated like a simple flashlight battery. It was even possible to eliminate the patient entirely. Doctor Greenfield demonstrated that the same deflection of the ammeter needle could be produced by dipping the footpad and electrode into a dish of water instead of applying them to a human body.

As for the nine dials with their 10 numbered settings, Doctor Greenfield dismounted the panel and showed that only two wires each dial to the circuit. Further dismantling showed that the 10 positions of each switch were connected together and it therefore made no difference on which position any of the dials were set!

The exposure of the scientific fraud brought some moments of amusement to the courtroom. But behind it lay all epic example of heartlessness, cruelty, and indifference to human life. "Quackery can kill," said deputy district attorney John Miner in his summary, "and the use of fraudulent instruments such as these devices in the courtroom is dangerous to human life." The Drown-Chatfield scheme, which treated thousands of patients and took in immense sums of money for years after its worthlessness had been demonstrated in the Chicago experiments and the federal trial, demonstrates that the nation is still far from solving, one of its gravest social problems -- the menace of health fraud.

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Dr. Drown's Homo-Vibra Ray

"The physician is only allowed to think he knows it all, but the quack, ungoverned by conscience, is permitted to know he knows it all; and with a fertile mental field for humbuggery, truth can never successfully compete with untruth." - Dr. Albert Abrams

The history of radionics begins with the discoveries of Dr. Albert Abrams around the beginning of the 20th Century. Abrams was a respectable physician who began to pursue his theories of diseases having specific vibratory rates that could be detected by tapping on the patient's abdomen or spine.

He refined his diagnostic techniques with invented devices such as the ``dynamizer." According to Martin Gardiner, in his book Fads and Fallacies in the Name of Science:

It was a box containing an insane jungle of wires. One wire ran to an electrical source, and another was attached to the forehead of a healthy person. A drop of blood was obtained from the patient, on a piece of filter paper, and placed inside the box. Abrams would then percuss (tap) the abdomen of a healthy person, who was stripped to the waist and always for a reason never made too clear - facing west. By listening to the sounds, the doctor was able to diagnose the ills of the patient...

Not only that, but without the patient even being present, Abrams could tell the patient's age, sex and religion. If a drop of blood from the patient was not available, a lock of hair or even a handwriting sample was enough (he diagnosed ills of long-dead historical personalities in this manner).

After the dynamizer came the ``oscilloclast" and the ``reflexophone." His disciples were never permitted to examine the wiring in the boxes, which were rented to trained practitioners. Gardner again:

Shortly before the doctor's death, however, a committee of scientists opened one of the magic boxes and issued a report on what they found. It contained an ohm-meter, rheostat, condenser, and other electrical gadgets all wired together without rhyme or reason. Since patients did not have to be physically present to be diagnosed by the devices, a thriving industry was created in which people could send in blood samples and receive diagnoses through the mail. Some sceptics took advantage of this anonymity. Blood from a rooster was sent to Abrams, who diagnosed ''malaria, cancer, diabetes, and two venereal diseases."

Among Dr. Abrams' converts was author Upton Sinclair, who wrote that Abrams `has made the most revolutionary discovery of this or any other age. I venture to stake whatever reputation I ever hope to have that he has discovered the great secret of the diagnosis and cure of all major diseases." Further, Abrams had treated `over fifteen thousand people, and my investigation convinces me he has cured over ninety-five percent."

Gardiner sums up Sinclair's many apologetics for Abrams as a ``clinically perfect statement of the persistence of irrational belief on the part of a convert to a totally worthless set of theories hatched in the brain of a brilliant paranoid." High critical praise, indeed.

Dr. Ruth Drown took things a step further, able to not only diagnose but to cure from a distance - any distance - as long as the operator of her Homo-Vibra Ray mechanism had a

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blood sample from the patient on-hand. Not only that, but the device could create X-Ray-like pictures of the patient remotely.

In 1950, the University of Chicago formed a committee to investigate Dr. Drown's methods at work - she had been having remarkable success in finding enthusiastic promoters, including... well, read between the lines in the university's announcement:

On the face of it, the Drown claims appear to be totally unworthy of serious consideration by anyone, least of all a university. However, certain friends who are members of lay boards that have been of great assistance to the university have urged that the Drown claims be investigated so that they may be repudiated if found unworthy or adapted to the benefit of mankind if they should prove to be worthy.

It wasn't even close. In her first test, Dr. Drown took six photographs using her machine on blood samples. None were clear enough for her to base a diagnosis on. The testing committee decided that

the film images which have intrigued Mrs. Drown and her disciples are simple fog patterns produced by exposure of the film to white light before it has been fixed adequately. These images are significantly identical regardless of whether or not the film is placed in Mrs. Drown's machine before being submitted to the highly unorthodox processing which has been devised by her. In the numerous old films shown us by Mrs. Drown we can see no resemblance to the anatomical structures, appliances, bacteria, etc., that Mrs. Drown professes to see.

Test two, a diagnostic test using blood samples was equally disastrous. Healthy patients and ones with obvious medical problems were remotely diagnosed by Dr. Drown as suffering from a motley assortment of maladies. After badly misdiagnosing three patients, the remaining seven tests were abandoned. According to the testing committee:

The machine is a sort of Ouija board. It is our belief that her alleged successes rest solely on the noncritical attitude of her followers. Her technic is to find so much trouble in so many organs that usually she can say 'I told you so' when she registers an occasional lucky positive guess. In these particular tests, even this luck deserted her.

Test three tested the healing powers of Dr. Drown's machines. Drown had claimed to have treated the hemorrhaging of a traffic accident victim in Italy by using her machine in California. She was confident she'd be able to stop the bleeding of two lab animals from one room over. Two dogs had their arteries perforated; two dogs bled to death; the committee report:

In the opinion of all observers, including herself, Mrs. Drown failed completely to control or modify hemorrhage. Spectacular failures such as these have hardly slowed the radionics industry. Indeed, if the links in the column to the right are any indication, radionics is going strong.

The modern radionics expert, with her thousand-dollar medical dowsing rod, her extensive training in the subtleties of homeopathic diagnostic samples and remote healing, her wholesale appropriation of respectable-sounding medical terminology and trendy new-age

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jargon - what are we to make of her and her practice?

It's cheap and easy to determine that the apparatus and theory of radionics is complete bunk. The fact is, though, that as a form of faith healing it does heal some people with remarkable success, and a success that medical science might be unable to match with its techniques.

Medicine has long acknowledged that in order to scientifically test the efficacy of a new medicine, for instance, it must be compared to the effects of a placebo administered with equal solemnity, ritual and belief. This is because the solemnity and ritual and belief can themselves heal.

Establishment medicine often seems to treat this as an inconvenient fog that makes the respectable diagnosis of physical ailments with chemical remedies more difficult.

Faith healers, like radionics practitioners, use placebo healing as a technology, intuiting that to master the authoritative trappings of a cure may heal more patients than a conservative and prudent scientific diagnosis and treatment.

An establishment physician diagnoses depression from a checklist of symptoms, represented in a patient's case history and in interviews with the patient. He knows that scientific, double-blind tests have shown that chemicals that inhibit the ``reuptake" of ``serotonin" can cause the patients depression-indicative symptoms to lessen or disappear.

The radionics practitioner discovers from the patient, who describes himself as depressed, overworked and struggling with the challenges of raising teenagers, clues as to where disturbances in the ``subtle energy fields" that create the multidimensional interference pattern that is the patient's body and life may be found. She knows from her training and experience that by using her precision instrument, she can influence not only the patient's bodily health but the very circumstances of his life that are causing him distress.

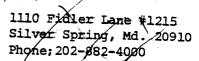
In some patients, a placebonic cure of their love-lives or their terrible commute or rotten landlord - or perhaps more importantly, the treatment by a medical practitioner who agrees that these environmental irritants are to blame (at least in part) for the problem - may lead to better results for the patient than all the scientifically-proven treatments of scientific medicine.

I happen to believe in the nostrums and rituals of establishment medicine, and I have no patience for a healer who wants to clear my chakras with tachyonic chi-crystals. But, on the other hand, an MD in a white lab coat with a stethiscope can boggle me with equally nonsensical diagnoses and courses of treatment, expressed in a language that I respect (even if I don't fully understand) and have confidence in, and I'm sold.

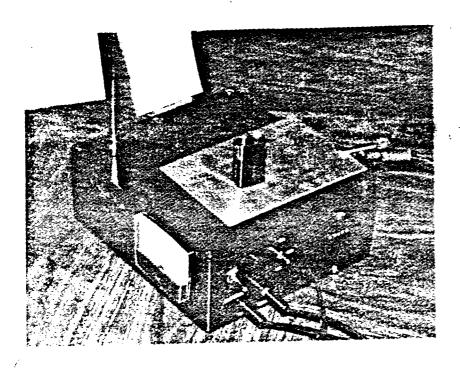
So here's an ethical question for Dr. Reader: If you have no idea what is wrong with a patient and don't really know how to proceed or know of no therapy that's likely to promote healing for a particular patient - are you honest with your patient?

Is it better to honestly confess the limitations of medical knowledge and technique, or is it better to put your hard-earned trappings of medical authority to good use in the ``theatrapeutical" creation of a potent placebo cure?

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MANKIND RESEARCH UNLIMITED INC.



NEW PRODUCT ANNOUNCEMENT

AGRAD MACHINES

AGRICULTURAL RADIATING

MACHINES: FOR INSECT CONTROL

Note: (1) Actual photo of AGRAD machine model 81A. 9V battery is shown only for scale purposes and is not used in the unit.

(2) This is the same unit developed and used by General Henry M. Gross and his associates at the Homeotronic Foundation of Harrisburg, PA, in the 1940-50's. MRU is the only current source of these original units.

Mankind Research Unlimited, Inc. (MRU) is now introducing on a limited basis for experimental use only the agricultural field-effect radiating machine, designated the AGRAD which is solely intended to be used in the treatment of crops and the control of insect populations.

The AGRAD machines have been used for several years by MRU researchers to conduct experimental applications of the type described in The Secret Life of Plants by Christopher Bird and Peter Tompkins, and Report on Radionics by Edward W. Russell. Theoretically, the AGRAD machine is intended to produce effects in electromagnetic wavefronts that will interact with the environment thus enabling control of insects by disturbing the latter's sensor mechanism.

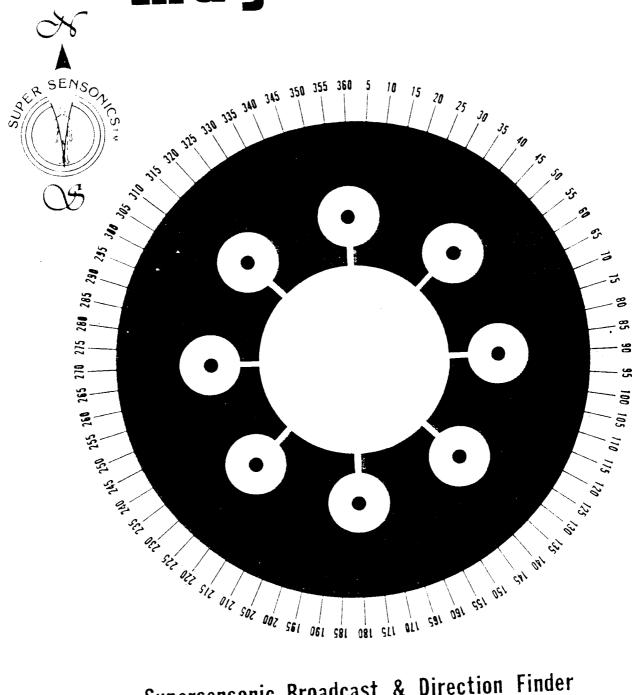
The AGRAD comes equipped with the basic field transmitter unit, copper plate for specimens, connecting wire to plate, and ground wire with alligator clip. Reagents for specific insect control are not included in this offer but will be made available via special licensing arrangements with those who request it.

The AGRAD machine will be shipped upon receipt of check or money order in the amount of \$390.00 plus \$10 for shipping and handling charges.

The AGRAD machine is intended for experimental research purposes for insect control. No claims are made as to results to be expected or exact theory of operation. MRU reserves the right to refuse to sell or lease an AGRAD machine without giving cause or reason for doing so to any prospective purchaser. Ninety day warranty on all basic electronic parts is granted.

Training sessions are conducted in the use of the AGRAD machine for insect control. Inquire about training schedule, location, and fees at MRU office.

magnetron



Supersensonic Broadcast & Direction Finder

Magnets under circles

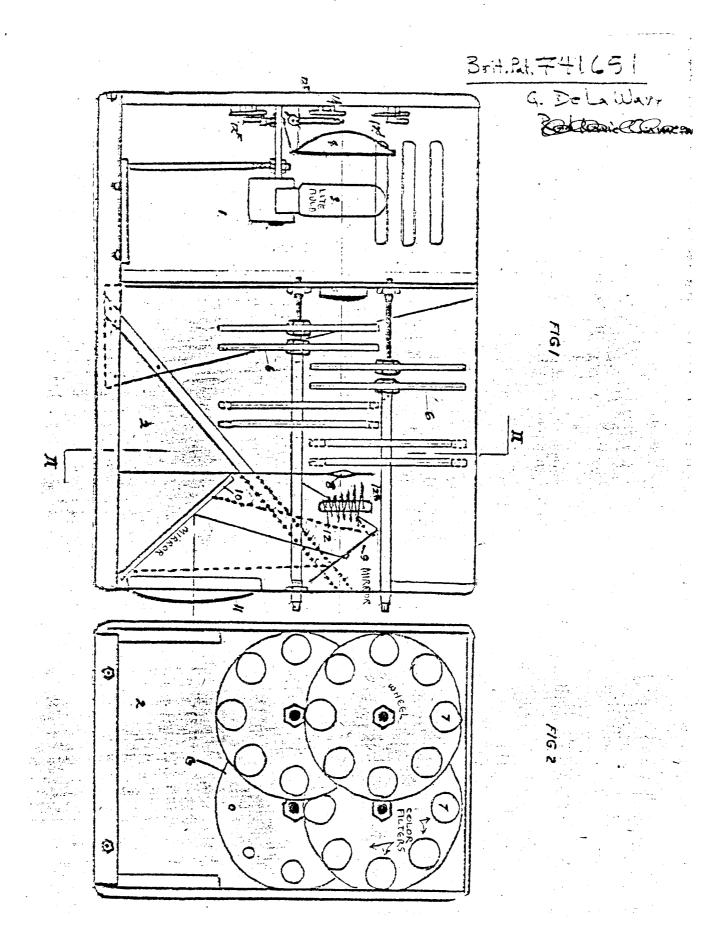
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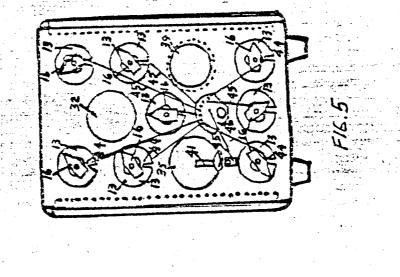
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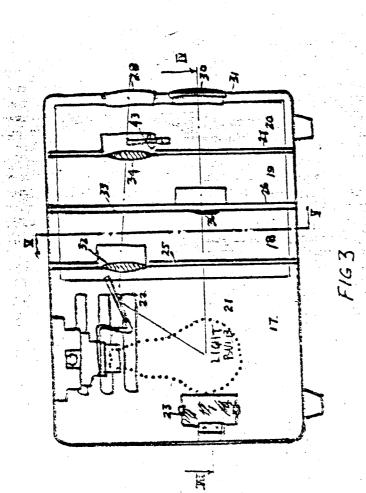
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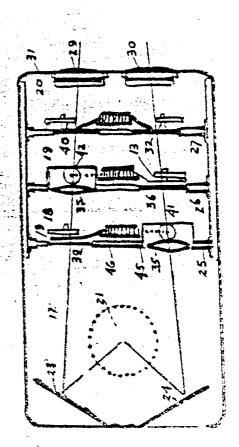
PO Box 644

Boulder Creek, CA 95006









United States Patent [19]

[11] 3,759,607[45] Sept. 18, 1973

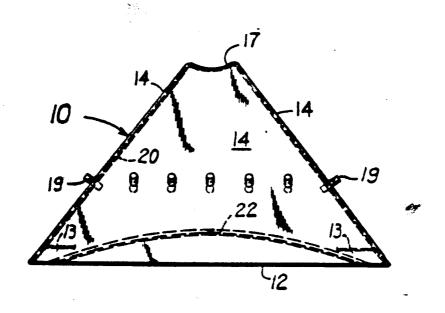
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	_		STATES I	
1,968,	759	//1934	GEF et al	272/8 M
	283	V1972	Chatenis	350/293
3,614,	213: 10	¥1 9 71	Mahonsy	350/299
3,467,	5 34 (V1972	Mertines	350/286

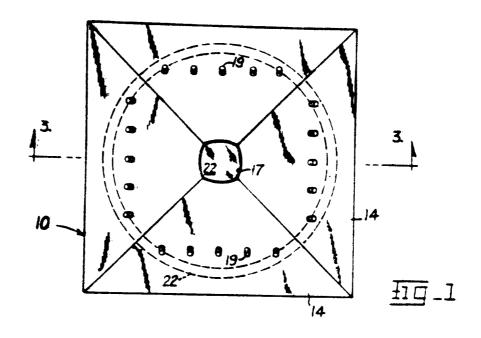
Primary Examiner—David Schonberg Assistant Examiner—Michael J. Tokar Atterney—Charles W. Chandler

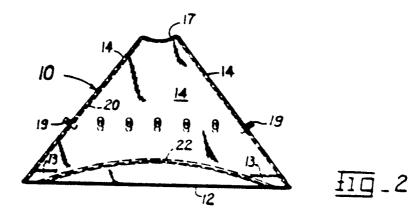
[57] ABSTRACT

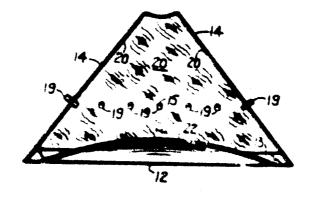
In an occult illuminator system, are occult illuminator device and method are disclosed comprising, inter alla, providing a hollow chamber having window means therein so that the interior thereof can be seen by a person as a viewer looking into said chamber through said window means, said chamber having light reflective material lining the interior thereof, at least one half of which is crinkled metal foil, illuminating the interior of said chamber and reflecting the light therein off said lining and through said window means to the eye of said viewer, whereby to form images which appear in said chamber in the mind of said viewer.

4 Claims, 3 Drawing Physros



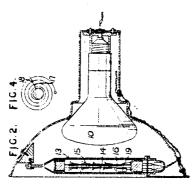






<u>Fig</u> _ 3

761,976. Radiation-therapy apparatus. ARR G. W. De. April 6, 1954 [April Addition 10064/53. WARR G. 1953], No. Class 81(2)



HALO AND COLOR foratio Sc.

DEVICE FOR DETE

ing a tube 14, containing four generally conical brass spirals 15 mounted on a common axial spindle 16 made of dielectric moulded plastic material, is detachably mounted in front of an infra-red lamp 10 so that the light beam is at right angles to the axis of each spiral 15. Each spiral 15 is provided with a radial tapping ann 17 engaging a predetermined point 18 in each spiral 15. An electromagnetic radiator 19 and an initiator unit comprising at least one generally conical spiral of non-magnetic material interposed in the path of the beam. An initiator element 13 comprisof the tube 14. The radiator 19 may altersource arranged to project a beam of infraultra-violet or visible light radiation comprising a 70,000 ohm resistor heated by electric power is mounted in the lower end The settings of in the form of

its operator, comprising a housing, a first lamp supported in the housing for emitting a sustained bright light, said housing hiving an opening at one end through which

for visually conditionin

optical display device

7

said light is visible, a second lamp in the housing for at about 3650 angstrom units, a rotatable disk in the housing, said disk having a surface exposed to the second emitting ultraviolet light in a narrow band width peakin,

thermionic vacuum tube. each tapping arm 17 is pre GROUP

April 9, 1947, No. 9456.

zes, shapes and colors, said spots being rendered minous then the second lamp is energized to project ultraviolat light upon the spots, a motor rotatably porting said disk, and circuit means connected to the and second lamp for lighting the first lamp in one of a timed cycle, then extinguishing the first lamp first a portheister and here amountaineously lighted amp, said surface having fluorescent spots of different is preadjusted during

Group xx

[Class

the motor to turn said

motor rotating the disk at a speed not greater

ond lamp and energizing

7

ut twelve revolutions per second

The dielectric by coaxial bar particular upon the assembly of the apparatus, the partice settings chosen being dependent upon condition, to be treated. The dielespindle 16 may be replaced by coaxia magnets.

Spectroscopic apparatus. 626,396. 97 (i)] [Also in Group VI]

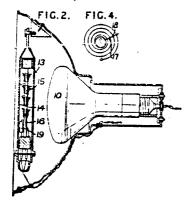
Apparatus for use in radiesthesia comprises a light source, means for directing a beam therefrom in a direction inclined to a projection surface which is divided according to the Turenne or Lesourd Rules, a slit limiting the beam, an optical system projecting the spectrum of the beam on to the surface and a holder for locating preparation slides in the beam. As shown the prism system 11

projects a spectrum on the ground glass screen I from light which has passed from the lamp 2 through a collimating quartz rod 5 and a slit 6, a holder 8 permitting slides 10 carrying the specimen, e.g. blood, to

ATKINSON, D. W.

be inserted in the beam so that the spectrum produced thereby is visible on the screen. Specification 515,866 is referred to.

761.976. Radiation-therapy apparatus. LA WARR G. W. De. April 6. 1954 [April 13. 1953], No. 10064/53. Addition to 741.651. Class 81(2)



Therapeutic apparatus comprises a light source arranged to project a beam of infrared, ultra-violet or visible light radiation and an initiator unit comprising at least one generally conical spiral of non-magnetic material interposed in the path of the beam. An initiator element 13 comprising a tube 14, containing four generally conical brass spirals 15 mounted on a common axial spindle 16 made of dielectric moulded plastic material, is detachably mounted in front of an infra-red lamp 10 so that the light beam is at right angles to the axis of each spiral 15. Each spiral 15 is provided with a radial tapping arm 17 engaging a predetermined point 18 in each spiral 15. An electromagnetic radiator 19 comprising a 70,000 ohm resistor heated by electric power is mounted in the lower end of the tube 14. The radiator 19 may alternatively be in the form of a conventional thermionic vacuum tube. The settings of ach tapping arm 17 is preadjusted during

GROUP VI

settings chosen being dependent upon the condition to be treated. The dielectric spindle 16 may be replaced by coaxial par magnets.

761 ~~

AT THERIC APPARATUS WITHOUT FIXED SUGGESTION

Fa.e: tschrift, Patentirt im Deutschen Reiche vom 14, 1891 ab. Oscar Korscheit, Leipzig, German Chanks to subscriber, Bernhard Vaegs, West Germany.)

This device, according to the inventor, taps life energies from the ether. Korschelt's idea evolve out of carlier findings by Wilhelm Weber who believed minute, etheric-electric particles originated the standard plasma. Korschelt agreed with Weber's concept that these particles are concentrated with unlimited intensity throughout the immediate, etheric (humidic) band surrounding our plan. The theory goes on to state that this energy band causes vibrational fields to issue as rays and bear from all forms, up to a certain distance. These energies presumably obey unknown, but hypothetica logical, mathematical laws in their activity, (ed note: shades of RADIESTHESIA).

Korschelt claimed his form energy apparatus caused a vacuuming effect, created by rotation a orderly interraction with the free, positive etheric particles, adding, and with the negative moleculinherent in solid forms.

"It is therefore possible," stated Korschelt, "by the diffuse moving aether in the atmosphere, balance-out," the base theory of Korschelt's cosmic contraption. "This apparatus," Korschelt wro "can be used for all purposes where an increase of living energy from the aethers is desired."

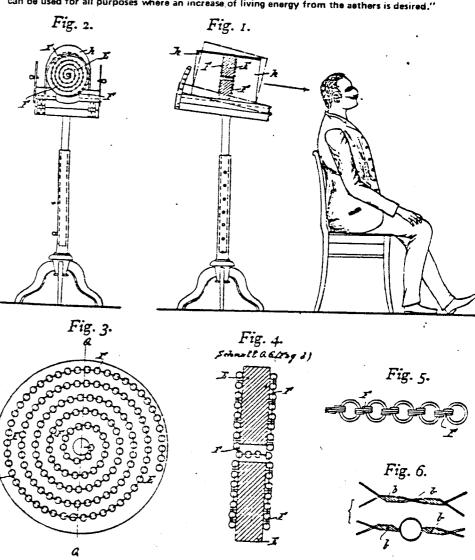


Figure 1 — The Korschelt apparatus so fixed upon the tripod stand, allows the etheric particles in velocity to enter the mind-aura field of the subject at the point of receptive ingress, joining with the union between the intuitive and intellectual hemispheres of the brain.

Figure 2 — This spiral on disc device will through a system of wires, gather whorls and curved lines of energy from the ether, bringing the etheric particles into a state of rotation, and will mount upon certain spots so that the living energy can be made useful in various ways. One side of the interconnected, wire-loop, spiral-framed disc is colored blue so that identification between positive and negative sides can always be assured.

Figure 3 — The helical coil, as developed upon the round plate mentally suggests rotation and is therefore effective with sufficient and carefully selected visualization. However, the chain (figure 5) effect of double-side, wire mountings might be utilized as a driving mechanism to gyrate the etheric wheel under certain conditions. The inventor suggests the etheric whirl can be amplified or lengthened by application of the spiral-link chain.

Figure 6 — Wire winding method connecting metal rings as shown.

Drown Radio-Viscon & Homo-Vilbra Ray histr. & Their Uses from: Borderline Sci. Res. Fdn., POB 548, Vista CA 92083

PATENT SPECIFICATION
(British Patent Office) 515,866

Application Date: July 1, 1938 No. 19584/38.

Complete Specification Accepted: Dec. 15, 1939

COMPLETE SPECIFICATION

Method and Means For Obtaining Photographis Images of Living and Other Objects

I, Ruth Drown, a citizen of the United States of America, of 4706 Oakwood Avenue, Los Angeles, California, United States of America, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement: --

The present invention relates to a method of and means for obtaining photographic images of parts of the human body or of other objects. One object of my invention is to enable accurate photographs of healthy and diseased parts of living bodies somewhat similar to X-ray photography to be obtained in simple and easily applied manner. Another object is to provide a compact, portable apparatus for obtaining photographic images according to the invention.

It is believed that the action obtained by my present method consists in activating the flow of electrons of the uni-directional flow of current from the battery or other equivalent source and the radiant energy of the body being examined.

In pursuance of the foregoing and according to my present invention a method of obtaining photographic images of living and other objects and more particularly human beings consists in subjecting a highly sensitized photographic plate or film to an electromotive force so as to produce a field thereon and providing means susceptible to the influence of invisible energy rays or electrons of the atoms of the object to be photographed to produce a change in voltage drop across an electrical circuit to correspondingly influence said field.

The apparatus for carrying out the invention does comprise a light-sensitive cell, a uni-directional source of current connected at the negative side of the cathode of the light-sensitive cell and at the positive side to the anode of the cell. A series of impedance rheostates connected so as to have a condenser action and connected in parallel with the cell and the source of energy,

a rectifier, and a photographing device comprising the opposed plates of a fixed condenser between which the film or plate is located, said rheostats being connected across one of the plates of the condenser and the cell plates, and the other plate of the condenser being connected to the filtered negative side of the said source.

In carrying an embodiment of my invention into practice it should be understood that the latent image is carried to the sensitized surface by means of a magnetic field having certain lines of force and the thickness or width of the field, i.e., transverse to the shortest distance between the negative and positive points, can vary from one thirty-second of an inch to an inch. This field, when applied across a sensitized surface, spreads or is trapped to the plane of such surface and by action of a suitable developer the image of the field can be printed. Consequently, if the potential of the applied force is varied by using the electronic or light ray influence of the object to be photographed to affect the photo-electric cell included in the circuit of the apparatus, the lines of force will be correspondingly varied on the plate.

In practice the subject to be photographed is placed close to the photo-electric cell and it is found that the radiant energy of the subject impinges on the cathode of the tube resulting in an increasingly higher resistance placed across the cell. Such increase will cause an exceedingly minute change of the current in the anode circuit, in turn producing a change in the voltage drop across the circuit, such voltage drop or change in potention being led through the selecting or tuning section constituted by the rheostat. That is to say a photoelectric cell is used to isolate a particular section to be photographed and in doing so it pictures changes in electro-motive force in an electrical circuit, such changes of the electro-motive force being utilised to excite the circuit producing a field across a highly sensitized emulsion surface, the resulting distortion or change of the lines of force across said surface producing an image which can be developed chemically. Suitable apparatus for achieving this result is illustrated by the appended sheets of drawings wherein: --

Fig. 1 is a diagrammatic view of a complete circuit.

Fig. 2 is a sectional side elevation view of a portable casing accommodating the cell, rheostat or tuning device, photographic plate-holder and circuit wiring.

Fig. 3 is a detail sectional plan view showing one

of the adjustable tuning devices, a number of which are suitably connected in the circuit as shown diagrammatically in Fig. 1, and assembled on a panel in the portable casing as shown in front and broken rear elevations in Figs. 4 and 5 respectively.

Referring to the drawings a source of direct or uni-directional current l is connected by its negative side to the cathode 2 of a photo-electric cell 3 via a filter 4 which can consist of coils of insulated wire or solenoids wound on both iron cores and air cores and in series. The source of potential may be a battery carried in the portable casing 5 so that the apparatus can be self-contained and available for use anywhere. The positive side of the source l is connected to the anode of the cell 3. Connected across the anode and a rectifier 7 is one, or preferably as shown, a plurality of series-coupled impedance rheostats 8 which are constructed to act as condensers, the rectifier 7 being in turn connected to the filtered negative side of the source l so that the rheostats are in parallel with the beforementioned circuit of the battery and cell. This rectifier may be a quartz-crystal type, a vacuum tube rectifier, a rectifier of the oxide type or a chemical rectifier. A pair of large surface area (in relation to their thickness) conducting plates 9 and 10 are located in narrowly spaced relationship, e.g., after the manner of a fixed condenser and are connected in parallel with the rectifier. This condenser device forms in effect a photographing device because between them is interposed a highly sensitized plate or film.

With the source of the potential connected as shown there will always be a difference of potential between the cathode and anode of the cell, the anode being positive to the cathode by reason of the applied direction of polarity of the source of potential.

In practice the object to be examined is placed close to the surface of the cathode so that the invisible light rays or radiations will impinge upon the cathode resulting in negative electrons being emitted from the cathode. This places a negative potential on the anode and an increased resistance is placed across the cell resulting in an exceedingly minute change of current in the anode circuit. Because of this change in current there will be a voltage drop across the circuit which is led through the selecting or tuning section constituted by the rheostats.

The changes in dielectric stress of the condenser-

like arrangement of plates 9 and 10 caused by the changes of potential applied to the plates 9 and 10, produces corresponding changes in the field which is contained in the sensitized surface of the photographic plate or film. This field is in the nature of a magnetic field with appropriate lines of force depending upon the particular setting of the tuning device constituted by the impedance rheostats 8. As the tuned in electro-motive force which produces the field is varied or regulated by the energy derived from the nervous system or organism of the living object being photographed, the field is varied accordingly.

The tuning device can comprise any suitable number of rheostats connected in series as shown in Fig. 1 to afford a wide range of adjustment. Each rheostate comprises a plurality of conductor studs 14 arranged in an arcuate path about a center conductor pivot pin 15 from which radiates a contact 16 engaging the studs singly. Each stud is lined with an insulating sleeve 17 about which is wound a wire 18 so that there is a capacity between the wire and the conductor stud 14. The windings 18 are in series for each rheostat, and the conductor pivot pin 15 of each rheostat is connected to the first winding of the next rheostat in succession as shown in Fig. 1. Such an arrangement affords a wide range of fine tuning, the impedance formed in the circuit being determined by the number of windings selected.

The rheostats can be mounted on a panel 19 fixed in the portable casing 5. A switch 20 for making and breaking the circuit of the battery can be provided on this panel, and the photo-electric cell 3 can be plugted into a socket 21 on the base of the casing between the panel 19 and a partition 22 separating a compartment 23 containing the condenser plates 9 and 10. Immediately above the space between these two plates is a narrow lid 24 adapted to light seal the compartment 23, and to be opened for insertion and removal of a mount containing the photographic plate or film.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, & declare that what I claim is:--

l. Method of obtaining photographic records of portions of human bodies or other objects consisting in forming a magnetic field across a sensitized plate or film by means of an electrical circuit and producing changes in the electro-motive force in the circuit by means of a light-sensitive cell or photo-electric cell exposed

to the influence of the radiant energy of the object to be photographed.

- 2. Method of obtaining photographic records of portions of human bodies and other objects consisting in creating a magnetic field by an electrical device and locating a highly sensitized photographic plate or film in the magnetic field and locating a light-sensitive cell in juxtaposition to the object to be photographed, placing a potential on the anode of the cell by means of a unidirectional source of current of the said circuit to increase the resistance of the cell and thereby produce a change in voltage drop across the circuit to the said field-producing means.
- 3. Apparatus for obtaining photographic records of portions of human bodies and other objects comprising means for applying a magnetic field across the sensitized surface of a photographic plate or film, a photo-electric or light sensitive cell adapted to produce changes in the electromotive force producing said field and susceptible to the influence of electrons given off by the radiant energy of the object to be examind, and tuning means connected in parallel with the cell and a source of current.
- 4. Apparatus for obtaining photographic records of portions of human bodies and other objects comprising a light-sensitive cell, a uni-directional source of current connected at the negative side via a filter to the cathode of the light-sensitive cell and at the positive side to the anode of the cell, a series of impedance rheostats connected in parallel with the cell and the source of current, a rectifier, and terminal members between which the film or plate is located, said rheostats being connected across one of the terminal members and the cell plate, and the other terminal member being connected to the filtered negative side of the said source.
- 5. Apparatus for obtaining photographic records of portions of human bodies and other objects according to claims 4 or 5, wherein the negative side of the source of current is connected to the cathode of the photoelectric or light-sensitive cell via one or more solenoids or coils of insulated wire wound on air-cores and iron cores.
- 6. Apparatus for obtaining photographic records of portions of human bodies and other objects according to claim 4 or 5, wherein a portable casing accommodates the electrical elements and is partitioned to screen the plate or film receiving section from the cell and the

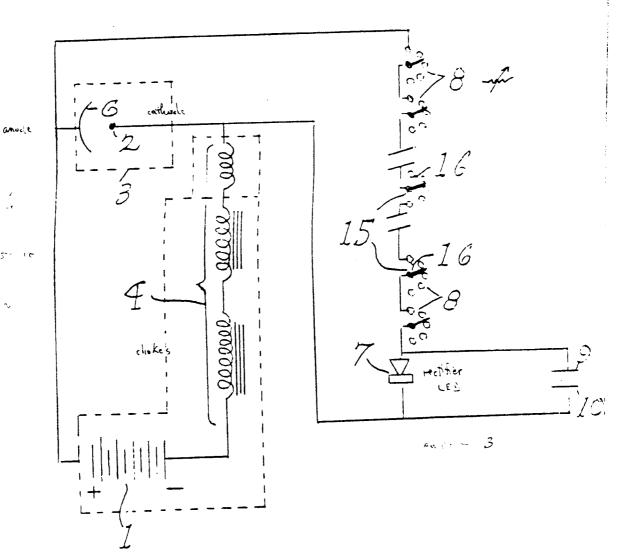
tuning means or rheostats.

7. Apparatus for obtaining photographic records of portions of human bodies and other objects substantially as described with reference to the accompanying drawings.

Date this 1st day of 1938, RAYNER & CO. 5, Chancery Lane, London W.C.2 Agents for the Applicant

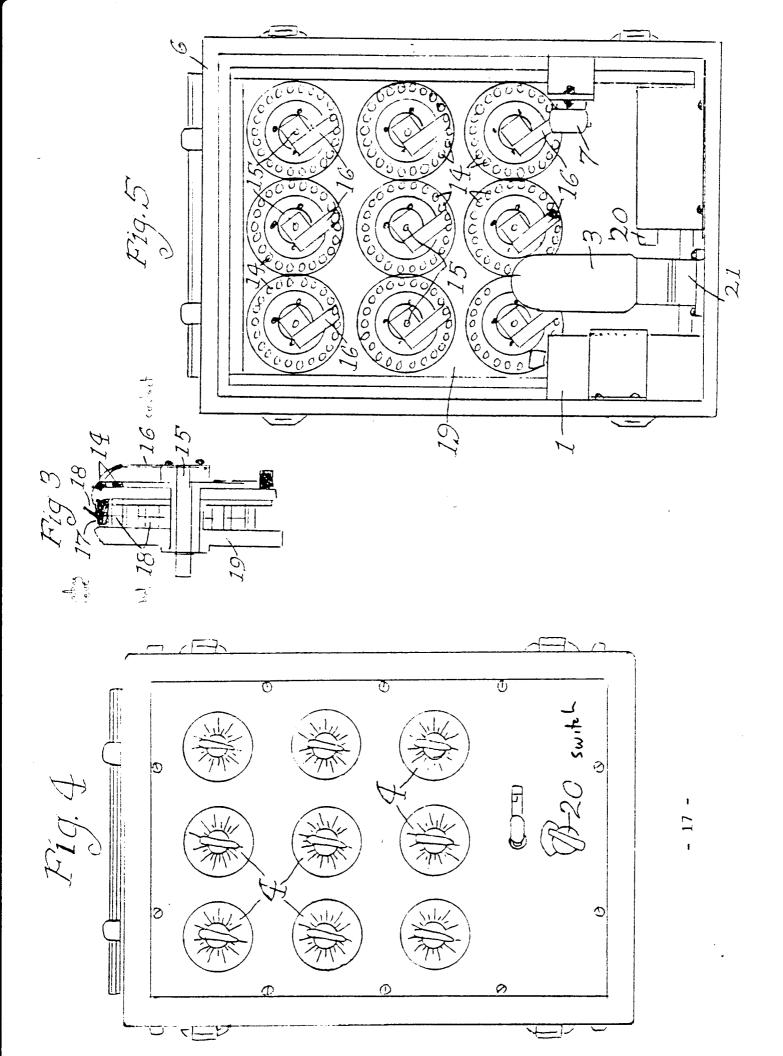
Leamington Spa: Printed for His Majesty's Stationery Office by the Courier Press -- 1940.

Fig. I



Herfront 2 & ilswoth 44 Y-7-(1/10) 23, 2. x 0 3 -8 yr 76 きひろう Fig. 1 80000 000000 cho Kes H

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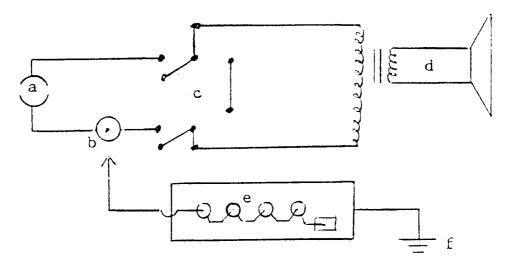


THE "VOICE-PRINT" AS SPECIMEN FOR ANALYSIS

When this gizmo is set before television, radio or telephone, the vibration of the speaker's voice passes thru the old radio speaker "microphone" and is super-imposed on the triple-distilled water in the ampule and thus becomes a living "specimen" of the person speaking which can be completely diagnosed. The ampule of water can be completely neutralized for further use on other people simply by touching it with a magnet.

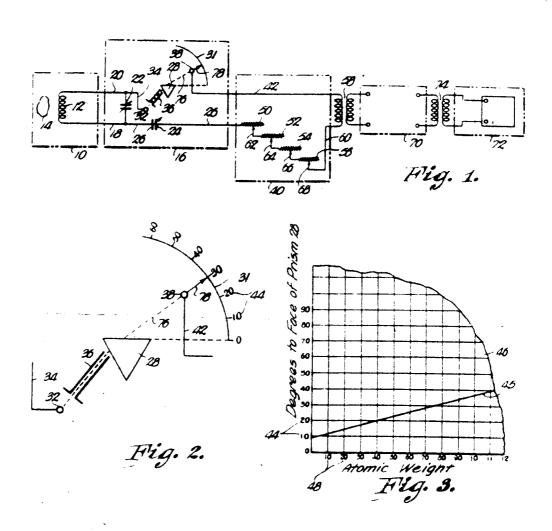
The voice VR passing thru rate 2-9-6-3 on the instrument dials is fixed in the water as long as not demagnetized.

Switch speaker "mike" on for obtaining voice-specimen and reverse switch afterward to cut out mike unit and free radionic unit for diagnosis as if blood, urine, or sputum specimen, or THE patient were attached to the unit in person.



- a: Port to hold ampule of IV/IM triple distilled water
- b: Input for lead wire from Drown instrument
- c: Simple DP/DT switch (Double Pole/Double Throw)
- d: Discarded radio speaker, 4 inch, as "mike" input placed in front of TV, radio or telephone
- e: Drown 4-dial instrument set on rate 2-9-6-3
- [: Ground .

T. G. HIERONYMUS DETECTION OF EMANATIONS FROM MATERIALS AND MEASUREMENT OF THE VOLUMES THEREOF Filed Oct. 23, 1946



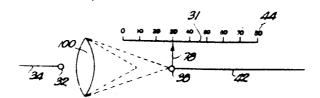


Fig. 4.

Thomas a Hieronymus

BY

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UNITED STATES PATENT OFFICE

DETECTION OF EMANATIONS FROM MATE-ALS AND MEASUREMENT OF THE VOL-UMBS THEREOF

Thomas G. Hieronymus, Kansas City, Mo. Application October 23, 1946, Serial No. 706,888

13 Claims. (Cl. 256--63)

This invention relates to the art of detecting the presence of and measuring the intensity or quantity of any of the known electro-chemical series of elements of material matter, or the combination of two or more such elements, whether in solid, fluid or gaseous forms at ordinary room temperatures and without special treatment or requiring any change in the material under observation.

my co-pending application for Letters Patent Serial Number 555,553, filed September 23, 1944. and now abandoned and pertaining to improvements in Detection of emanations from materials and volumes thereof.

The primary aim of this invention is the provision of a method and apparatus for detecting the presence of any element or combination of elements that may be in the substances under quantity thereof.

This invention has for a still further object to provide a method and means for detecting the presence of and analyzing and measuring the quantity or intensity of elements or combina- 25 tion of elements in the substance under observation through the capture and analysis of radiations emanating from the said elements, whether the said radiations be of electrical or optical characteristics, or both.

A yet further aim of this invention is to provide an instrument having a reaction device. the surface whereof is affected by the introduction of radiations thereto, in such a manner that the surface of the device will have its ability to 35 resist movement of articles over its face changed when energy flows through the apparatus, of which the reaction device is a part.

A further aim of the invention is to provide an atomic radiation analyzer, having as one of 40 its important elements, a reaction device, the surface whereof is affected to increase adhesion or friction as the operator of the analyzer strokes the surface of the device and manipulates the instrument to direct radiation thereto.

It has been discovered that there are radiations emanating from or released from each of the known elements constituting material matter. These emanations occur at ordinary room temperatures, i. e. 40° P. to 90° F. and they have 50 electrical and optical characteristics and frequencies which are disposed in the zone from the violet ray portion of the visible spectrum up into the ultra-violet portion, which none has as yet not been fully explored. Since it has been 58

found that these radiations from the elements or their effect may be carried over electrical conductors, it is the object of this invention to provide apparatus having suitable conductors and parts so that analyzing of substances may be accomplished. The radiations or the effect of such radiations from known elements or combinations of two or more elements of material matter may not only be carried over electrical This application is a continuation in part of 10 conductors and handled in a manner similar to an ordinary electrical current, but they may be affected by electrical capacity inductance and resistance. The radiations may also be refracted, focussed, diffracted or otherwise manip-15 ulated in the same manner as the radiations of the visible spectrum. Accordingly, therefore, this invention has for one of its aims to provide an instrument for handling the radiations, identifying their presence, analyzing them and observation and to determine the intensity or 20 measuring their intensity—all to the end that the presence of one or more of the known elements may be concluded from the character of the radiation as determined by the behavior of the analysing device and the values read from the appropriate scales forming a part of the instrument.

Other objects of the invention will appear during the course of the following specification, referring to the accompanying drawing, wherein:

Fig. 1 is a schematical and diagrammatical view illustrating an instrument for detection of emanations from materials and measuring the volumes thereof, made in accordance with the present invention.

Pig. 2 is an enlarged detailed fragmentary schematic view illustrating a portion of the instrument shown in Fig. 1.

Fig. 3 is a fragmentary elevational view of a chart, usable in connection with the instrument, to translate the scale readings into identification of the substances: and

Fig. 4 is a diagrammatical view illustrating another type of radiation refracting member, capable of forming a part of the instrument 45 illustrated in Fig. 1.

Prior to referring specifically to the parts of the apparatus diagrammatically illustrated in the drawing, clarification of the theory upon which the invention is predicated will be made by explaining experiments heretofore conducted and capable of proving the phenomenal theories hereinafter disclosed as having a bearing upon the practicability and utility of both the electrical and optical apparatus.

Radiations from each of the known elements of

matter produce some form of energy, probably electrons which can be made to flow along electrical conductors. The flow from each of the elements having characteristics different from the others. Conversely, the flow of electrons along 5 a conductor produces a radiation having characteristics of the radiation from each respective element. Such of the known elements as are required to feed growing plants have been transmitted to the plants through metallic conductors as 10 the plants were entirely isolated from the elements upon which they were fed. More precisely, seeds were planted in boxes in a darkened basement room. One of the boxes of plants containing some of the seeds was used as a control and 15 no apparatus for transmitting element radiations thereto provided. The remaining boxes of plants had electrodes or plates of conducting material mounted or otherwise disposed adjacent thereto, and each box of plants was separately attached to a conductor extending to a point outside the building where electrodes or plates were attached to the conductors and allowed to remain exposed to the light. Such of the known elements as replants were apparently fed thereto by having the radiations of the elements from the light conducted to the plants through the wires and associated electrodes. The treated plants were relacharacteristics of growing vegetation which has been deprived of the elements in natural light. Particularly was the control plant devoid of chlorophyl while the remaining plants were green.

Apparatus for laboratory or commercial use and 35 for detecting the presence of any of the known elements, preferably relies upon the element of touch, and therefore, the skill of the operator. The instrument diagrammatically illustrated in Fig. 1 comprises a unit 18 including a coil 12 disposed to pick up radiation from substance 14. wherein the known elements are disposed and that are to be detected. The temperature of substance 14 may be within the range of from 40 to 90° F. but such temperature is not critical. This range 45 has been found satisfactory in actual practice.

Coil 12 may be a spirally wound flat body approximately 2 in. in diameter and formed of magnet insulated wire of any conventional size. As an alternative, this coil 12 may be a single layer, 50 cylindrical coil, wound on a core of insulating material substantially 1 in, in diameter. The exampies given for this coil 12 are not critical and so long as the coil is in the field of radiation of substance 16, the purpose of unit 16 will be ful- 55 filled.

Instead of employing coil 12, wire 28 may be directly connected to substance 14 or wire 28 may be terminated in an electrode and the latter disposed with relation to substance 14 as to pick up 60 the radiations therefrom, as does coil 12 in the illustrated embodiment. In this case, wire is may be grounded or connected separately to substance is or terminated in another electrode which may also be placed near substance 14. The 65 proximity of substance i4 to coil i2 or the electrodes as the case may be, is such as to be within the field of radiation of the emanations from substance if.

Apparatus 16 is a manually manipulatable ana- 70 lyzer tuneable to the specific radiation desired. It consists of two principal parts, the first being the two standard type of variable condensers, 22 and 24, and the second being the ray refracting device made up of electrode 32-passageway 76

38, prism 28 and electrode 38, all as shown in Fig. 2. Apparatus 16 is joined to unit 10 by conductors is and 20 across which is disposed a conventional variable condenser 22 and with which is employed a condenser of similar type 24, located in conductor 28, as illustrated. Variable condensers 22 and 24 may be of standard radiobroadcast type and they are provided with graduated scales in conventional manner.

Prism 28 is of any suitable ray refracting substance as glass, quartz or analogous materials. In practice a prism 28 having two polished faces disposed at angles from 30 to 60 degrees has proved satisfactory. An electrode 32 is joined to coil 12 by conductor 28 and conductor 34. Stationary electrode 32 may be of any electrical conducting material such as aluminum, bruss, copper or substances having analogous electrical properties. The distance of electrode 32 from prism 28 is not critical so long as the radiations or emanations reach prism 28 through a confined path of travel in the nature of a thin band or line. In practice, this distance was from one-half to two inches. A passageway 38 formed between quired to impart normal characteristics to the 25 a pair of optically opaque insulating elements directs the radiations to a desired area on one face of prism 28.

The angle of incidence of this path of travel to the face of the prism 28 was of the order of 5.5° tively healthy but the control plant assumed the 30 for best results and for obtaining the widest useful segment along scale 11.

An electrode 35 shiftable along scale 31 is joined to unit 48 by conductor 42. Electrode 38 is of the same specifications as to materials and distance from prism 28 as electrode 32 but is suitably mounted for movement adjacent to scale 31 where its position may readily be indicated by a pointer 78 movable therewith and extending outwardly therefrom toward scale 31 in alignment with the path of travel of the thin ray of energy indicated by the line 18. The axis of rotation of electrode 38 is substantially on a median line extending longitudinally across the face of prism 28 proximal to electrode 38. Electrodes 32 and 38 work best when they are relatively thin and of the order of a few mils thickness.

As illustrated in Fig. 2, scale 31 is calibrated with indicia 44, and these indicia are on chart 46 along one edge thereof. The indicia on chart 46 have been given a corresponding reference numeral to those on scale 31 for clarifying the description hereinafter set down. Indicia 48 on chart 46 designate the atomic weight of elements of matter and continue up to include all known elements of the electro-chemical series when the full size chart is employed.

Unit 48 is a variable resistance. It may be either a continuously variable type or it may consist of a series of non-inductive resistance units 58, 52, 54, and 56 are each adjusted by a switch having movable points 62, 84, 88 and 88 respec-

In practice, unit 50 will have ten times the resistance of unit 52, which in turn is ten times the size of unit \$4, etc. (the values may range from fractions of 1 chm up to several megohms). Unit 50 e. g. might be 1 megohm in steps of 100,000 ohms each; unit 52 then would be 100,000 ohms total in steps of 10,000 ohms each; unit 54 then would be 10,000 ohms total in steps of 1,000 ohms each, and so on until the smallest unit would have steps low enough to give the desired exactness to the measured volume or intensity of the radiations.

Unit 48 is joined to unit 78 by means of an

untuned radio frequency type transformer 58 through the medium of conductors 42 and 60. Unit 46 may be joined to unit 76 by resistance coupling or other conventional coupling of the type frequently used in standard broadcast radio receivers and which is analogous to transformer **61**:

Unit 78 may be a conventional three stage tuned radio frequency broadcast band-type of amplifier with the usual variable condensers omitted or it may be of the resistance coupled or impedance coupled type often used in radio broadcast type amplifiers. Said amplifier intensifies the value of the radiations reaching it so that the effect upon detector 12 is clearly discernable. Under some conditions, the reactions from unit 40 may be put directly into detector 72 without interposing unit 10 but amplification of the radiations is desirable.

Detector 12 is a device that will indicate a 20 change from its normal state when the radiations from the analyzer 16 are caused to influence it.

Detector 72 may be connected to unit 10 by transformer 14 or it may be placed near enough to pick up the radiations from the output of unit 10 without direct contact so long as it is placed within the field of radiations.

Detector 72 is preferably an electrical conductor coated with a material having such characteristics the conducting portion, the coating will change its surface tension or viscosity, or in some manner give evidence of the presence of the energy flowing through the conducting portion by producing a greater drag or resistance to the movement of 35 any part of the body of the operator thereover. such as the hand or fingers. It has been found practical to use a metal plate covered with a sheet of plastic or coated with lacquer, which plate is of an area convenient for stroking with the tips of the fingers or paim of the hand. It may also be a sheet or plastic with a coil similar to coil 12 disposed adjacent thereto and connected to the acupling transformer 14.

Fig. 4 illustrates another form of that part of 45 unit 16 showing Fig. 2, so far as the element separator or filter portion thereof is concerned. This separation or filtering is accomplished in the embodiment illustrated in Fig. 1 and Fig. 2 by prism 28. In Fig. 4 a lens 188 has the electrode 50 32 disposed adjacent thereto and movable electrode 38 is shiftable toward and from lens 106.

Scale indicia 44 are disposed in a line parallel to the path of travel of electrode 38 and the element or elements involved will be determined by 55 the location or the scale of pointer 78 at the instant a reaction is obtained at detector 72.

Chart 46 is of course produced as a part of the complete apparatus when such apparatus is manufactured and after the prism 28 (or lens 100, as 60 the case may be) is installed as a unit of the material detector. A small quantity of each of the known chemical elements is placed adjacent to coil 12 and with full knowledge of the element. the angle of radiation formed by line 76 and, the face of the prism 28, is determined and the degree numeral on scale 31, which identifies the angle of the radiation, is placed on chart 46 as one of the indicia 44. After this chart 46 is so constructed and the intersecting lines are extended from indica 44 (degree readings from scale 31) and indicia 48 (the atomic weight of the known elements) then when the apparatus is in practical use, any material or substance may be located

determined by positioning electrode 38 on a line of radiation 78 where the degree number on the face of scale 31 is quickly read and used by referring to chart 48. When the degree indicia 44 is so located, the line on chart 46 extending therefrom is followed until it reaches the diagonal line 45 on chart 46 whereupon the operator then follows the intersecting line to the lower edge of the chart where the value of the atomic weight 48 is read. These atomic weights are well known and are used in conventional texts and scientific works.

In practice, for example, let it be assumed that substance 14 contains calcium but it is not known that such is the case. The angle at which the unknown ray or radiation leaves prism 28 will teach its name for, as the operator moves the fingers over the surface of detector 12, electrode 38 is shifted slowly and pointer 18 moves along scale 31 until a greater degree of adhesion or resistance to motion at the surface of detector 12 is set up. This occurs when the energy or radiation flows from unit 16 through units 40 and 70 into detector 12. When electrode 38 is at a position where it is intercepting a radiation from prism 28, or lense 100, the resistance to stroke at detector 12 will be of highest order.

As soon as electrode 38 has been positioned as described, variable condenser 22 is adjusted while that under influence of energy flowing through 30 the operator continues to stroke detector 72 to a position where the greatest drag at detector 12 is again manifested. Next, variable condenser 24 is similarly manipulated to obtain a setting where the drag at detector 12 again reaches a maximum. Electrode 38 is then readjusted for a final position. The employment of condensers 22 and 24 insure a more accurate setting of pointer 18 by virtue of their additional filtering action.

> In the illustration, electrode 38 has intercepted 40 the path of radiation with pointer 78 at the numeral 30 on scale 31 and reference to chart 46 will teach the operator that the element having atomic weight 79.2 is that from which the radiation along dotted line 76 is travelling. If atomic weight 79.2 is calcium then that element in substance 14 has been located.

The manner of using lens 100 is substantially the same as described in connection with the use of prism 28: The focal point of paths of radiation of the elements will cause detector 72 to react and establish a drag to the operator's touch. whereupon the scale 31 may be read and its reading translated by reference to chart 46.

What actually happens at detector 72 to increase and decrease its drag to the touch of the operator, is not known but the apparatus functions as above set forth when constructed as specified, and therefore, a positively acting analyzer for atomic radiations is produced even though the principle upon which it is based is not fully known.

Radiation from hydrogen passes through prism 28 at the sharpest angle or at the lowest degree measured from the face of prism 28. Radiations from other elements and their isotopes pass through prism 28 at greater angles but in the same order as their atomic weight-the heavier the element or its isotope, the wider the angle,

A substance composed of two or more of the known elements may be analyzed as herein set down to determine its component constituents. The substance itself which consist of two or more known elements may be identified because the emanations therefrom will produce a composite adjacent to coil 12 and its components definitely 75 frequency peculiar to that combination of ele-

ments. All combinations may be charted in precisely the same manner as herein described for all the individual known elements in the electro

Unit 40 is used to measure the intensity of the 5 adiations from a given element or substance by adjusting the several switches comprising unit 46 until the maximum amount of resistance has been introduced into the circuit without interrupting the reactions manifested at detector 72. 10 The switches are calibrated in conventional resistance values and a chart must be prepared that will relate the value indicating by switch settings of unit 40 the quantative units of measurement.

It is realized that apparatus for detecting materials and measuring the volumes thereof, having physical characteristics different from those illustrated and described, might be made without scope of the appended claims.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. The method of analyzing substance to de- 25 tect the presence of any of the known elements contained therein, which comprises capturing only the radiations emanating from one of the clements, having both electrical and optical characteristics; and identifying the said radiations to 30 accomplish the desired purpose.

2. The method of analyzing substance to detect the presence of any of the known elements contained therein, which comprises capturing only the radiations emanating from one of the 35 elements having both electrical and optical characteristics; identifying the said radiations to accomplish the desired purpose; and measuring the quantity of said radiations.

taining a plurality of chemical elements to determine the component elements of said substance which comprises capturing the radiations emanating from the substance having both electrical and optical characteristics; and identifying the radiations to accomplish the desired purpose

4. The method of detecting the presence of chemical elements in a specimen under test by capturing and analyzing the electrical and opti- 50 cal radiations characteristic of such elements emanating from said specimen which comprises, impressing said radiations on an electrical conductor; conducting the radiations through a tunable circuit including said electrical conductor to an electrode in said circuit from which electrode said radiations emanate; directing the radiations emanating from said electrode through a refracting body; adjusting a second electrode until it intercepts said refracted radiations; conducting said radiations from said second named electrode to a detector comprising a conductive solid having a smooth planar surface to vary the surface frictional characteristics of said solid; tuning said tunable circuit until a maximum of the radiations from said specimen are emitted from said first named electrode; and readjusting said second named electrode until the variation of the surface characteristice of said detector inare impressed on said second named electrode.

5. The method of detecting the presence of chemical elements in a specimen under test by capturing and analyzing the electrical and optical radiations characteristic of such elements em- 78 to said coupling element; adjusting said adjust-

anating from said specimen which comprises, hirpressing radiations on an electrical conductor; conducting the radiations through a tunable circuit including said electrical conductor to an electrode in said circuit from which electrode said radiations emanate; directing the radiations emanating from said electrode through a refracting body; adjusting a second electrode until it intercepts said refracted radiations; amplifying the radiations intercepted by said second named electrode; conducting said amplified radiations to a detector coupled with said amplifier which detector comprises a conductive solid having a smooth planar surface to vary the surface (rictional characteristice of said solid; tuning said tunable circuit until a maximum of the radiations from said specimen are emitted from said first named electrode: and readjusting said second named electrode until the variations of the surface frictional department from the spirit of the invention or 20 characteristics of said detector indicates that a maximum of refracted radiations are impressed on said second named electrode to obtain an indication of the presence of a chemical element in said specimen.

6. The method of detecting the presence and quantity of chemical elements in a specimen under test by capturing and analyzing the electrical and optical radiations characteristic of such elements emanating from said specimen which comprises, impressing said radiations on an electrical conductor; conducting the radiations through a tunable circuit including said electrical conductor to an electrode in said circuit from which electrode said radiations emanate; directing the radiations emanating from said electrode through a refracting body; adjusting a second electrode until it intercepts said refracted radiations; conducting said radiations from said second named electrode through a variable resistance; ampli-3. The method of analyzing a substance con- 40 fying the radiations passing through said variable resistance; conducting said amplified radiations to a detector coupled with said amplifler which detector comprises a conductive solid having a smooth planar surface to vary the surface fric-45 tional characteristics of said solid; tuning said tunable circuit until a maximum of the radiations from said specimen are emitted from said first named electrode; readjusting said second named electrode until the variations of the surface frictional characteristics of said detector indicates. that a maximum of refracted radiations are impressed on said second named electrode to obtain an indication of the presence of a chemical element and varying the resistance in said variable 56 resistance unit until the surface frictional characteristics of said detector are unaffected to obtain an indication of the quantity of said ele-

ment in said specimen. 7. The method of detecting the presence in any 60 body of a specific element as well as the quantity thereof which comprises, impressing on an electrical conductor radiant waves having optical and electrical properties which are generated by and which are characteristic of a specific element; 65 tuning said waves; impressing the tuned waves on an electrode; amplifying said waves by an amplifying circuit which includes a coupling element, a gap adjacent said last named electrode, and an adjustable electrode, said last two electrodes bedicates that a maximum of refracted radiations 70 ing at opposite ends of said gap; causing said waves to pass through a refracting body in passage through said gap; impressing said amplifled waves on an indicator comprising a conductive solid having a smooth planar surface coupled

able electrode and operating said indicator and said adjustable electrode until a maximum intensity of refracted rays is indicated.

8. Apparatus for analyzing substance to detect the presence and quantity of any of the known 5 elements therein comprising, in combination, a pick-up unit having electrical conductive properties for absorbing characteristic radiations of an optical and electrical nature from the substance being analyzed; an electrode in connection with 10 said unit from which the radiations move outwardly along a particular path of travel; a refracting member of transparent material in said path to intersect said radiations; a scale having may be identified; a second electrode between the said member and the scale to collect radiations passing through the member after their path of travel has been altered thereby; and apparatus by the second electrode.

9. Apparatus for analyzing substance to detect the presence and quantity of any of the known elements therein comprising, in combination, a pick-up unit having electrical conductive proper- 25 ties for absorbing characteristic radiations of an optical and electrical nature from the substance being analyzed; an electrode in connection with said unit from which the radiations move refracting member of transparent material in said path to intersect said radiations; a scale having indicia thereon whereby any one of the elements may be identified; a second electrode between the said member and the scale to collect radiations 35 passing through the member after their path of travel has been altered thereby; apparatus measuring the quantity of the radiations collected by the second electrode; and a detector member concharacterized by the property of having its effect upon the touch altered in accordance with the flow of radiations thereto.

10. Apparatus for analyzing substance to detect the presence and quantity of any of the 45 known elements therein comprising a pick-up unit having electrical conductive properties for collecting characteristic radiations of an optical and electrical nature from the substance being analyzed; an electrode in connection with said 50 pick-up unit from which the radiations move outwardly along a path of travel; a lens in said path of travel to refract radiations emanating from the said electrode and traveling in said path. said lens having a focal point for each known 55 element; a second electrode to collect radiations passing through the lens; and a scale having indicia thereon, provided with reference characters each indicative of one of the known elements and each being at a focal point of said lens.

11. Apparatus for analyzing substance to detect the presence and quantity of any of the known elements therein comprising a pick-up unit having electrical conductive properties for collecting characteristic radiations of an optical and electrical nature from the substance being analyzed; an electrode in connection with said pick-up unit

from which the radiations move outwardly along a path of travel; a lens in said path of travel to refract radiations emanating from the said electrode and traveling in said path, said lens having a focal point for each known element; a second electrode to collect radiations passing through the lens; a scale having indicia thereon, provided with reference characters each indicative of one of the known elements and each being at a focal point of said lens; and apparatus for measuring the quantity of the radiations collected by the said second electrode.

12. Apparatus for analyzing substance to detect the presence and quantity of any of the known indicia thereon whereby any one of the elements 16 elements therein comprising a pick-up unit having electrical conductive properties for collecting characteristic radiations of an optical and electrical nature from the substance being analyzed; an electrode in connection with said pick-up unit measuring the quantity of the radiations collected 20 from which the radiations move outwardly along a path of travel; a lens in said path of travel to refract radiations emanating from the said electrode and traveling in said path, said lens having a focal point for each known element; a second electrode to collect radiations passing through the lens; a scale having indicia thereon, provided with reference characters each indicative of one of the known elements and each being at a focal point of said lens; apparatus for measuring the outwardly along a particular path of travel; a 30 quantity of the radiations collected by the said second electrode; and a detector member conductively joined to the last-mentioned apparatus charactertized by the property of having its effeet upon the touch altered in accordance with the flow of radiations thereto.

13. An apparatus for analyzing a substance to detect the presence of any of the known chemical elements in said substance comprising, an electrical conductor for absorbing the characteristic raductively joined to the last-mentioned apparatus 40 diations of an optical and electrical nature from a chemical element in the substance being analyzed; a tuning circuit connected to said electrical conductor; an electrode in said tuning circuit from which said radiations emanate in a defined path of travel; a refracting body adjacent said electrode and positioned in the path of cravel of said radiations for refracting said radiations; an adjustable electrode positioned adjacent a portion of said refracting body from which the refracted radiations emanate; a scale provided with indicia for identifying any one of the chemical elements associated with said adjustable electrode; and a detector comprising a conductive solid having a smooth planar surface conductively coupled with said adjustable electrode, said detector being characterized by the property of varying its surface frictional characteristics when a maximum of refracted radiations are conducted thereto.

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The following references are of record in the file of this patent:

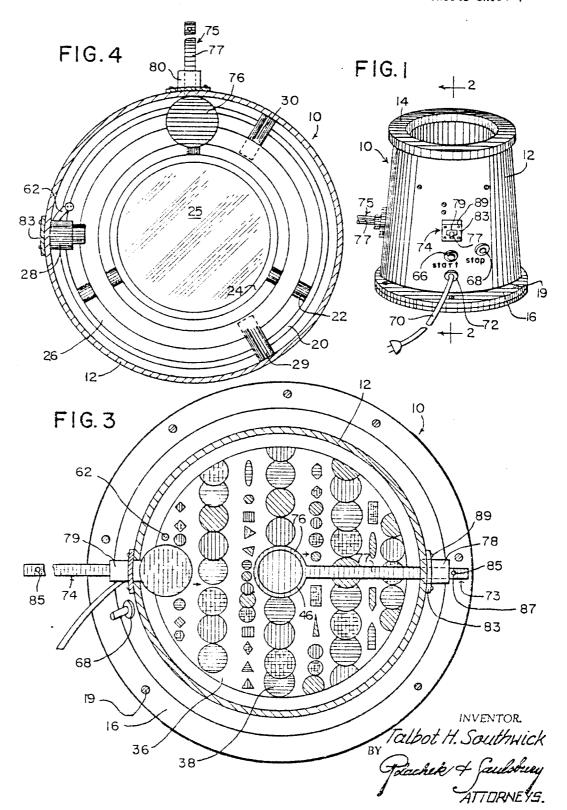
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DEVICE FOR DETECTING HALD AND COLOR AURAL RADIATIONS

Filed Dec. 7, 1964

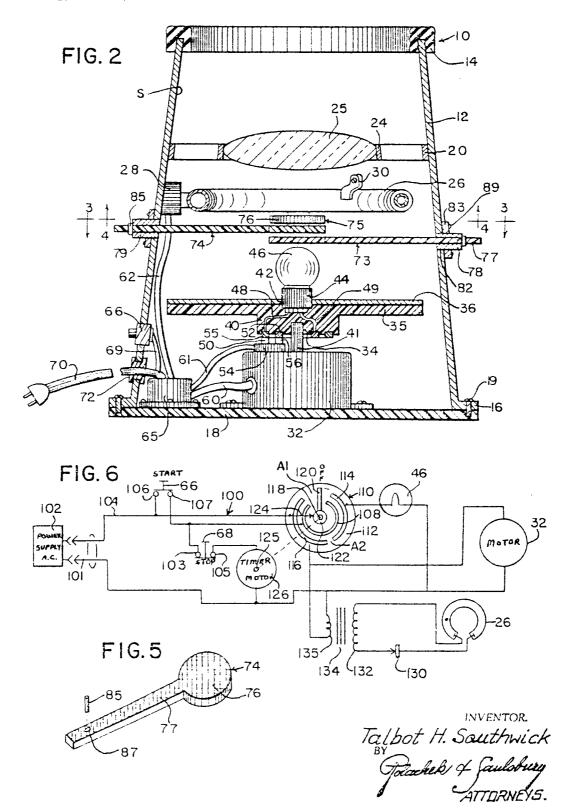
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DEVICE FOR DETECTING HALO AND COLOR AURAL RADIATIONS
Talbot H. Southwick, 79 Horatio St.,
New York, N.Y. 10014
Filed Dec. 7, 1964, Ser. No. 416,249
11 Claims. (Cl. 128—1)

ABSTRACT OF THE DISCLOSURE

An optical display device for visually conditioning a person, including a housing with an opening therein, a pair of lamps in the housing, one emitting a sustained bright light, the other emitting ultraviolet light, a disk in the housing having a surface with fluorescent spots of different sizes, shapes and colors thereon, which spots are adapted to become luminous when the ultraviolet ray lamp is energized to project the ultraviolet rays upon the spots, and electrical means for cyclically lighting the 20 lamps.

This invention relates to an optical display device especially intended for conditioning the visual organs of a 25 person for producing certain visual effects.

According to the invention there is provided an optical display device which includes a generally cylindrical box or housing with an opening into which an operator looks. In the housing is an incandescent electric lamp which can 30 be turned on and off, and an ultraviolet or "black light" lamp, which can be turned on and off. A multicolored disk is rotatably mounted in the housing. This disk has multicolored areas which glow when the ultraviolet light impinges on them. Colored filters are provided in front of 35 the incandescent lamp for selecting and changing the colors of bright light seen by the operator using the device. The operator looking into the housing first sees the bright incandescent lamp which is lighted for about thirty seconds. Then the incandescent lamp is turned off. The in- 40 terior of the housing remains dark a few seconds and then the ultraviolet lamp is turned on while the multicolored disk is rotated slowly. After about thirty seconds the ultraviolet lamp is then turned off and the operator closes his eyes until he sees the after image in his own mind of the 45 fluorescent colors on rotating disc. After about five seconds the operator opens his eyes. In normal reaction, part of the operator's surroundings will assume flashes of aura or glow. The device can be used by normal persons or even children for amusement purposes.

The device embodying the invention can be arranged for manual control at the several steps of operation, or can be arranged for automatic control, or for both manual, and automatic control.

It is therefore an object of the invention to provide an 55 optical display device for conditioning visual organs, said device including means for producing a bright light in an enclosure, and then producing a rotating multicolored, fluorescent display with or without a black light stimulus in the enclosure for producing a glow.

A further object is to provide a device as described wherein the bright light can be changed to different colors.

Another object is to provide a device as described wherein the device operates automatically for cyclically producing the bright light and then the fluorescent display.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

FIGURE 1 is a side oblique view of a device embodying the invention.

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FIG. 2 is an enlarged sectional view taken on line 2—2 of FIG. 1,

FIG. 3 and FIG. 4 are sectional views taken on lines 3—3 and 4—4 of FIG. 2,

FIG. 5 is a perspective view of a light filter member, and

FIG. 6 is a diagram of an electric circuit employed in the device.

Referring first to FIGS. 1 to 4, there is shown the optical display device 10 which includes a tapered box or housing 12. The housing is tubular in form with open top and bottom. At the narrow open top is a resilient channelshaped pad or molding 14. When a person looks down into the housing the pad forms a light-tight seal on the forehead and cheeks around the person's eyes so that external, ambient light is excluded. At the open bottom of the housing is an annular flange 16 abutting the rim of a bottom closure plate 18 and held by screws 19. Secured near the top of the housing is a spider ring 20 having arms 22 supporting an internal ring 24 in which is fitted a double convex lens 25. The central plane of the lens is horizontal and perpendicular to the central axis of the housing. Located just below the lens 25 is a circular, tubular black light lamp 26. This lamp is supported by a socket 28 on the inner wall of the housing, and by two spring bracket fingers 29, 30 spaced about 120° apart and partially encircling the lamp. Lamp 26 has a glass body and is a fifteen watt self-filtering tube named purple black tube (BLB) by the Stroblite Corp., New York, New York. It emits light in a narrow band peaked at 3650 to 3660 angstrom units. Purple light in this range of wave lengths is popularly known as "black light" since it produces no glowing effects when it impinges on non-fluorescent surfaces. Surfaces which contain suitable phosphors will however glow with a color depending on their chemical constituents. Surfaces of colored tin foil or those colors which luminesce in the dark when previously charged by sunlight or electric light, or powders which are brilliant under incandescent light because of their phosphor chemicals, all such colors do aid production of after image following the process of starting at an incandescent light, then closing one's eyes. Ordinary crayon or printed inks will also produce after image under the above condition of staring at a bright incandescent light and then closing one's eyes. The use of black light on phosphor or fluorescent color surfaces obtains the best results. All the visible colors ranging from red to deep purple can be evoked in fluorescent surfaces by the incidence of black light on a printed or painted surface that is fluorescent. This light is harmless to human eyes even when they are exposed to it for long periods.

Mounted on the bottom plate 18 is a motor 32 having an axially vertical shaft 34 rotating at a speed of not more than approximately twelve revolutions per second. A flat disk 35 is fixed to the shaft. Disk 35 has a sheet 36 of white paper, plastic, or cloth cemented or otherwise secured to its upper side. On the upper white side of the sheet 36 is a plurality of rows of differently colored and shaped fluorescent spots 38. These spots will glow in black light as brightly colored red, yellow, green and blue when exposed to the black light emitted by lamp 26. They may be visible in light of wave lengths longer than that of black light, but will not fluoresce or glow. The internal surface S of the housing may be highly reflective white or 65 silver.

The disk has a thick, central base 40 with a central recess 41 in which shaft 34 is received. A recess 42 is provided at the center of the disk 35 in which seats a socket 44 carrying a removable incandescent lamp 46. Electrical conductors 48, 49 in base 40 are connected to the socket and they terminate at concentric slip rings 50, 52 at the underside of base 40. An electrical connector

One or more of the filter members 73, 74, 75 may be interposed in the optical path of the lamp 46 and lens 25 before or during the time lamp 46 is lighted. The filter member can remain in the place set while the lamp 46 is extinguished, since the presence of the filter member 5 will not interfere materially with the multicolored rotating fluorescent view presented later in the cycle of the device.

The way to produce the glowing or fluorescent effect of paint or printed fabric that is luminous in darkly lit 10 areas after it is effected by ultra violet rays that are long wave of about three hundred sixty-five degrees Angstrom units, is by any one of four methods. Any two or three, or four of such methods could be used simultaneously in this device:

- (1) The lamp 26, FIG. 2, can be an ultra blue lamp that, by itself, will not fluoresce fabric or paint of a luminescent or fluorescent kind; it must pass its rays through purple plastic translucent glass (73-74-75), FIG. 2, in order to cause a fluorescent glow of paint or fabric 20 on disc 38, FIG. 3.
- (2) The lamp can be a black tube type that has within the tube said purple translucent glass filter material. In this case the lamp itself known by the tradename of the glow or fluorescence of fluorescent or luminescent surfaces of 38, FIG. 3. This said filter absorbs most visible light, but transmit over black light.
- (3) The lamp can be an incandescent two hundred fifty watt black light bulb of the General Electric type 30 with a life of about forty hours. This bulb can be substituted for the incandescent lamp 46, FIG. 2. Such substitution is done immediately after the first step of staring into housing of incandescent lamp 46, FIG. 2. Such blackkind on the disc 36, FIG. 3.
- (4) The lamp can be an extremely strong quartz high pressure mercury are lamp one hundred watt in a sealed beam. The visible light transmitted is in the region of three thousand six hundred sixty Angstrom units range. Said lamp can cause to glow the fluorescent fabric or point 38, FIG. 3.

For example, the lamp 26 in the present drawing is a fluorescent type with a self filtering purple black tube. The purple filter glass that makes the lamp makes ultra 45 violet for the purpose of producing a flow of paints or fabrics specially treated for luminescence, is within the lamp tube. I am able to modify this by changing purple glass plate strips either around an ultra blue light tube as named in Stroblite Corp. of New York city, or by in- 50 serting such ultra glass strips 12, 74, 75 now seen in FIG. 2. I am also able to manually substitute for incandescent lamp 46 a black light bulb named purple X by General Electric Corp, and which has two hundred fifty watts and bulb. This can be done to increase fluorescence of colored paint or fabric of disc 35.

The following is an explanation of behavior in use of this as a toy. One person using the toy is called the operator and the other is called the subject. There may be any number of participants. There are six steps needed to obtain amusement by the use of what is commonly called "after image" that occurs in one's mind particularly after one stares at bright colors and closes one's eyes. This refers to the special means of obtaining after image by 65 this device. Said after image may be derived from staring at glowing fluorescent colors while looking through the housing, or by staring at brightly lit filters of different colors, even though not fluorescent in nature.

Step 1.—An operator stares into the housing of the de- 70 vice for about thirty seconds. He sees an extra bright incandescent bulb of light and no bright colors known in the special way of fluorescence or glowing. Next, the operator looks away from the device and closes his eyes to see the bright light's after image in his own (the oper- 75 luminous when the second lamp is energized to project

ator's) mind. Or he may close his eyes while still having his face and eyes over the housing and touching same, but after the incandescent lamp is turned off, whether by automatic or manual means. He sees color in his mind's eye as an after image coloration.

The operator may look at a subject in a dimly lighted area and observe externally around the subject the after image color's which he first saw within his own mind when his eyes were closed. This is the pre-block light stage of seeing the halo. The later use of black light on fluorescent surfaces improves the intensity of colors within the operator's mind and around the subject he views.

Step 2.—Immediately, next the operator stares through the housing at the rotation of the disc with its cover of 15 fluorescent paints of fabric in multi color. He stares for about thirty seconds at such colors that glow by aid of the black light lamp that is in the housing and above the revolving disc. Now he again closes his eyes and sees by his mind's eye or his after image imagination faculty. those colors of various hues and types. They are virtually the same colors he observed on the rotating disc before closing his eyes and while he stared into the housing.

Step 3.—Now comes a main goal of the device which is to observe the halo colors or the commonly called Stroblite Corporation of New York City, can cause the 25 aural colors around a person known here as the subject. For this purpose the operator who took steps 1 and 2 now looks at the perimeter of the head and body of the subject who is three or more feet away depending on what distance gets the best results. Escape light from the device is enough for this 3rd step, but more light from ordinary room lights may be added, if convenient. Room light outside the device should be dim to a degree making readability of a newspaper's small type hardly possible. When subject is looked at by operator, the best areas are light of bulb type will fluoresce fabric of a fluorescent 35 those of the subject that are unclothed and uncolored by cosmetics or other artificial methods.

There is a 4th step that may be used for this toy device. It also gives amusement. The operator may ask the subject to stare into the housing at the filters when they are lighted by the incandescent lamp in the housing. The subject selects and concentrates on one color filter member alone. Then the operator asks the subject to close both eyes while subject is still in the position needed to peer into housing. He asks subject to try to see that color in his own (the subject's) mind's eye. That is, the operator asks the subject to have an after image recall of that color selected by subject before subject closed his eyes. Then the operator tries to inform the subject what color the subject has in mind as an after image effect. He may keep competitive score of his own (the operator's) guesses and compare his results to the guesses of another operator with the same subject who again peers into the housing.

Step 5.—The operator follows instruction of steps 1, 2 only. While he observes colors in his own mind because 115-125 volts with fifty hours duration for life of said 55 of after image effect, he tries to note any change of feelings within himself.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein 60 disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claims.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:

1. An optical display device for visually conditioning its operator, comprising a housing, a first lamp supported in the housing for emitting a sustained bright light, said housing having an opening at one end through which said light is visible, a second lamp in the housing for emitting ultraviolet light in a narrow band width peaking at about 3650 angstrom units, a rotatable disk in the housing, said disk having a surface exposed to the second lamp, said surface having fluorescent spots of different sizes, shapes and colors, said spots being rendered

54 is mounted on the stationary casing of the motor 32. This connector has spring contacts 55, 56 making continuous contact with rings 50, 52 respectively, for supplying power to the lamp 46 in all positions of the disk 35. Wires 60, 61 and 62 are connected between motor 32, connector 54, socket 28 and circuit component box 65. Pushbutton switches 66, 68 are connected by wires 69 to box 65. Switch 66 is mounted in an opening in the housing 12 near the bottom thereof. A power supply cord 70 is connected to box 65. It extends through a grommet 72 in 10 the side of housing 12.

Lamp 46 is centrally disposed on the central, vertical axis of the housing and on the optic axis of lens 25. When lamp 46 is lighted it appears as an intense white light to a person looking into the housing through the lens. The 15 lens spreads the field of the light so that the person sees almost nothing that glows but this bright light.

Three light filter members 73, 74 and 75 colored respectively red, yellow and blue are provided in the housing. As clearly shown in FIGS. 2-5, each filter member has a 20 circular end portion 76 slightly larger in diameter than the lamp 46. The filter members may be made of colored transparent plastic material. The filter members each has a stem 77 which extends radially outwardly of the end portion 76 and is slidably disposed in a rectangular tubular 25 holder 78, 79 or 80 each secured in a different opening 82 in the siding of housing 12. The holders have flanges 83 held by rivets or screws 89. The openings 82 may be disposed 90° apart circumferentially of the housing 12 and are spaced slightly apart axially of the housing. Thus the 30 circular end portions 76 can be overlapped. Any two filter portions 76 can be overlapped during use of the device. The operator of the devce, by retracting all filter members until the end portions 76 are stopped at the inner side of housing 12, clears lamp 46 so that white light 35 passes through lens 25. If filter member 73 is extended until its end portion 76 is aligned centrally with lamp 46 the filter member will pass red light. Filter member 74, similarly will pass yellow light, and filter member 75 will pass blue light. If the end portions 76 of the red and 40yellow filters are superimposed, orange light will pass to lens 25. Similarly the superimposed red and blue filters will pass purple light. Superimposed yellow and blue filters will pass green light. Three superimposed filters will pass no light and this arrangement will not be used except when 45 the device is not in use when all filters can be fully inserted into the device with only the ends of stems 77 projecting radially from housing 12. Pins 85 can be inserted in holes 87 near the free ends of the stems to prevent the stems from passing entirely into the housing. When the 50 filter members are inserted so that pins 85 abut the tubular holders, the circular portions 76 are properly located at the axis of the housing 12 and lamp 46.

FIG. 6 shows the electrical circuit 100 of the device, in circuit 100 power cord 70 can be connected to a suitable power supply 102. Pushbutton switch 68 is a STOP switch which has contacts 103, 105 normally closed. Pushbutton switch 66 is a START switch which has normally open contact 106 connected to power supply wire 104, and open contact 107 connected to arcuate contact 60 108 of a timer switch 110. Contact 103 is also connected to contact 108. Switch 110 is located in the circuit component box 65 shown in FIG. 2. The switch includes a stationary insulated plate 112 on which is contact 108. This contact is circularly curved and has spaced ends 65 at OFF area A1. The switch has two other arcuate contacts 114 and 116 spaced apart at areas A1 and A2. The switch contacts 114 and 116 are concentric with contact 108. The switch has a rotary shaft 118 carrying a rotary conductive arm 120. Arm 120 is electrical- 70 ly connected with slip ring 122 and brush 124 to switch contact 106 of switch 66. Shaft 118 is operatively connected to the shaft 125 of a timer motor 126. This motor is connected between contact 105 of switch 68

nected to incandescent lamp 46 having one terminal connected to wire 101. Glow lamp 26 is connected via rectifier 130 to the secondary winding 132 of a transformer 134. The primary 135 winding is connected between power wire 101 and contact 116. Motor 32 which drives disk 35 is connected between power wire 101 and contact 116.

In operation of the device 10 and circuit 100, the person using the device, looks into the dark interior of housing 12. The operator of the device, or the person looking into the device, then presses the button of START switch 66 and holds this button. Rotary arm 120 which is in the OFF position of timer switch 110 at area A1 rotates clockwise as viewed in FIG. 6. The timer motor 126 is started when the switch 66 is closed. When arm 120 reaches contacts 108 and 114 the operator of the device may release the switch 66. The timer motor will continue to operate since it draws current via contacts 103, 105, 108 and arm 120. Lamp 46 will light since current is drawn via arm 120 and contact 114. Lamp 46 will be lighted for about thirty seconds while the person using the device stares at the intense light in the interior of the housing. Lens 25 concentrates and intensifies the light. After about thirty seconds, arm 120 leaves contact 114 and reaches area A2. The lamps 26 and 46 are extinguished and the interior of the housing remains dark for about ten to twelve seconds. Then lamp 26 goes on while disk 35 starts to rotate as motor 32 becomes energized via contact 116 and arm 120. The lamp 26 stays lighted and the disk 35 rotates about thirty seconds. When arm 120 reaches area A1 again the motors 32 and 126 stop and lamp 26 goes out. The operator of the device then closes his eyes. He may be requested at this time to visualize by his mind's eye or imagination pertaining to after image, that group of colors on disc 35. He then opens his eyes and turns from the device with his eyes open, whereupon he will observe externally a glow, radiance, halo or aura at the perimeter of the animate subject now under inspection by the operator. The color of the glow seen around that animate subject may be the color last visualized on the disc 35 by the operator, or may be anyone of those colors, or a combination of them most strongly remembered by that operator, as he viewed the rotating, flourescent multicolored disc 35, with its spots. In any case the colors so viewed will cease to become merely the after image colors formerly seen by the operator in his own mind. They gradually become the colors of the animate subject being viewed by the operator. The after image of the operator when seen within his own mind after seeing glowing surface of disc 35 is called internal aura or halo. The color seen around the subject by the operator who has stared through the housing at the glowing colors of the disc 35 and who now looking at said subject, are the colors named external halo or aura.

If desired, the person using the device or the operating attendant may press the button of switch 68 to open it. This will stop motor 126 since its circuit will be opened. The cycling of the device will then stop while the switch 68 is held open. If lamp 46 is lighted, it will stay lighted. If either or both lamps 46 and 26 are off they will stay off. If lamp 26 is lighted and disk 35 is rotating, lamp 26 will continue to be lighted and motor 32 will continue driving the disk, until switch 68 is released, whereupon the cycle can continue as before. Thus, operating switch 68 at one or more points in the cycle makes it possible to control manually the length of different parts of the cycle with either lamp held on or off or both lamps held off. The device is thus automatic in operation but has manual controls for selective operation if desired. Instead of using a motor 32, it is possible to turn the disk 35 manually via mechanical and wire 101 of the power cord. Contact 114 is con- 75 means such as a suitable crank and gear means.

the ultraviolet light upon the spots, a motor rotatably supporting said disk, and circuit means connected to the first and second lamp for lighting the first lamp in one part of a timed cycle, then extinguishing the first lamp and after a predetermined time simultaneously lighting the second lamp and energizing the motor to turn said disk, said motor rotating the disk at a speed not greater than about twelve revolutions per second.

2. An optical display device for visually conditioning a person, comprising a housing, a first lamp supported in the housing for emitting a sustained bright light, said housing having an opening at one end through which said light is visible, a second lamp in the housing for emitting ultraviolet light in a narrow bandwidth peaking at about 3650 angstrom units, a rotatable disk in the 15 housing, said disk having a surface exposed to the second lamp, said surface having fluorescent spots of different sizes, shapes and colors, said spots being rendered luminous when the second lamp is energized to project the ultraviolet light upon the spots, a motor rotatably supporting said disk, and circuit means connected to the first and second lamps for lighting the first lamp in one part of a timed cycle, then extinguishing the first lamp and after a predetermined time simultaneously lighting the second lamp and energizing the motor to turn said disk; said motor rotating the disk at a speed not greater than about twelve revolutions per second, and a plurality of different colored transparent filter members in the housing selectively disposable between said first lamp and said opening for selectively varying the color of the 30 bright light transmitted to said opening from the first lamp.

3. An optical display device for visually conditioning a person, comprising a housing, a first lamp supported in the housing for emitting a sustained bright light, said 35 housing having an opening at one end through which said light is visible, a second lamp in the housing for emitting ultraviolet light in a narrow bandwidth peaking at about 3650 angstrom units, a rotatable disk in the housing, said disk having a surface exposed to the second lamp, said surface having fluorescent spots of different sizes, shapes and colors, said spots being rendered luminous when the second lamp is energized to project the ultraviolet light upon the spots, a motor rotatably supporting said disk, and circuit means connected to the first and second lamps for lighting the first lamp in one part of a timed cycle, then extinguishing the first lamp and after a predetermined time simultaneously lighting the second lamp and energizing the motor to turn said disk; said motor rotating the disk at a speed not greater 50 than about twelve revolutions per second, said circuit means including a timer switch, said first and second lamps and said motor being connected in circuit with said timer switch so that each of the lamps and said motor is energized for times determined by said timer 55

4. An optical display device for visually conditioning a person, comprising a housing, a first lamp supported in the housing for emitting a sustained bright light, said housing having an opening at one end through which said light is visible, a second lamp in the housing for emitting ultraviolet light in a narrow bandwidth peaking at about 3650 angstrom units, a rotatable disk in the housing, said disk having a surface exposed to the second lamp, said surface having fluorescent spots of different 65 sizes, shapes and colors, said spots being rendered luminous when the second lamp is energized to project the ultraviolet light upon the spots, a motor rotatably supporting said disk, and circuit means connected to the first and second lamps for lighting the first lamp in one 70 part of a timed cycle, then extinguishing the first lamp and after a predetermined time simultaneously lighting the second lamp and energizing the motor to turn said disk; said motor rotating the disk at a speed not greater than about twelve revolutions per second, said circuit 75

means including a timer switch, said first and second lamps and said motor being connected in circuit with said timer switch so that each of the lamps and said motor is energized for times determined by said timer switch, said circuit further including a timer motor driving said timer switch, and a manually operable other switch in circuit with the timer motor for stopping the motor at any point in said cycle for prolonging the lighting time of either of the lamps and for delaying the lighting of either lamp.

5. An optical display device for visually conditioning a person, comprising a generally cylindrical housing having an opening at one end thereof, a lens located near said opening near one end of an optical line of sight in said housing, an incandescent first lamp supported in the housing for emitting a sustained bright light through said lens to the open end of the housing, a fluorescent, tubular second lamp in the housing, said second lamp being circular in form and disposed in axial alignment with said lens and said first lamp, said second lamp having a deep purple transparent body so that the second lamp emits ultraviolet light in a narrow bandwidth peaking at about 3650 angstrom units, a rotatable disk in the housing spaced from the lamps, said disk having an axis of rotation aligned with the axis of the second lamp, said disk having a surface covered with fluorescent spots of different colors, so that said spots are rendered luminous and visible through the lens when the second lamp is energized to project the ultraviolet light on said surface, said surface being located in said line of sight, a motor rotatably supporting the disk, the circuit means connected to the first and second lamps and motor for lighting the first lamp in one part of a timed cycle, then extinguishing the first lamp and after a predetermined time simultaneously lighting the second lamp and energizing the motor to turn said disk; said motor rotating the disk at a speed not greater than about twelve revolutions per second.

6. An optical display device for visually conditioning a person, comprising a generally cylindrical housing having an opening at one end thereof, a lens located near said opening near one end of an optical line of sight in said housing, an incandescent first lamp supported in the housing for emitting a sustained bright light through said lens to the open end of the housing, a fluorescent, tubular second lamp in the housing, said second lamp being circular in form and disposed in axial alignment with said lens and said first lamp, said second lamp having a deep purple transparent body so that the second lamp emits ultraviolet light in a narrow bandwidth peaking at about 3650 angstrom units, a rotatable disk in the housing spaced from the lamps, said disk having an axis of rotation aligned with the axis of the second lamp, said disk having a surface covered with fluorescent spots of different colors, so that said spots are rendered luminous and visible through the lens when the second lamp is energized to project the ultraviolet light on said surface, said surface being located in said line of sight, a motor rotatably supporting the disk, and circuit means connected to the first and second lamps and motor for lighting the first lamp in one part of a timed cycle, then extinguishing the first lamp and after a predetermined time simultaneously lighting the second lamp and energizing the motor to turn said disk; said motor rotating the disk at a speed not greater than about twelve revolutions per second, said housing having a resilient pad around the periphery of said opening to form a light-tight seal with a person's forehead and cheeks when the person looks into the open end of the housing.

7. An optical display device for visually conditioning a person, comprising a generally cylindrical housing having an opening at one end thereof, a lens located near said opening near one end of an optical line of sight in said housing, an incandescent first lamp supported in the housing for emitting a sustained bright light through said lens to the open end of the housing, a fluorescent, tubular second lamp in the housing, said second lamp being circu-

lar in form and disposed in axial alignment with said lens and said first lamp, said second lamp having a deep purple transparent body so that the second lamp emits ultraviolet light in a narrow band width peaking at about 3650 angstrom units, a rotatable disk in the housing spaced from 5 the lamps, said disk having an axis of rotation aligned with the axis of the second lamp, said disk having a surface covered with fluorescent spots of different colors, so that said spots are rendered luminous and visible through the lens when the second lamp is energized to project the 10 ultraviolet light on said surface, said surface being located in said line of sight, a motor rotatably supporting the disk, and circuit means connected to the first and second lamps and motor for lighting the first lamp in one part of a timed cycle, then extinguishing the first lamp and after a prede- 15 termined time simultaneously lighting the second lamp and energizing the motor to turn said disk; said motor rotating the disk at a speed not greater than about twelve revolutions per second, and a pluraltiy of different colored transparent filter members in the housing selectively dis- 20 posable between said first lamp and said opening for selectively varying the color of the bright light transmitted to said opening from the first lamp.

8. An optical display device for visually conditioning a person, comprising a generally cylindrical housing having 25 an opening at one end thereof, a lens located near said opening near one end of an optical line of sight in said housing, an incandescent first lamp supported in the housing for emitting a sustained bright light through said lens to the open end of the housing, a fluorescent, tubular sec- 30 ond lamp in the housing, said second lamp being circular in form and disposed in axial alignment with said lens and said first lamp, said second lamp having a deep purple transparent body so that the second lamp emits ultraviolet light in a narrow bandwidth peaking at about 3650 ang- 35 strom units, a rotatable disk in the housing spaced from the lamps, said disk having an axis of rotation aligned with the axis of the second lamp, said disk having a surface covered with fluorescent spots of different colors, so that said spots are rendered luminous and visible through 40 the lens when the second lamp is energized to project the ultraviolet light on said surface, said surface being located in said line of sight, a motor rotatably supporting the disk, and circuit means connected to the first and second lamps and motor for lighting the first lamp in one part of a timed cycle, then extinguishing the first lamp and after a predetermined time simultaneously lighting the second lamp and energizing the motor to turn said disk; said motor rotating the disk at a speed not greater than about twelve revolutions per second, and a plurality of different colored transparent filter members in the housing selectively disposable between said first lamp and said opening for selectively varying the color of the bright light transmitted to said opening from the first lamp, said circuit means including a timer switch, said first and second lamps and said motor being connected in circuit with said timer switch so that each of the lamps and said motor is energized for times determined by said timer switch, said circuit further including a timer motor driving said timer switch, and a manually operable other switch in 60 circuit with the timer motor for stopping the motor at any point in said cycle for prolonging the lighting time of either of the lamps and for delaying the lighting of either.

9. An optical display device for visually conditioning a person, comprising a generally cylindrical housing having an opening at one end thereof, a lens located near said opening near one end of an optical line of sight in said housing, and incandescent first lamp supported in the housing for emitting a sustained bright light through said lens to the open end of the housing, a fluorescent, tubular second lamp in the housing, said second lamp being circular in form and disposed in axial alignment with said lens and said first lamp, said second lamp having a deep purple transparent body so that the second lamp emits ultraviolet light in a narrow bandwidth peaking at about 75 second lamp is energized to project the ultraviolet light

3650 angstrom units, a rotatable disk in the housing spaced from the lamps, said disk having an axis of rotation aligned with the axis of the second lamp, said disk having a surface covered with fluorescent spots of different colors, so that said spots are rendered luminous and visible through the lens when the second lamp is energized to project the ultraviolet light on said surface, said surface being located in said line of sight, a motor rotatably supporting the disk, and circuit means connected to the first and second lamps and motor for lighting the first lamp in one part of a timed cycle, then extinguishing the first lamp and after a predetermined time simultaneously lighting the second lamp and energizing the motor to turn said disk; said motor rotating the disk at a speed not greater than about twelve revolutions per second, and a plurality of different colored transparent filter members in the housing selectively disposable between said first lamp and said opening for selectively varying the color of the bright light transmitted to said opening from the first lamp, said circuit means including a timer switch, said first and second lamps and said motor being connected in circuit with said timer switch so that each of the lamps and said motor is energized for times determined by said timer switch, said circuit further including a timer motor driving said timer switch, and a manually operable other switch in circuit with the timer motor for stopping the motor at any point in said cycle for prolonging the lighting time of either of the lamps and for delaying the lighting of either, said housing having a resilient pad around the periphery of said opening to form a light-tight seal with a person's forehead and cheeks when the person looks into the open end of the housing.

10. An optical display device for visually conditioning a person, comprising a housing, a first lamp supported in the housing for emitting a sustained bright light, said housing having an opening at one end through which said light is visible, a second lamp in the housing for emitting ultraviolet light in a narrow bandwidth peaking at about 3650 angstrom units, a rotatable disk in the housing, said disk having a surface exposed to the second lamp, said surface having fluorescent spots of different sizes, shapes and colors, said spots being rendered luminous when the second lamp is energized to project the ultraviolet light upon the spots, a motor rotatably supporting said disk, and circuit means connected to the first and second lamps for lighting the first lamp in one part of a timed cycle, then extinguishing the first lamp and after a predetermined time simultaneously lighting the second lamp and energizing the motor to turn said disk; said motor rotating the disk at a speed not greater than about twelve revolutions per second, said circuit means including a timer switch, said first and second lamps and said motor being connected in circuit with said timer switch so that each of the lamps and said motor is energized for times determined by said timer switch, said circuit further including a timer motor driving said timer switch, and a manually operable other switch in circuit with the timer motor for stopping the motor at any point in said cycle for prolonging the lighting time of either of the lamps and for delaying the lighting of either lamp, and a plurality of different colored transparent filter members in the housing selectively disposable between said first lamp and said opening for selectively varying the color of the bright light transmitted to said opening from the first lamp.

11. An optical display device for visually conditioning a person, comprising a housing, a first lamp supported in the housing for emitting a sustained bright light, said housing having an opening at one end through which said light is visible, a second lamp in the housing for emitting ultraviolet light in a narrow bandwidth peaking at about 3650 angstrom units, a rotatable disk in the housing, said disk having a surface exposed to the second lamp, said surface having fluorescent spots of different sizes, shapes and colors, said spots being rendered luminous when the

a timer motor driving said timer switch, and a manually operable other switch in circuit with the timer motor for colored transparent filter members in the housing selecstopping the motor at any point in said cycle for prolongof the lamps and said motor is energized for times deterconnected in circuit with said timer switch so that each switch, said first and second lamps and said motor being energizing the motor to turn said disk; said motor rotating and circuit means connected to the first and second lamps tively disposable between said first lamp and said openthe lighting of either lamp, and a plurality of different ing the lighting time of either of the lamps and for delaying mined by said timer switch, said circuit further including mined time simultaneously lighting the second lamp and upon the spots, a motor rotatably supporting said disk, the disk at a speed not greater than about twelve revoluthen extinguishing the first lamp and after a predeterfor lighting the first lamp in one part of a timed cycle, tions per second, said circuit means including a timer 5 10

head and cheeks when the person looks into the open end ing having a resilient pad around the periphety of said opening to form a light-tight seal with a person's foreof the housing. transmitted to said opening from the first lamp, said housing for selectively varying the color of the bright light

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7/1914 France.

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RESERVE COPY

PATENT SPECIFICATION



Application Date: Feb. 17, 1922. No. 4678 22.

198,018

Complete Left Nov. 11, 1922.
Complete Accented: May 17, 1923.

PROVISIONAL SPECIFICATION.

Instrument for Detecting and Investigating Emanations Proceeding from Substances.

I, WILLIAM ERNEST BOYD, of British nationality, of 17, Sandyford Place, Charing Cross, Glasgow, do hereby declare the nature of this invention to be as follows:—

The subject of the present invention is an instrument for detecting the minute particles or ether vibrations proceeding from substances, animal, vegetable or mineral, for the purpose of analysing their particular type of electrical activity, whether they are in simple or compound chemical form and whether they are present in natural form or incorporated in manufactured substances, whereby an analysis of the substance may be carried out.

The instrument comprises an electrical circuit containing: -(a) An inductance 20 calibrated as such in henrys or cms., (b) a variable condenser, (c) a so-called terminal detector in the form of a box having an insulated bottom containing some good conducting substance such 25 as aluminium insulated and a top containing similar material and similarly insulated, or, if preferred, having sides containing insulated electrical conducting material, the insulated 30 material being connected by terminals to the respective parts of the electrical circuit in which it is placed, and an arrangement being provided for separating the two surfaces containing the 35 insulated electrical conducting material

from each other so as to give a variable distance between the surfaces the distance appropriate to the substance under test being dependent on the intensity of the energy of the enumerations or vibra- 40 tions; (d) a final detector; and (f) a removable fixed concenser to be omitted on occasion.

It is to be noted that this arrangement differs from many wheless arrangements 45 in that there is no earth and no aerial. Further it is self-entained and also includes as a component the apparatus referred to under (c) above. This apparatus acts both as a container for the 50 specimen under examination and for detection of the electrical energy of the substance in question. There are no butteries or sources of energy in the main circuit other than the specimen.

The final detector returned to above may depend on certain nerve reactions in a buman subject, or may be in the form of an einthoven galvanometer after rectification or without it, or may utilise 60 the movement of colloidal particles in a fluid medium as indicative of difference of potential between two sides of the circuit introduced into the medium.

Dated this 16th day of February, 1922, 65 CRUIKSHANK & FAIRWEATHER, 62, Saint Vincent Street, Glasgow, and 65-66, Chancery Lane, London, W.C., Agents for the Applicant.

COMPLETE SPECIFICATION.

Instrument for Detecting and Investigating Emanations Proceeding from Substances.

I. Whiliam Ernest Boyd, of British Charing Cross, Glasgow, do hereby nationality, of I7. Sandyford Place, declare the nature of this invention [Price 1/-]

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and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement: --

. The subject of the present invention is an apparatus for detecting and investigating emanations proceeding from substances, animal, vegetable or mineral, for the purpose of analysing their particular 10 type of electrical activity, whether they are in simple or compound chemical form and whether they are present in original form or incorporated in manufactured substances, whereby an analysis of the 15 substance may be carried out.

The emanations in question are believed to be minute ether wave effects due to electronic activity in the specimen substance; it being understood that the 20 analysis is effected by comparing the waves from unknown substances with the waves from known chemical elements or

known organic specimens.

The apparatus of the invention com-25 prises an electrical circuit containing (a) An inductance calibrated as such in henrys or cms.; and so arranged that every portion of the winding can be "tapped" by a contact; (b) Λ so-called 30 "terminal detector" consisting of two metallic plate: which can be separated from each other and which are embedded in insulating material, with opposing faces substantially free from insulation, 35 one plate being connected to earth or to a body capable of absorbing electrical energy, the distance between the two plates providing a factor for comparative measurement of the energy of the speci-40 men. (c) Λ final detector. There may be employed as a final detector, as heretofore proposed, a human being placed in a magnetic field which crosses the body at right angles to the plane of sight. 45 This magnetic field may be that of the earth or may be set up by a bar magner placed at right angles to the plane of sight; (d) A variable condenser, where very accurate work is required.

It is to be noted that this arrangement differs from many wireless arrangements in that there is no aerial. Further, it includes as a component the "terminal detector" referred to above. No battery 755 or other source of energy except the speci-

men is used.

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In the figure of the accompanying drawing there is illustrated diagrammatically an arrangement according to 60 the invention.

For the purpose of the following explanation certain assumptions are made as to the path of the current produced in consequence of the activity of the speci-65 men which results in certain phenomena.

The correctness or incorrectness of these assumptions is, however, immaterial as regards the actual operativeness of the

The actual source of energy may be for example a drop of blood or saliva of a patient contained in a receptuele 1 clipped say by a rubber band to the plate 3 of the terminal detector. The plate 3 is adapted to be variably spaced from the co-operating plate 4. For measuring the gap between the plates 3 and 4 there is provided a scale 5.

The plate 4 is electrically connected to an inductance 6 of wire wound as a helix on an insulator and engaged by a finger 7 carried by a nut adapted to travel along a screw-threaded spindle 8 of the opposite hand from the helically wound wire, and of the same pitch, the insulator and spindle being interconnected by spur gears of the same size. With this arrangement there is continuous contact between the finger and the wire notwithstanding variation of the inductance action produced by turning the handwheel 9 fitted to the spindle 8, the latter carrying the vernier wheel 20. A pointer 10 moving with the finger 7 travels over the scale 11. A contact 12 also moving with the finger 7 bears on a conducting

strip 13. From the plate 3 a conductor 23 is led to a metallic foot-plate 14 to which may also be connected an earthed con- 100 nection 15. The foot-plate 14 is also connected by a conductor 16 with a metallic foot-plate 17. From the strip 13 is led a conductor 18. For very accurate work a variable condenser in series with the 105 conductor 18 may be provided. The conductor 18 terminates in a plug 19 or the like adapted to be fitted to a bandage strapped to the head of a human being. whose teet are placed on the plates 14-110 and 17, and who may face either east

It may be assumed that a path for current is presented by the nerves and or muscles of the human being. The 115 phenomena to be observed are produced by tapping the thorax or abdomen of the human being, say, in the case of the abdomen, as about the point Λ . It is found in practice that, as the plate 3 is 120 shifted more or less from the plate 4, a dull sound produced by tapping at A with a given setting of the inductance changes with increased separation of the plates 3 and 4 to a hollow sound, indicating that 125 energy has ceased to cross the gap between the plates 3 and 4, or at any rate that there is no longer passage of such energy as is requisite for the production of the dull sound. The distance between 130

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the plates 3 and 4 as read on the scale 5 is thus a measure of the intensity of the energy. Particular types of emanations can be identified from the setting of the 5 inductance at which such observations are made.

The electrical disturbances representative of the energy in question are high frequency oscillations, the magnitude of 10 which is at present not measurable by any other means than the scales of the instrument itself.

As a specimen there may be employed, for example, a drug, the activity or 15 emanations of which are to be tested, and, if desired, compared with those of the patient whereby to determine the suitability of the drug.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed. I declare that what I claim is:—

Apparatus for detecting emanatious

proceeding from substances, animal, 25 vegetable or mineral, for the purpose of analysing their particular type of electrical activity, comprising an electrical circuit containing (a) A calibrated inductance so arranged that every portion of the winding can be "tapped" by a contact: (b) A terminal detector consisting of two metallic plates insulated from one another and movable relatively to one another, one plate, adjacent to which the specimen is placed, being connected to eagth or to a body capable of absorbing electrical energy, the distance between the two plates providing a factor for comparative measurement of the energy of 40 the specimen; (c) A final detector; and, if desired, also (d) a variable condenser.

Dated this 10th day of November, 1922.
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65—66, Chancery Lane, London, W.C.,
Agents for the Applicant.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.-1923.

