

Physico-Clinical Medicine

A QUARTERLY JOURNAL DEVOTED TO THE STUDY
OF THE ELECTRONIC REACTIONS OF ABRAMS
AND THE VISCERAL REFLEXES OF ABRAMS
IN THE DIAGNOSIS, TREATMENT AND
PATHOLOGY OF DISEASE

Vol 4

DECEMBER, 1919

No. 2

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All the subject-matter of this Journal refers to the original research work of Dr. Albert Abrams. Citations from other sources will be duly accredited. "Spondylotherapy" and "New Concepts in Diagnosis and Treatment" constitute the archetype of this Journal and "S", in parenthesis, followed by a number, refers to the page in the former and "N.C." to the latter work where extended consideration of the subject cited will be found. "J", refers to a previous number of this Journal. The motive of this Journal is to replace the cell doctrine by the Electron theory. Vital phenomena are dynamic and the actions of organisms should be regarded as processes and not as structures. Exclusivism is excluded inasmuch as all sciences are embraced in practical medicine and diagnosis must invoke physical, biological and chemical methods. All problems in medicine not in accord with the progress made in physical science are doomed to perish.

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THE PHYSICS OF HUMAN PHENOMENA.

Scientific theories are frequently swept into the discard. The physics of the electron has dethroned cherished hypotheses which, in deference to tradition have survived the lapse of time.

Electron Theory.—Electrons are charges of electricity which produce radiations by their incessant activity. The relatively crude methods of physicists show that, practically only thirty-six bodies (products of uranium, thorium or both) are radioactive.

Radium emanation is detectable by the electroscope which is a million times more sensitive than a spectroscope although the latter detects the millionth of a milligram of matter.

Electroradiometer.—This apparatus devised by the writer is essentially an electroscope sensitized by its construction on the electric balance principle (Fig. 1).

Observations with it are objective, constant and invariable and disprove the contention that the normal condition of matter yields no evidence of electricity. On the contrary, radiant energy from all matter is electric and that by certain devices in connection with the instrument, differentiation of one substance from another is possible and furthermore, the energy yield of matter and polarity are determinable.

The electroradiometer (Fig. 1) consists of an electric balance electroscope (A) with a single suspended gold leaf: B, a device for differentiating vibratory rates: C, a device for measuring the energy output of all radioactive matter: D, an electrode for receiving the energy: E, induction coil for stepping up energy: F, apparatus (with G, for connection to an electric circuit) for projecting movements of the leaf on a screen so that the same may be observed simultaneously by a number of persons: H, reading microscope with micrometer eye piece for individual observation of the movements of the leaf: I, plate for grounding the energy before it is received by D*.

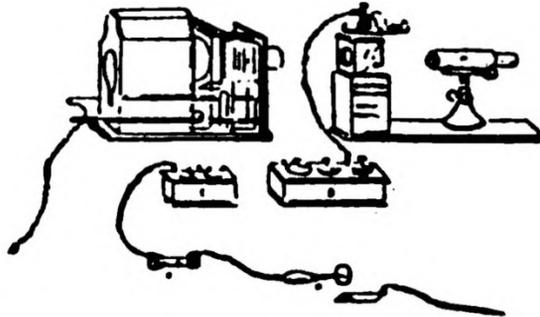


Fig. 1. Abram's Electroradiometer for Electroradiometry

Animal Machine.—Problems of nature are only computable in accordance with the laws of physical science. The forces resident in the living organism correspond with those governing the inanimate world. The ultimate unit of the human organism is the Electron and not the cell and the phenomena associated with the former may be interpreted with mathematic certainty by the Electroradiometer. Vital phenomena are dynamic and the actions of organisms should be regarded as processes and not as structures. Science today though true is woefully deficient.

*Brief reference to new observations are here cited. Detailed reference to the subject may be found in the writer's book, "New Concepts in Diagnosis and Treatment."

A science may be gauged by the amount of mathematics (symbolized logic) it contains and when one can neither measure nor express knowledge in numbers, such knowledge cannot be dignified as scientific. The writer is a positivist in the sense that knowledge should be limited to phenomena and that all sciences are but branches of one science to be investigated on one and the same method. The ancient theory of vitalism predicated a capricious vital force unfettered by natural laws thus segregating the human organism from other entities which retarded the interpretation of human phenomena. The lungs of the human machine antedated the bellows; the heart, the pump, the hand, the lever, and the eye, the photographic camera.

Telephonic and telegraphic apparatus only duplicate what has always been done by the nervous system and always by aid of the same energy and the sense organs are equipped as receivers for all kinds of radiant energy.

Human Radiation.—Energy liberated by the human appears in mechanical, thermal and electrical form. Apparatus (magnetometer, sthenometer and a variety of dynamoscopes) for recognizing radiations have been devised but lacking constancy in action, they are impracticable.

The heretofore supposititious radiations have been called prana, animal and vital magnetism, odyle, psychode, biactinism, aura etc. Superstition is true psychology with the wrong dress and the Electroradiometer shows that some spiritistic phenomena are realities independent of disembodied spirits and referable to the manifestations of human radioactivity. It can be shown that, in the normal male, radiations from the right hand are positive and negative from the left hand and this polarity is reversed in the normal female. Yellow reflected on the body will reverse the normal polarity in both sexes. It can be shown with the Electroradiometer that the average man thinks with only one side of his brain, whereas the genius utilizes both sides.

The Soul.—Science never transcends human intelligence, nor does it invoke in the interest of its doctrines any suspension of the laws of nature, for, after all, "Facts are the words of God."

The word 'soul' was invented to imply a naturally imperishable entity. The doctrine of immortality is by no means alluring. The unhappy Ahasuerus vainly sought death after finding his eternal life intolerable. The religion of Buddha finds perfect rest only in the annihilation of self.

Isolation and weighing of an electron, the most unthinkably minute particle ever conceived by man eliminates imponderability as the dividing line of material and spiritual matter. The vital force as the electroradiometer shows is the inherent radioactivity common to all animals evolved from the incessant activity of the electrons and is essentially the soul. My measurements show that the yield of this radioactive energy is greatest at birth and diminishes with advancing age.

At birth, its potentiality is sufficient to overcome a resistance of more than three ohms whereas at the age of 70, the resistance it can overcome is not more than 3-25 of an ohm. If then animal radioactivity corresponds with the mythical soul, in old age we have no soul and it would seem to justify the Byronic allusion, "Whom the Gods love die young."

Radioactive energy must necessarily vary with the temperamental individual who has "pep" and the phlegmatic one who has little. There is no more radioactive equality in birth than there is in the elements. The diamond, amorphous carbon and graphite are identical in composition although showing different properties and this difference in the allotropes depends simply in the amount of bound up energy.

Love.—This, like every other natural phenomenon is dependent upon matter in vibration and is subject to the law of polarity. It is the most powerful emotion that sways the destiny of individuals. The response of the heart to this emotion is apostrophized by the poet, "In many ways doth the full heart reveal the presence of love it would conceal." Connecting D (Fig. 1) with the heart, one notes in general, the following polar responses after different names are called by the experimenter:

1. Indifference to the person whose name is mentioned evokes a two and fro movement of the leaf of the Electroradiometer (polarity of neutrality):

2. Affection is announced by a decided swing of the leaf to the left and the amplitude of the swing is in direct proportion to the depth of affection.

These responses are involuntary and thus the subjective mind reveals to the individual what reason cannot do. Civilization predicates an abrogation of natural laws and marriage based on man's laws, will soon prove an anachronism by aid of Electroradiometry.

Radioactive waves have no effect on objects incapable of vibrating in resonance with them. The Electroradiometer shows that attraction between the sexes is a matter of like rates of vibration and repugnance or indifference is only a question of dissimilar rates.

It can be shown that love is only a matter of induction just like the production of magnetization or electrification by the proximity of another body.

In such instances, when the female has been the causal factor in inductance, the swing of the leaf is toward the left and vice versa.

Paradoxical as it may appear, odd and even numbers are the mathematical sexes: the Electroradiometer shows that the former are male and the latter female.

With a few drops of blood personal identity may now be established with reference to approximate age, sex, race and parental origin. It is possible to say whether sex is normal, or whether the individual is asexual, bisexual or heterosexual. Racial reactions are constant and moot points in ethnology heretofore beyond our ken may now be solved. Racial rates of vibration are transmitted to the progeny and the proportion of such transmission may be measured. Thus a person whose father is a Jew of German parentage and whose mother's parents are French may be racially identified. My investigations show that a child through generations has the same vibratory rate as its parents.

TRIUMPHANT SCIENCE.

An analytic retrospect of the preceding contribution constrains one to exclaim, O! science, where is thy solace? O! science where is thy victory?

When, from an unbiased viewpoint one witnesses the epidemical diffusion of Christian Science and other popular delusions, one is impressed with the fact that "It's great to be crazy." Superstition is of jungle heritage. Scratch the skin of the average person and you'll find the Tartar whereas others are so nauseating that you'll find tartar emetic. In the tempora mutantur, the present day psychology of the proletarian refuses to respond to the ruthless iconoclasm of science. Lotze affirms that our apprehension of the world is one prolonged deception and Taine in his work on "Intelligence," avers that as a rule, all perception is hallucination.

Voltaire observed, "As nothing can be proved, let us believe in the impossible." This paragon of polished mockery likewise observed, "If there were no God, it would have been necessary to invent one."

Descartes observed "that whatever is clearly and distinctly thought, must be true.

It is neither inspiring nor consoling to be made to believe that dolorous science has cast its blight on man who was once cherished as the supreme work of God to find that he is only an accidental product of an arboreal ape.

There are the credulous who believe too much and the skeptics who believe too little.

We were not all created mentally equal. Intellectuality imposes obligations and the penalty of knowledge is the rejection of sentiment, when the latter nullifies reason.

Even mighty minds,—Sir Oliver Lodge and Sir Arthur Conan Doyle, find solace in their grief, by interpreting as realities the gibberish of "trance speaking" and other phenomena called "spiritistic."

The average mind is unprepared to become engulfed in the maelstrom of disbelief and divorced from beautiful illusions which contribute so much to his happiness.

I have just read "Memories," by Stephen Coleridge. Harken to his threnody; "The sinister advance of science which is desolating all things lofty in life,

is the great dominant event of the last fifty years; if it continues unchecked, it will lead down to a general disintegration and dissolution of society, which, after all, is entirely based on the unscientific qualities of subordination, duty, mercy, reverence love and willing toil for the benefit of others."

ANIMAL ORIENTATION AND MAGNETIC INFLUENCES

BY DR. JULES REGNAULT, EX-PROFESSOR OF ANATOMY, OF THE SCHOOL OF NAVAL MEDICINE, OF TOULON, FRANCE.

(Paper read before the Society of Comparative Pathology, July 8, 1919, and translated by Albert Abrams).

(Abrams has shown the influence of position on visceral tone (N. C. P. 101). Regnault, here recounts his investigation bearing on this subject. His work, "Medicine et Pharmacie chez des Chinois, etc., is a French classic.—Editor).

The orientation of animals is a physiologic problem which has not thus far received a satisfactory explanation. Since investigating the visceral reflexes of Dr. Albert Abrams, I now regard this subject from a new viewpoint. Different authors admit that the sense of orientation is provoked by the physiologic excitation of terrestrial magnetism which they have localized (object of excitation) in the semi-circular canals. Other theories embrace hereditary habits, congenital memory and a combination of memory with the employment of the senses. All these theories are insufficient to explain the migration of birds and fish and the Prince of Monaco has shown that a whale pursues his route for many miles in the open sea in the direction of a compass.

In China, great importance is attached to the position of monuments and tombs and the influence of terrestrial magnetism on the health of man and animals.

The European seems to attach importance to the position of monuments in relation to the sun.

In Greco—Latin antiquity, the temples were orientated from East to West so that the solar rays by penetrating the entrance could fall on the statue of divinity; the first Christian churches were oriented in an inverse sense so that the sanctuary facing the East enabled the devout to view the Orient.

Physicians have not attributed any importance to orientation. The only notable exception is that of Marcellus Empiricus who in his treatise *Des médicaments* (1536), directed patients taking a drug for gout and sciatica to face the Orient. In 1845, Reichenbach, in his studies noted that certain patients get benefit when they face the East and many sleep better when their beds are directed North and South with the head toward the North.

In 1914, my studies on orientation were interrup-

ted by the war, but have been resumed and controlled by the observations of Abrams.

To obtain the best results, the subjects must stand on a grounded plate and colors and intense light must be eliminated. Under these condition, I have made many investigation with colleagues at Vichy, Granville and Toulon and our invariable results may be summarized as follows:

When the heart area was defined by percussion (patient facing west) and then percussed again with the patient facing east, north and south, the area of dulness was notably diminished in the latter positions.

The liver border in the right parasternal line diminished 2 to 3 cm., and the upper heart border was lowered from 8 to 10 mm. when the subject was turned from the position, "face to the west," to the position, face to the north." We proved Abrams studies which show that the visceral reflexes attain their maximum reaction from electronic energy when the subject faces west.

These facts show the variations produced in visceral tonicity by orientation; they show the influence of terrestrial magnetism on the human organism and the orientation of animals, facts which have heretofore escaped recognition.

The studies of Dubois on the influence of magnetism on microbial colonies are unfortunately incomplete owing to the non-recognition of polar influences.

This same experimenter observes, "The reaction to a movement can be internal, intracellular, intramolecular, atomic, ionic or electric but owing to the fact that it escapes direct observation, I have called it intrabiocinese."

According to my experience, the Electronic reactions which escape observation may be placed in evidence thanks to the great sensitivity of the visceral reflexes.

ELECTRONIC REACTIONS OF ABRAMS OVERT PHENOMENA

Elsewhere, (1) reference has been made to these reactions in detail. In our repeated references to the latter, we have commented on the sensitivity of the human reflexes for demonstrating infinitesimal radioactivity which is an inherent property of all matter. It is difficult to conceive of any mechanism which is responsive to ethereal vibrations at a rate of 500 million million a second. Thus it is, that physicists only recognize a limited number of bodies possessed of radioactivity although they concede that all elements are radioactive.*

Recent reports from the Department of Agriculture show that old maxims bearing on farm practice are more reliable than deductions recruited from scientific data. These traditional maxims are based on the behavior of plants and animals which are more sensitive and consequently more responsive to external conditions than any instrument yet devised by man. In despair and in accordance with the foregoing a science of phenomena, "Phenology" is proposed. The physiologic responses to infinitesimal atomic energy have merely escaped observation thus making knowledge defective not so much for want of knowing as for want of looking. There is never a sensation from within which does not find its expression from without.

The writer has shown elsewhere how the heart may be utilized for demonstrating and differentiating various forms of energy. Brief reference at this time will be made to new vasomotorial and muscular phenomena. Practically all diseases yield a definite physiologic topography as shown in "Iconography of the Electronic Reactions of Abrams" but at this time, reference will only be made to tuberculosis. For the rationale of the phenomena, the reader is referred elsewhere.

To objectify the following overt physiologic reactions, the initial exaction is a modicum of patience.

*The writer has constructed an apparatus known as Electroradiometer, which is essentially an electric balanced Electroscopie enabling him to differentiate radiant energy. Although practical, it does not attain the sensitivity of the human reflexes. It was the Electroradiometer which enabled him to devise his oscilloclast, an apparatus by which major operations may be executed by aid of a definite vibratory rate secured from an electric circuit and from which absolutely no sensation is felt by the patient.

General Exactions.—Practically any non-tuberculous person of either sex (subject) may be used for the physiologic reactions. The subject must be seated facing the geographical West in proximity to a window with the feet on a metal plate grounded by means of a wire to a faucet or radiator. This grounding may be effected without a plate by fastening a wire to subject's leg and the other end to a faucet or radiator. Preliminary investigations may be made with a culture tube of tubercle bacilli. The latter must be so grasped that the finger tips of the experimenter must not be pointed in the direction of the culture tube (to avoid the radioactive polarity issuing from the fingers). When the phenomenon is evident to the experimenter, he may conduct the energy through a conducting cord (preferably with

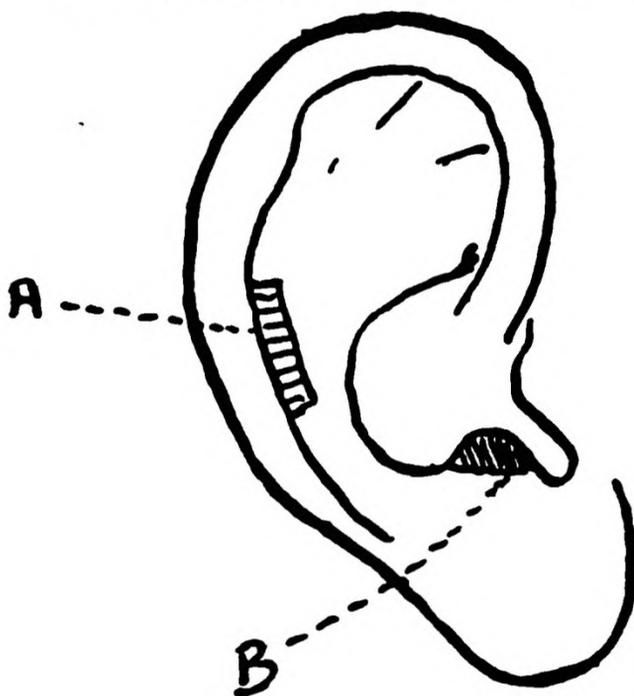


Fig 2. Area of localized hyperemia when tuberculosis energy is conveyed to the navel. A more intense hyperemia is noted when the energy is applied to the center of the forehead. Area of hyperemia is supplanted by pallor when end of culture tube is applied at a point about 3 inches to the left of the navel. B, vasomotor or reaction of strep infection.

aluminum electrodes, not in excess of 1 in. in diameter) from a suspected tuberculous lesion to the receptive area of the subject. Better results are achieved if the patient as well as the subject is grounded. Later, by employing a special ohmmeter, he may differentiate the energy thus conveyed through the latter by no-

ting that the physiologic response is only at either 15 and 57 of the scale. Furthermore he may be able by aid of the ohmmeter to measure the potentiality of the energy and thus note the progression or retrogression of the disease. The physiologic reactions in question furnish the earliest evidence of tuberculosis and far exceed in value the conventional methods employed in diagnosis. With a pointed aluminum electrode the area of the lesion may be defined. Thus, when the electrode attains one side of the area, there is a response and so with other sides of the area which may be marked with a pencil. The reactions may be noted in artificial light which must be at some distance from the subject.

The writer has shown how the patient may be utilized (without a subject) for diagnosis by aid of the electronic reactions and, in the same work how the ear of a white rabbit may be employed for a like purpose.

Otoangioscopy.—Select a subject with a moderately red ear (a congested ear is of no value). Note that when the end of the culture tube is applied in the region of the navel, there is an immediate response in the area shown in Fig. 2. The physiologic response is an area of circumscribed hyperemia and if any veins are present, their engorgement is apparent. Most subjects can localize the area by the

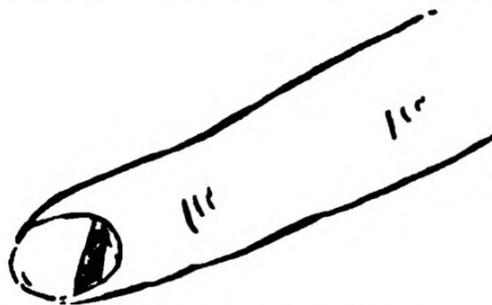


Fig. 3. Area of pallor in the finger nail (preferably ring finger) in tuberculosis.

burning sensation which persists for a variable period after the removal of the tube. The experiment with the same subject can only be repeated a few times owing to the persistence of the hyperemia. A better hyperemic response is achieved when the tube is placed in the center of the forehead.

Onychoscopy.—It is difficult to observe circumscribed areas of hyperemia in the nails so that observation must be limited to areas of pallor. If the

end of the tube is applied to the subject at a point on a line with the navel and about 3 in. to the left of the latter, pallor will be noted at the area shown in Fig. 3.

In the application of the energy to the receptive abdominal areas, it is unnecessary to remove the clothing, although better results are achieved when the tube approximates the skin.

Myoscopy.—Exactions (position, grounding, light, etc.) like the elicitation of the foregoing reactions. Thin individuals are alone adapted for the myoscopic reactions. The receptive zone for the tuberculous energy in these reactions is the area A, shown in Fig. 4, viz., at a point corresponding to the median line of the vertex, on a line drawn from the outer borders of the orbitae.

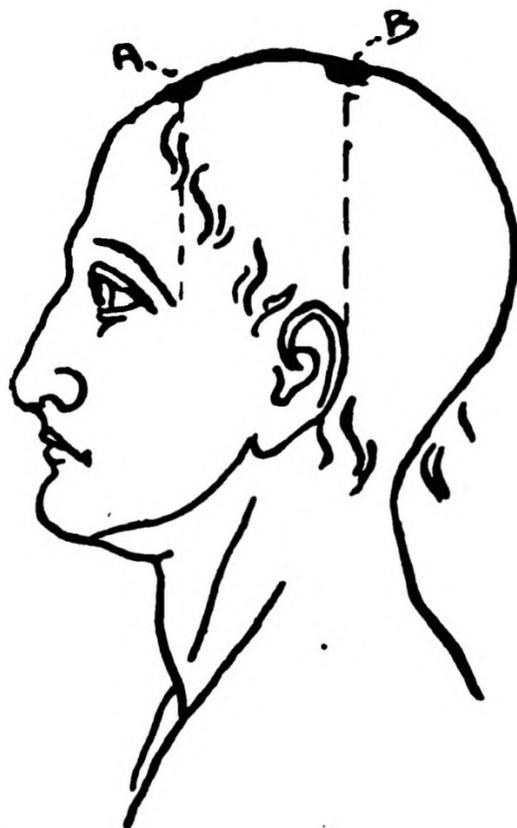


Fig. 4. A—Receptive area to elicit the myosopic reactions (center for muscular tonus): B, hypothetical centrum for atonicity.*

*Abrams' heart and lung reflexes are universally recognized by stimulation of definite spinous processes as shown in Spondylotherapy and elsewhere. (4). Stimulation of the area (Fig. 4) will elicit these reflexes of greater amplitude and duration. If this area is struck with a plexor by aid of a pleximeter and the small veins of the hand or arm are noted, the veins in question will be seen to contract. The writer assumes that this area (Fig. 4A) is the center for muscular tonicity. In an area corresponding to the center of the vertex (B, Fig. 4) is stimulated by concussion or sinusoidalization the veins become engorged. These centers may be utilized in treatment (Cephalotherapy).

Reaction of the Platysma Myoides.—When the end of the culture tube is placed at A, Fig. 4, a retraction of the skin ensues which is invariably in the same area (Fig. 5). This area may be identified after several observations.

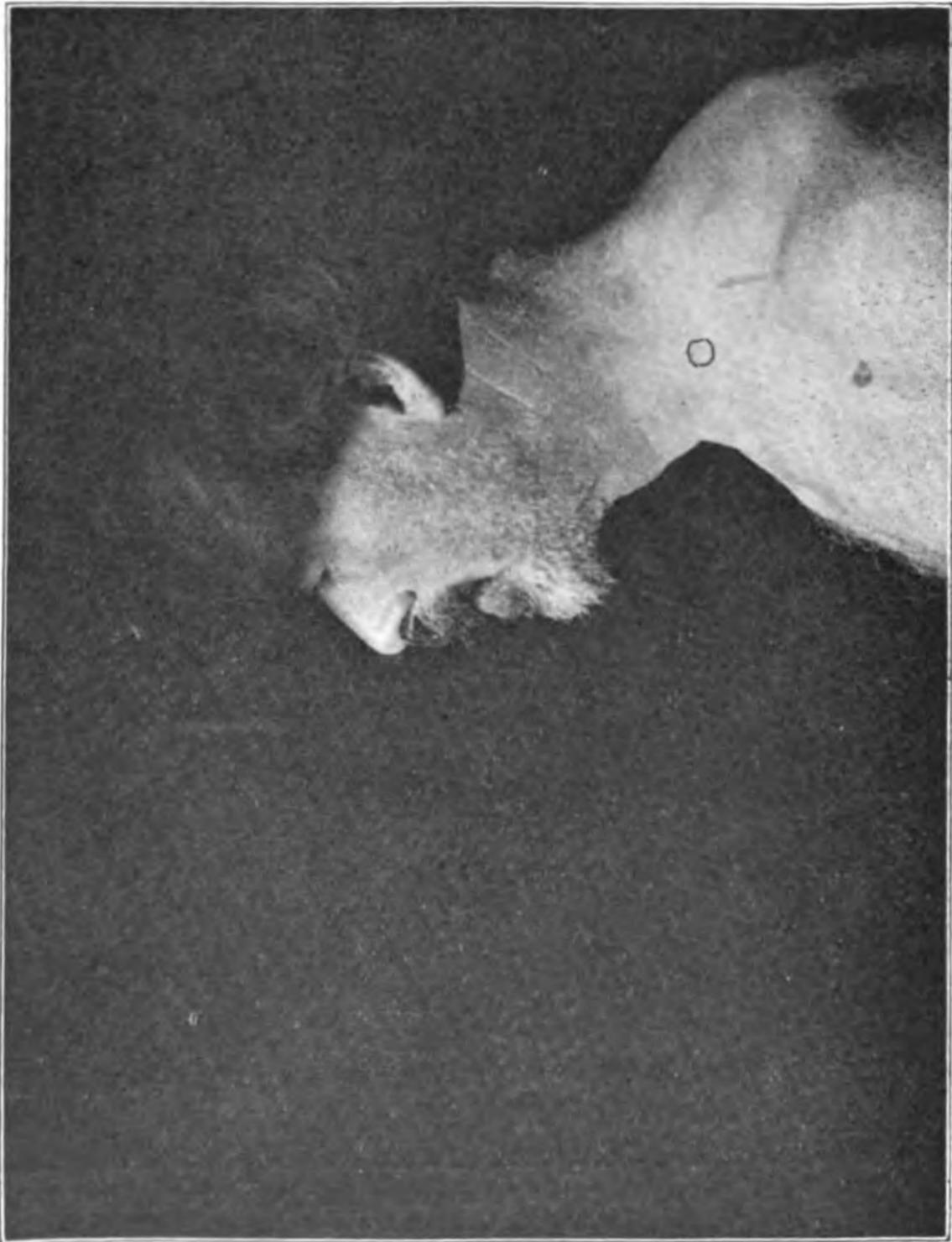


Fig. 5.—Circumscribed retraction of the skin from tuberculous energy conveyed to the area shown in Fig. 4 (A). Reproduction of skin retraction is noted by shadow within circle. (Instantaneous photograph).

The myosopic like the vasomotorial reactions are easily exhausted. Pulsations and movements due to respiratory excursions are easily excluded.

Suprascapular and Brachial Reactions (Figs 6 & 7). The energy is conveyed to the same area (A, Fig. 4) for all myosopic reactions. Note however that in these reactions, there is no retraction of the skin, but a muscular wave (not unlike the fibrillation observed in muscular atrophy) pursuing the direction as shown in Fig. 6 and 7.

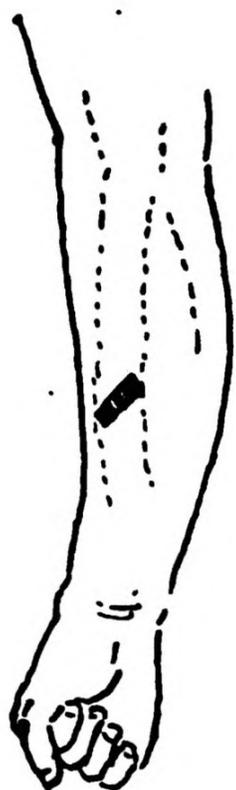


Fig. 7.—Brachial myosopic reaction.

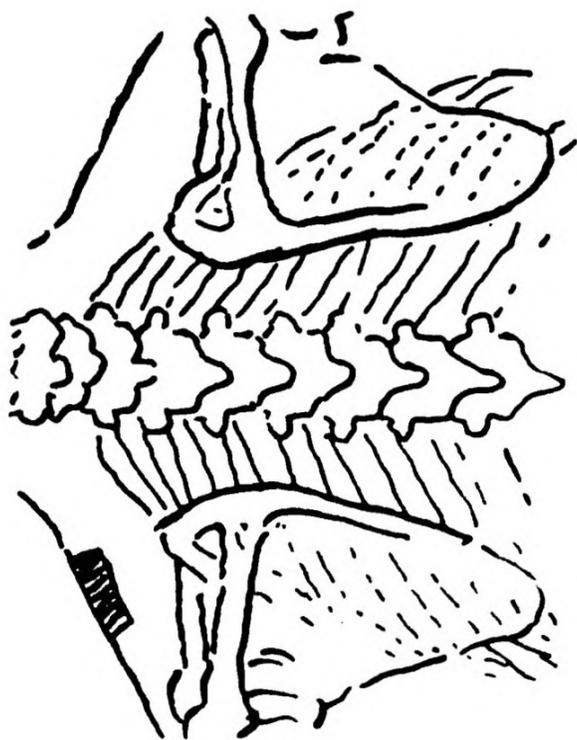


Fig. 6.—Suprascapular myosopic reaction.

BIBLIOGRAPHY.

1. Abrams:—New Concepts in Diagnosis and Treatment; Spondylotherapy, 6th edition: International Clinics, Vol. 1, 27th series: Medical Record, Feb. 16, 1918.

2. Abrams:—Electrical Experimenter Sept. 1918 and Physico—Clinical Medicine, Sept. 1918.

3. Abrams:—Spondylotherapy, 6th edition, 1918.

4. Abrams:—Reference Handbook of the Medical Sciences, last edition, Vol. 7.

Addendum.—Various unsatisfactory theories have been suggested to explain the supposed miraculous power of dowzers: 1. That they guess at the position of what they are about to discover: 2. That a knowledge on the part of diviners of the locality and of its geology are sufficient: 3. That the power is an involuntary action resulting from a fixed idea.

Every man is an ideo-motor being and his idea is expressed in some kind of external motion. It is impossible to entertain an idea without participation of the whole body in harmony with it.

The dowser's method to find water is to grasp the limb of a twig (divining rod) firmly in each hand. He holds the rod in front of him and proceeds slowly. When he arrives at running water, the twig jerks up and down and not infrequently it twists around in the dowser's hand. Any one can demonstrate by the following myoscopic reactions that the correct explanation of the dowser's method is involuntary muscular action independent of a preconceived idea. It must be recalled that there are reflexophilic individuals with exaggerated reflexes. With the latter the myoscopic reaction are accentuated.

The grounded subject faces the west with bare arms held in a semiflexed position. Use a cord with electrodes. One electrode is fixed at A, (Fig. 4), whereas the other electrode is brought into proximity with a large quantity of water in a bath tub. Note that the moment the electrode is over the water (knowledge of the subject to be excluded), a slight twitching is observed in the areas shown in (fig. 8.) Note, that when the water is agitated there is a decided muscular twitching notably at the lower portion of the biceps.

The electric sensations of dowzers are muscular

contractions and the latter are in direct proportion to the quantity of water and its depth. The dowser's reactions are only evident over running water.

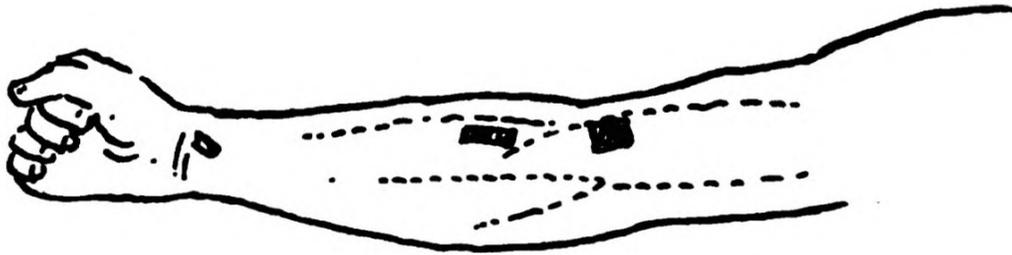


Fig. 8.—Areas of muscular reactions when the energy from water is conveyed to A, Fig. 4.

PSYCHOMETRICAL DIAGNOSES.

Psychometry is a supposed occult power of recognizing by physical contact the character of an object and to diagnose disease by touch. This phenomenon is not a myth as the writer has shown in *New Concepts in Diagnosis and Treatment* (P. 256). The only mythical thing about it is to give it an esoteric and occult parentage.

The writer was recently impressed by the following, narrated to him by Dr. W. H. Ketchum, a visitor from Honolulu.

Dr. Ketchum adopted the most meticulous precautions against chicanery.

There was an ignorant young man in his town who was able in an auto-hypnotic state to describe conditions at a distance. He did so correctly in many instances. One day a letter was received from a gentleman in Cincinnati requesting Dr. Ketchum to have his protege diagnose his wife's condition. Provided with a stenographer, the autohypnotist expressed himself as follows:

"There is a woman seated in a chair surrounded by two nurses in white. It is a wheel chair. She has a trembling sickness. Her condition is due to masturbation, begun at puberty and only ceasing at the time of her marriage, late in life."

Provided with this stenographic report, Dr. Ketchum hastened to Cincinnati and was ushered into a room. On a wheel chair sat an elderly lady and in the room were two nurses. After dismissing the nurses, she requested Dr. Ketchum to read his report. When he had finished she exclaimed. "I thought only God and myself knew that I had masturbated. I began the habit at the time of puberty and discontinued the habit at the time of my marriage, late in life."

Dr. Ketchum ascertained later that her physicians had diagnosed her condition as paralysis agitans. Similar correct clairvoyant diagnoses were related to me by Dr. Ketchum.

Sometime before, a physician of undoubted integrity and eminent in his profession related to the writer, that in his city was an ignorant individual who made diagnoses by gazing steadfastly at the covered abdomen of a patient.

As a matter of curiosity he went to the home of

the clairvoyant accompanied by two patients. The clairvoyant saw an ulcer below the knee in one patient and in the other patient, a skin eruption limited to the back.

In both instances, the conditions stated, were present. No part of the body of either patient was uncovered.

The foregoing, like similar stories emanating from other sources, awakened the writer's interest and he determined to investigate this supposed occult power of psychics.

There are two hypotheses available.

1. Perception originates in the subliminal consciousness of the medium.

2. Perception is of supernormal origin. The latter hypothesis may be rejected in accordance with the following observations:

La Place established the principle that, "The weight of the evidence ought to be proportioned to the strangeness of the facts."

Instinct is a mere expression of forces. The bee constructs a perfect cell without a mathematical education and birds migrate without chart or compass. All phenomena are rates of vibration and some people like all animals can translate vibrations from the subliminal to the conscious mind. Those of my readers who have executed the electronic reactions in the diagnosis of disease know that when the energy, say from a cancer is conducted to the area between the third and fourth dorsal spines, there is an immediate specific reaction just above the navel demonstrable by percussion. If this same energy is conducted to the center of the forehead in lieu of the spinal areas the dulness is accentuated many times. This is called the cephalodiagnostic reaction.

Now take a patient with cancer or tuberculosis and let him stand facing the west. Let him hold one electrode in proximity* to any part of his body while the subject fixes the other electrode to the center of his forehead. It will be noted that one by this maneuver alone may elicit the areas of dulness peculiar to the disease from which the patient suffers. This is es-

*No reactions ensue if the Electrode touches any part of the patient's body. It will be found that the Electronic reactions as executed ordinarily are very much accentuated if the Electrode on the subject does not touch his skin at the areas employed for receiving the energy.

essentially *actio in distans* and is a psychometric diagnosis.

Any physician unskilled in percussion may employ this psychometric diagnosis by aid of the overt phenomena described on a previous page.

Reference was made to the clairvoyant whose method of diagnosis was to gaze at the abdomen of the patient.

Psychometric reactions vary in intensity according to the region of the body in proximity to the electrode. In my investigations, it was found that definite areas on the abdomen yielded the greatest output of energy (by measurement with the ohmmeter) and consequently more intense reactions. These areas are shown in Fig. 9.

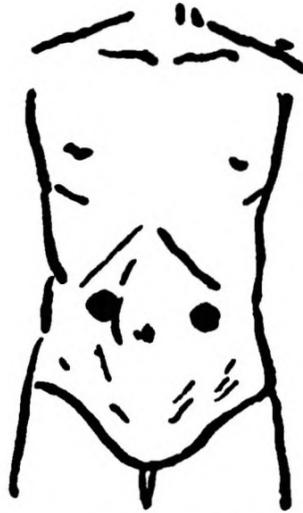


Fig. 9.—Areas on the abdomen yielding the most intense electronic reactions in psychometric diagnosis.

PRECOCIOUS DIAGNOSIS OF CANCER BY THE ELECTRONIC REACTIONS.

Summary of a contribution before the "Congress of surgery of Paris," France, October 7, 1919, by Dr. Jules Regnault (Toulon, France).

The most recent researches of physicists show the value of the electronic theory in physics and chemistry and the day is not distant when general biology and medicine in particular will be dominated by this theory. Many vibrations in nature escape our recognition because our organs are not syntonized with our consciousness and because we possess no detectors to place them in evidence. Other vibrations require a physical or chemical medium for their recognition like the Hertzian waves utilized in wireless and ultraviolet rays by their action on a photographic plate.

Thanks to the great sensitivity of the visceral reflexes of Abrams, various kinds of vibrations may be recognized.

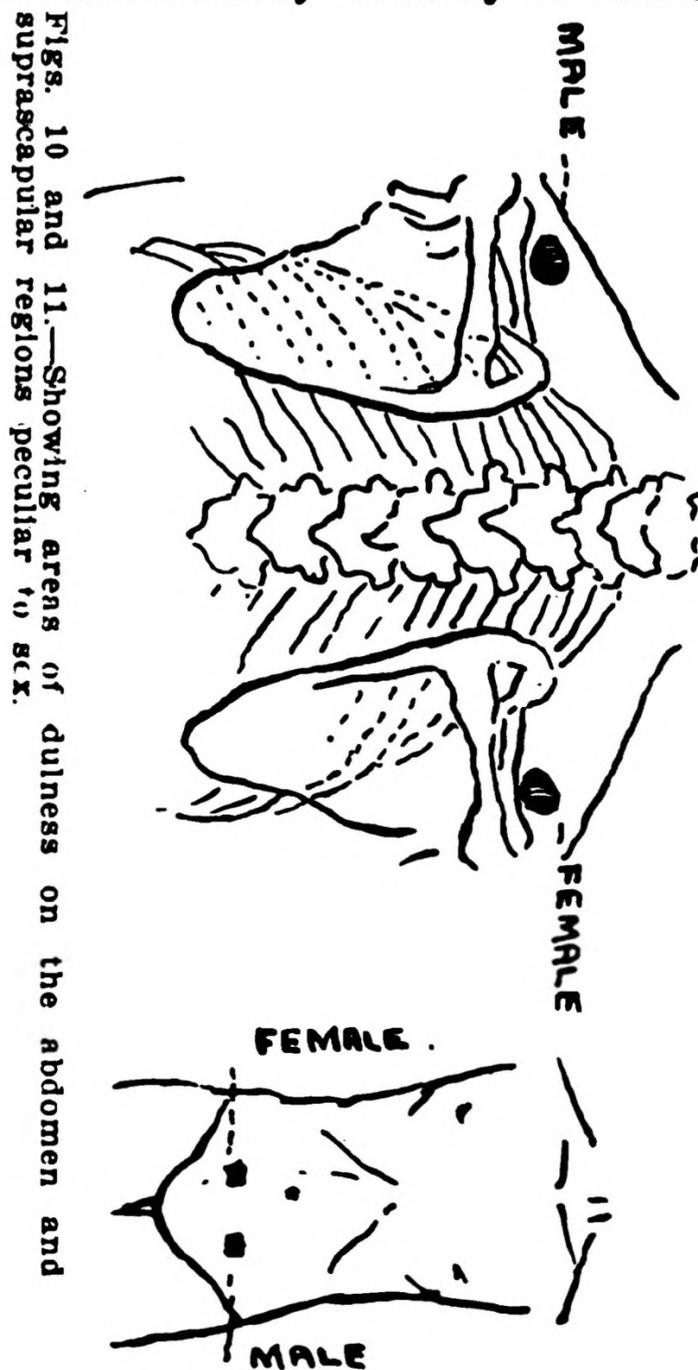
Cancer possess a specific vibratory electronic rate, recognizable by the employment of a subject. The sufferer from this disease may likewise be utilized owing to the presence of definite reactions.

One can thus recognize the malignancy of a neoplasm at its incipency, and define its limitations and by an operation utilize the benefits accruing from early surgery.

Studies bearing on the polarity of cancerous energy and chiefly its vibratory rate suggest the possibility that malignancy may be destroyed before the operation by aid in the former instance of polaritherapy and in the latter instance, by homoscillatotherapy.

SEX DETERMINATION AND RACE.

Reference to Figs. 10 and 11, will show two areas which are elicited by percussion (patient facing West and grounded). They disappear when the patient turns from the geographical west to re-appear when the latter position is resumed. One who is not an adept in percussion may readily localize these areas



by approaching them with a stethoscope, while percussion of either anterior superior iliac spine is executed for the abdominal, and while continuous percussion of the acromical end of the clavicle is executed for the thoracic areas. Note that the abdominal area is on the left side in a normal male, and on the right side in the normal female. These areas are reversed in homosexuality.

If a subject is employed (sv reactions used) and

only a few drops of blood are at one's disposal, an area of dulness will only occur on the left side, if the blood is from a male and from the right side when it is from a female. If the blood is from a bisexualist (sexual tendencies of male and female), areas of dulness may be elicited on both sides. If the individual from whom the blood is obtained has been castrated, neither area can be evoked.

If one possesses an ohmmeter, one can only elicit a dull area at 0 or at 9 ohms of the scale. Human blood only elicits a dulness at 9. If the blood is from pregnant person note that at 57 ohms, sex prediction is possible; if the child is to be a male, dulness ensues on the left and if a female, on the right side. Using the ohmmeter and the abdominal areas, note that with blood or a few drops of saliva, an area of dulness will occur either at 0 or at 9, but that racial reactions only ensue at the rates cited below.*

*More intense reactions are elicited when the blood is placed in a black envelope (to exclude light) over which the receiving Electrode is placed.

RACIAL RATES.

Jew—7 ohms; Irish—15 ohms; German—13 ohms; Russian—16 ohms; Portugese—11 ohms; French—12 ohms; Dutch—20 ohms Chinese—19 ohms; Scotch or English—18 ohms; Spanish—16 ohms; Japanese—3 ohms; Swedish—21 ohms; Italian—4 ohms; Negro—10 ohms; Danish—22 ohms.

If the racial inheritance is from the father, the dull area (at the above rate) occurs on the male side (left) and from the mother on the right side. If a Jew has German ancestry on the mother's side, dulness on the right side ensues at 7 and 13. If both parents are of the same race, then reactions ensue on both sides at the specific rates. If there is a mixture of German and French on the mother's side, dulness ensues on the right side at 13 and 12.

PHOTOGRAPHY BY HUMAN RADIOACTIVITY.

Radioactivity is recognized in three ways; effects on a photographic plate, fluorescence and ionization of the air.

That distinguished authority, Dr. Hereward Carrington avers, that the majority of "spirit photographs" are easily "faked" and serious psychic students are now avoiding photographs from professional mediums.

He contends however that there are authentic instances of "thought photography;" a plate or film is placed on the forehead of the subject who endea-

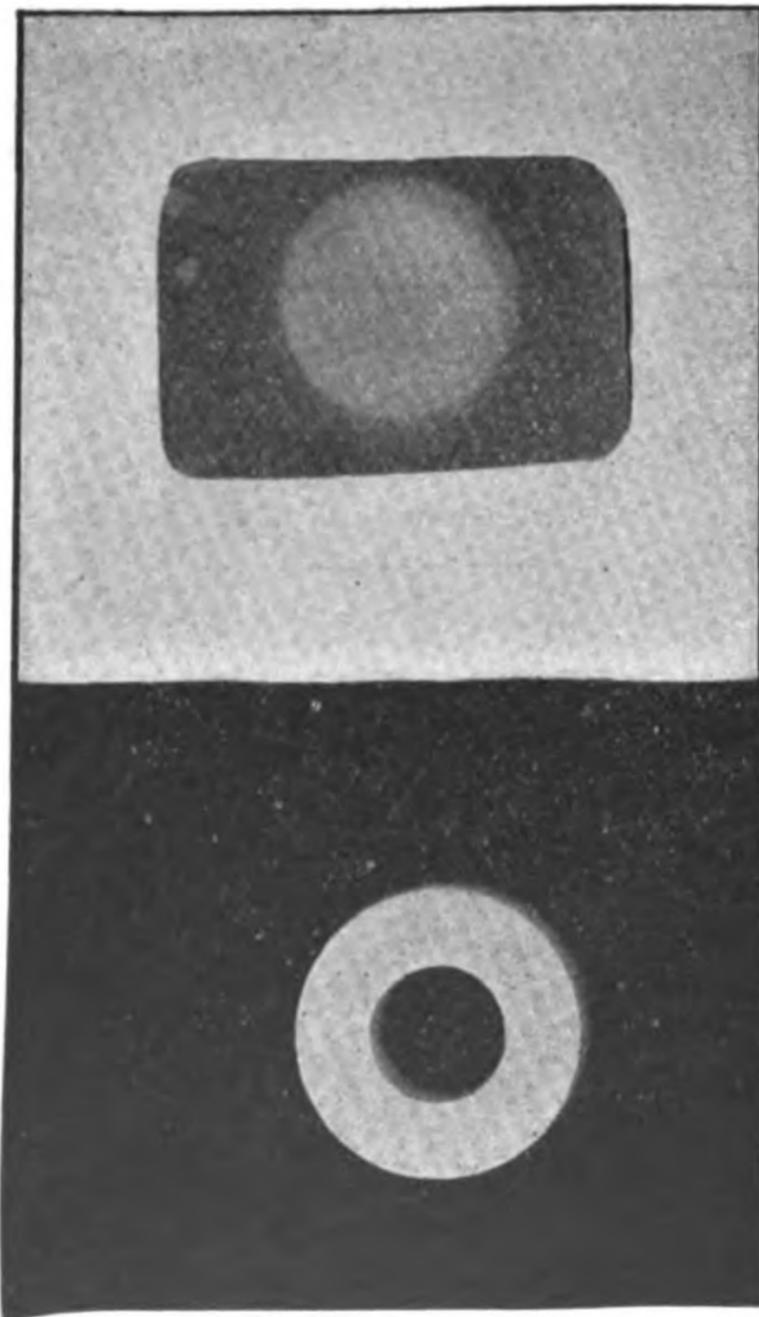


Fig. 12.—Photographic reproduction of a ring applied to the center of the forehead and film to the abdomen. Exposure 8 to 10 hours.

vors by intense effort to impress upon the sealed plate a mental picture or image held in the mind.

The writer has endeavored to secure photographic

impressions by an entirely new method with fairly constant results. The impressions are at present imperfect (Fig. 12), but continued experiments may yield better results.

Experiments were conducted with objects of steel. If, for instance a steel key or ring is placed in the center of the forehead, its form may be reproduced on the abdomen at a point above and to the left of the navel by percussion (dulness) or the Electroradiometer. The latter detects radioactive rays. If at the reproduced area a sealed film (dental) is fixed by plaster with the steel object applied to the center of the forehead by plaster and the subject retires for the night,* one may obtain photographs of the object like those shown in Fig. 12. It has been found that many of the experimental photographs reproduce the hairs of the abdomen and this suggested the thought that a card on which hairs were placed and fixed there by collodion would aid in reproduction (card between abdominal skin and film). This proved to be the case. The writer is now experimenting with different substances applied to the outside of the film to determine the active actinic rays and prevent their diffusion through the film.

When the subject retires, the head must be to the north or west. With the head in this position one may reproduce the position of the key on the abdomen. It cannot be reproduced when the head is directed south or east.

THE ABRAMS TREATMENT FOR SYPHILIS.

Rationale of Method (J. Dec. 1918).—Based on the fact that the defensive mechanism of the organism consists essentially of the formation of a neutralizing antibody (antitoxin). Localization of the latter is in the spleen which together with its leucocytic enzymes constitute the chief factors in immunization.

In parasymphilitic diseases, the parasites are found in the "dead corners" of the organism and resist medication.

Treatment.—Concussion is to be executed as follows:

Concussion—30 seconds

Rest—30 seconds

Concussion—30 seconds

Rest—30 seconds

Concussion—30 seconds

1. Concuss according to foregoing period of time between third and fourth dorsal spines to dilate blood vessels and thus dislodge parasites and toxins from the "dead corners."

2. Gather toxins in spleen by concussion of eleventh dorsal spine according to foregoing period of time.

3. Eliminate toxins by concussion of second lumbar spine (contraction of spleen). Allow one hour to elapse between procedures two and three.

By this method the electronic reaction of syphilis will disappear permanently (treatments daily) in about two weeks. By the oscilloclastic method, the same result can be achieved in about five days (treatments daily).

Oscilloclastic Method.—1. Dilate blood vessels (concussion between third and fourth dorsal spines); 2. concuss eleventh dorsal spine; 3. destroy toxins in spleen by application to latter of current at three (duration of treatment, 15 to 30 minutes). To re-enforce treatment, use oscilloclast at three over suspected luetic lesions. This method is available in infections using however, the destructive rate applicable for the disease.

OSCILLOCLAST

ANALGESIA.

In operations as a rule, apprehension of pain by the patient is the dominant suggestive factor of exalting sensory impressions. Thought directed to a part will augment its sensibility.

Dr. J. Goodwin Thompson, who makes daily use of the oscilloclast for analgesic purposes relates the following:

While executing an operation on a woman and using the oscilloclast for analgesia, the patient interpreted tactile as pain impression. He directed his nurse to administer chloroform. A single drop of the latter was placed on a cloth and no further complaint was heard.

Dentistry.—The use of the oscilloclast in dentistry is destined to subserve many useful purposes. To desensitize dentine is at present one of its chief objects. It is true that one of the chief objections in what I may call conscious analgesia is the personal equation of the patient hence the variable results in attaining absolute analgesia.

Drs. Haley and Watts, have already noted the value of the instrument in painless dentistry.

An excellent opportunity for observing the action of the apparatus was shown recently by Dr. Bertram C. Best of this city. His patient could not even tolerate the application of cotton to the dental cavities yet they were excavated with absolutely no pain.

A dominant feature in the use of the oscilloclast is the rapidity in which work can be executed owing to the analgesia. Dr. J. Goodwin Thompson has extracted teeth without pain by the oscilloclast using the electrode over the Gasserian ganglia.

Reinfection of Root Canals.—This is one of the chief conditions which militates against the stability of dental work. An infected root-canal cannot be made permanently sterile by the methods now in vogue. Reinfection probably ensues from the or-

ganisms in the dental tubuli which have evaded the action of antiseptics.

The oscilloclastic current is destructive to streptococcic organisms in a few treatments and has been employed successfully in dental abscesses. A preliminary application of the current for about five minutes to a tooth about to be filled is suggested. Oral sepsis and focal infections are now being exploited to the full and the fetish of the tooth looms large to the astigmatic dental radiographer.

Focal Infection.—A misinterpreted dental radiograph is a source of reckless monetary and oral extraction and the edentulous victim furnishes the testimony.

Anyone can readily demonstrate the presence of streptococcic infection at the tooth-root by the ear reaction suggested on a previous page. Use a cord with electrodes, one of which made of aluminum is pointed. With one electrode on the forehead of a subject, pass the pointed electrode over the roots of the teeth (of patient) and when strep infection is encountered, there is an immediate redness at B. (fig. 2). This is a more positive test than radiography. The dental radiograph does not show infection, but only rarefaction of the alveolar structure and this may be normal with the individual or due to other causes (atrophy). It does not show peridental infections (septic gingivitis), the most frequent source of constitutional diseases dependent on oral sepsis.

Polarity Test.—Directions sent to lessees of the oscilloclast enjoins them from communicating any current to the patient by making this test. It is really unnecessary for physicians who only use the current on insulated patients. It is essentially a precaution to be taken by dentists. Some power circuits in small towns have no neutral grounded wire, and in such instances, the test cannot be made. In the latter instance, a current effect is produced irrespective of the position of the forks in the plug connected with the circuit.

Cataract.—The following observation is only tentative. In cataract, the destructive rate is eight. The current is applied directly to the eye over the closed eyelid. The writer is now investigating the currents action at eight in a lady, with cataract referred by Dr. J. W. King, of Bradford, Penn.

Letters were not identified with the cataractous eye when treatment was commenced. At the time of writing, six treatments were given and vision has improved fully 25 per cent.

Destructive Vibratory Rate.—The oscilloclast may be destructive to disease at one or two numbers. Thus in gonorrhoea, the rate suggested is four. Later investigations show that eight is more effective than four.

ELECTRONIC ANALYSIS OF THE MOON.

Up to the time of the discovery of the spectro-scope and beyond that, to the use of the spectograph, leading astronomers believed that there was a possibility of life existing on the moon.

Evidence against this contention consisted entirely in the absence of an atmosphere as shown by the absence of refraction at the edge of the moon's disk, during the occulting of a star. This however, was not conclusive because it was conceivable that a form of life could exist by obtaining oxygen from solid or liquid compounds.

Later, spectrograms yielded conclusive evidence that there was no appreciable watery vapor on the moon after exclusion of the lines dependent on watery vapor in the earth's atmosphere. Here the subject rested although a few selenographers still contend that a large area of the moon's surface is covered by hoar frost. The latter contention is doubtful inasmuch as the moon's surface in full sunlight probably attains a high temperature, and the alternate disappearance and reappearance of frost would be apparent.

The chief feature of the preceding conclusions refers only to the immediate moon's surface and its hypothetical atmosphere.

It need not be shown what a ridiculous conclusion would ensue by disregarding what lies under our own earth's surface and consider only what would be visible to a lunarian.

Unconvinced by the methods employed to determine the presence of water on the moon, the writer sought a solution of the problem by using the electronic reactions. His telescope consists of the highest type of optical equipment obtainable; the objective is a 5 1-2 in. Brashear lens with a 75 in. focus. The moon's image was projected on a white surface (caelostat). This was done to enable a group of observers to check results and to differentiate more easily by a pointed electrode different areas of the moon's image. It may be remarked that the electronic reactions surpass in sensitivity any apparatus yet devised.

Electronic Conclusions.—1. Vegetation was excluded by the absence of the reaction for chlorophyll.

2. The reaction of iron was elicited all over the moon's surface.

3. A decided reaction of ice and water was elicited over the following areas; Appenines, Tycho and Copernicus.

SPONDYLOTHERAPY.

Cephalotherapy.—The elicitation of spinal reflexes in the treatment of disease is exploited in spondylotherapy. The centers in the cord are subsidiary to dominant centers in the brain. What surgery and the physiological laboratory have failed to accomplish in cerebral localization appears destined to be attained by clinical physiology. In spondylotherapy, some of the effects of stimulation of the cerebral cortex have been cited. More recently, the writer has noted that when the area A (fig. 4.) is struck several blows by aid of a plexor and pleximeter, visceral reflexes of greater amplitude are elicited than when the spinous processes are similarly stimulated. Thus, the lung reflex of contraction ordinarily elicited by striking the area between the fourth and fifth cervical spines will cause a retraction of the lower lung border amounting to 2.6cm., whereas, concussion of area A in Fig. 4., will cause a retraction of 5 cm. A like increase in amplitude is noted with the heart reflex.

Fig. 4 shows two centers A and B. The former is referred to by the writer as the hypothetical center for muscular tone, whereas B, is the hypothetical center for muscular relaxation.

Strike area A, and observe the small veins of the hand or arm and note that they contract in some instances even to evanescence; strike B and the veins dilate. These effects are better noted by observing the smallest veins.

These observations suggest a new therapeutic procedure—Cephalotherapy or cerebral reflexotherapy.

It is evident that concussion is not applicable to the head hence, another method of stimulation may be used, viz., the slow sinusoidal current.

It is suggested by the writer to stimulate center A (Fig 4) in idiopathic asthma, to secure tone to the intestines in atonic constipation, to stimulate the heart and stomach and to secure contractions of dilated veins.

Stimulations of center B (Fig. 4) may be indicated in many conditions. Thus, in one patient with high

blood pressure, stimulation of this center at one seance reduced the systolic pressure from 220 to 190.

The writer is not yet able to say how permanent this result may be. If the oscilloclast is used at six and the electrode is placed at A (Fig. 4), it appears to the writer in several experiments that stimulation of the tone center may be attained. The writer awaits confirmation of his observations.

Acupuncture and Reflexotherapy.—Dr. Jules Regnault, *Le Moniteur Medical*, September 9, 1919. Acupuncture utilized to the full in the far East has fallen into disrepute in the Occident. The Chinese claim that the "harmony of the universe" and health are dependent on the equilibrium of two principles, Yang (positive fluid or male principle) and Yn (negative fluid or female principle). These principles circulate in the blood and influence each organ. When an organ is engorged with blood, its exsanguination is effected by acupuncture dependent on the principle which dominates in the organ, the needle is made to penetrate from left to right or in the reverse direction.

The action of acupuncture now finds explanation in the excitation of reflexes and can therefore be eliminated by the employment of more simple and effective methods, notably by elicitation of reflexes as shown by Abrams, in spondylotherapy. Other names have been identified with the development of this subject. Jaworsky has embraced these methods under the generic designation—Reflexotherapy. The Chinese have employed acupuncture empirically. Thus to stop vomiting, acupuncture is executed in the area which Abrams has shown dilates the pylorus and causes the gastric contents to be evacuated into the duodenum.

I have been able to verify this observation in many instances by concussion of the fifth dorsal spine.

MISCELLANY.

Accentuation of Electronic Reactions.—To intensify the reflexes in these reactions, the electrode applied to the subject should not be in immediate contact with the skin. Fix a rubber washer (only sufficiently thick to prevent skin contact), to the electrode by rubber cement.. This method prevents conduction of energy through body of subject to ground plate on which the latter stands.

When percussing, the physician should place one of his feet on the ground plate to carry off from his body the percussional electricity developed by his percussion. This maneuver accentuates the reactions.

Anaphylactic Reactions.—When a foreign proteid is introduced into the body and later it is introduced again, it will produce violent symptoms. This phenomenon of hypersusceptibility is known as anaphylaxis. In the use of the oscilloclast, this phenomenon is occasionally noted and treatments at first should be of short duration.

Cephalodiagnostic Reactions.—In the conventional method of executing the electronic reactions, the energy to the subject is conducted to the third and fourth dorsal spines for the splanchnovascular (SV), to the second lumbar spine for the enterodiagnostic reactions (ED) and between the fourth and fifth cervical spines for the pulmodiagnostic (PD) reactions. For confirmatory evidence of the reactions and to intensify them many times, cephalodiagnostic reactions may be used.

When the electrode is placed in the center of the forehead of the subject, the (SV) are elicited; at A (fig. 4), the (PD) and at B Fig. 4 the (ED) reactions. For the electronic reactions, always ground patient as well as subject.

Locomotor Ataxia.—Use the oscilloclast according to Abram's method for treating syphilis. Use the current locally over the spine at the site of the luetic lesion at three and then later use the current at the same site for the destruction of scar tissue.

Iconography of The Electronic Reactions of Abrams.—This atlas is now ready for distribution. Price, 15.00. It shows all the sites of the reactions, vibratory and destructive rates, etc.

Electromagnetic Waves.—Some physicians do not

quite grasp the rationale of the oscilloclast. It is based on the principle that the destructive rates employed are in harmony with the disease which they destroy. Bodies out of harmony with the tissues are either not absorbed or changed before absorption. Electromagnetic waves have no effect on objects which do not vibrate in resonance with them.

Light only passes through an object when its vibratory rate is lower than light. Thus glass is transparent because its vibration is less than light and metal is opaque because its vibratory rate is high. Roentgen rays penetrate because their vibratory rates exceed cell vibrations.

Cobalt Chlorid Test.—It has been shown (J., June, 1918) that the areas of dulness with the electronic reactions show a moderate increased perspiration strictly limited to the areas. These may be defined by aid of a pointed aluminum electrode through which passes a moderate electric current (other electrode in the patient's hand). The writer has constructed an apparatus for this purpose connected with a buzzer or galvanometer so that when the defined areas are attained, the diminished skin resistance is announced by the buzzer or seen with the galvanometer. If a saturated cobalt chlorid solution in alcohol is painted on the chest or abdomen (notably, the former), a red line owing to increased perspiration limited to definite areas will appear. Patient faces west for several minutes in a warm room. Painted areas to be covered by a rubber cloth to increase perspiration.

Gastroduodenal Ulcers.—Etiology is obscure despite many investigations. Ulcers have been produced experimentally by injection of diphtheria toxin and with pure cultures of bacterium coli commune. In the experience of the writer, the strep reaction has occasionally been obtained over the site of the ulcer and he believes that with the oscilloclast at two he has given benefit to the patients.

The writer must emphasize the importance of syphilis as an etiologic factor not only of ulcer, but of other chronic digestive disturbances. He recalls three physicians whose symptoms persisted despite gastroduodenostomy by the Mayos. These physicians gave the electronic reaction of acquired syphilis and

their symptoms disappeared after adequate treatment for their acquired affection.

My conception of the gastroenterologist is one who can make a symptomatic diagnosis of gastrointestinal diseases, but does not profess to cure them. Like the neurologist he employs ponderous names to conceal ponderous misinformation. The writer never fully realized the fatuity of the interrogation, "what's in a name?" until he went up for his examination in neurology. Many of us treat names and not diseases and we are, if one is permitted to neologize, mere nomenclaturetherapists."

The average textbook dismisses gastrointestinal syphilis with brief reference to esophageal or rectal gummata which may eventuate in ulcers and strictures. Syphilis covers a multitude of skins and if one bears in mind that an eruption of the skin (exanthema) is synchronous with a mucous membrane eruption (enanthema), visceral syphilis would be more often recognized.

In the etiology of chronic digestive disturbances, one may incriminate congenital more often than acquired syphilis. In the latter affection, the presence of palpable tumors frequently conduce in my experience to an erroneous diagnosis of carcinoma.

The pathology of digestive syphilis can only be solved clinically by the therapeutic test and as this can be done without medication by Abram's treatment, it should be executed in every chronic digestive disease which baffles conventional medication.

Racial Types.—In the contribution in this number of the journal bearing on racial differentiation, it appears that the endocrine glands may yield a clue to the origin of the European, Chinese and Negro. Keith, president of the anthropologic section of the British Association for the Advancement of Science contends that the internal secretions influence the growth of the body. Thus, the thyroid acts directly on the skin and hair the very structures employed in the classification of the human races. The pituitary which regulates growth is directly concerned in determining stature, cast of features, skin texture and character of hair, all of which are marks of race. The testicular interstitial gland dominates male characters and this sexual differentiation is

more decided in the Caucasian than in the Mongol or Negro types.

Anthropologically, the thyroid is the most important gland of interal secretion.

Parental Identification.—Children show the same vibratory index as the parents, even through several generations. Measurements are made with an ohmmeter in numbers beyond 100. The areas employed are those for sex and race (Figs. 10 and 11). The rate will be found for the father on the male and for the mother on the female side.

Propinquity in love by induction, establishes the same vibratory rate. This is also true of indices established with many "afinities." In the event there is antagonism between the parents, a like rate does not prevail and the child will only show the rate of the father. Latter observation, contravenes the tendency of biologists to assign to the male an insignificant role in procreation and to regard acts of legislation of the father's rights over the children as over compensation for his real insignificance.

SOME RECENT VISITORS TO DR. ABRAM'S LABORATORY.

California.—Drs. L. Sherman, Long, Van Praag, Wall, Thompson, Wm. Martin, O. Muller, W. Atwood, W. Rowan, W. Watts E. Majors C. Thudichum W. Caesar, M. W. Kapp, A. T. Noe, C Wheeler. H. Meredith.

Honolulu.—Dr. W. H. Ketchum.

Michigan.—Dr. G. Boericke.

Colorado.—Dr. F. M. Cooper.

England.—Dr. Wooley.

In reply to many communications, courses at the laboratory may be commenced at any time during the month, but physicians are advised to write in advance of their coming. Only reputable physicians with the M. D. degree are eligible for the work.

LESSEES OF OSCILLOCLAST.

E. A. Majors, M. D., Oakland, Cal. (2 instruments).

A. Bursell, M. D., Medford, Oregon.

A. T. Noe, M. D., Pacific Grove, Cal.

J. P. Kanoky, M. D., Kansas City, Mo.

H. Meredith.

J. Goodwin Thompson, M. D., Oakland, Cal.

V. Sillo, M. D., New York, N.Y.

C. Powell M. D., Oakland, Cal.

W. F. Becker, M. D., Chicago, Ill.

L. B. Weitherbee, M. D. Antioch, Cal.

E. W. Dodge, Chicago, Ill.

J. W. King, M. D., Bradford, Penn.

C. Wheeler, M. D., Los Angeles, Cal

H. Michener, M. D., Wichita, Kas.

A. F. Burkard, M. D., Santa Barbara, Cal.

G. Boericke, M. D., University Hospital, Ann Arbor Mich

Curran Pope M. D., Louisville, Ky.

Grant Babcock, D. D. S., Denver, Colo.

M. W. Kapp, M. D., San Jose, Cal.

*Terms on which oscilloclasts are leased are as follows; a primary payment of \$150.00 and \$5. 0 monthly. Contracts may be executed for one or more years. The primary payment for the **electroradiometer** is \$200.00 and \$5.00 monthly. These primary payments are subject to change owing to varying cost of material and labor. Provision may be made later for an outright sale in which event lessees may avail themselves of this privilege.

FINAL NOTICE

SUBSCRIPTIONS are due for this volume which began with the last issue (Sept. 1919). One blue pencil mark signifies that you are in arrears for one year and two marks indicate that you are in arrears for two years. In the event subscriptions are not paid promptly, they will cease automatically.

PATHOGRAPHS

In the next number of the Journal, a simple method will be described by the editor showing how the energy of disease may be represented pictorially on a subject and how each disease may thus be visually interpreted. He will also describe a new departure in psychology for which he employs the term "Ideography." These ideographs observed by unaided vision objectify so-called mental photographs.

2135 SACRAMENTO ST.
SAN FRANCISCO, CAL., U. S. A.

PHYSICO-CLINICAL LABORATORY

—OF—

Dr. Albert Abrams

FOR THE ELECTRONIC TESTS OF ABRAMS

IMMEDIATE AND ACCURATE DIAGNOSIS.

These tests permit of an immediate and accurate diagnosis of SYPHILIS, CANCER, SARCOMA, TUBERCULOSIS, TYPHOID FEVER, MALARIA, PREGNANCY, GONOCOCCIC AND STREPTOCOCCIC INFECTION, COLISEPSIS and other diseases.

VIRULENCY GAUGED.

IN SYPHILIS (nervous system, cardiovascular apparatus, eyes, lungs), and in TUBERCULOSIS (Glands, Lungs, Bone) the SPECIFIC STRAINS of the organisms in these diseases may be determined, showing implication of definite structures or the invasion of the latter may be predicted. The VIRULENCY of DISEASE may be GAUGED with MATHEMATICAL ACCURACY. Thus, it can be determined whether SYPHILIS ("which never dies but only sleeps") is active or quiescent, and when treatment should be continued or discontinued. It is also possible to see whether SYPHILIS is congenital or acquired. Reprint on cure of Syphilis sent on request.

BLOOD ON PAPER, NO SPECIAL INFORMATION NECESSARY.

To execute these diagnoses all that is NECESSARY is to send several DROPS OF BLOOD from the patient ABSORBED by a CLEAN WHITE BLOTTER or filter paper. Blood examinations only, do not permit of the localization of lesions, and to achieve the latter an examination of the patient is imperative. Neoplasms, sputa and other tissues are equally available for diagnosis by the same tests. NO INFORMATION concerning the patients from whom the blood is obtained is necessary (other than in tests for pregnancy), thus, unlike the laboratory tests, the electronic tests permit an unprejudiced opinion. No diagnostic method is infallible. It is requested that all physicians correlate the Electronic Diagnosis with their clinical findings. Unless specially requested, and without comment from the physician, only the following conditions will be sought for: SYPHILIS, TUBERCULOSIS, CANCER, STREPTOCOCCIC INFECTION, and COLISEPSIS. These tests will be appreciated by your patients. To treat them without a correct diagnosis is only adding insult to injury. A diagnosis in the usual way by skilled diagnosticians shows 50 per cent. of errors and in some diseases 75 per cent.

A FEW REFERENCES.

Full information concerning these methods may be found in "INTERNATIONAL CLINICS" (Vol. 1, 27th series), the "REFERENCE HANDBOOK OF THE MEDICAL SCIENCES" (Vol. VIII, 3rd edition), and "NEW CONCEPTS IN DIAGNOSIS AND TREATMENT" (Abrams). All the tests are controlled by the "Sphygmopathometer," an instrument devised by Dr. Albert Abrams.

ONLY ONE IN FIVE.

Laboratory diagnoses are notoriously fallacious. There is only ONE CHANCE IN FIVE that a specimen of blood submitted to ten serologists will result in an agreement. The negative results with the Wassermann are fully fifty per cent., and positive reactions may occur in tuberculosis, acidosis, malaria and other affections. Collins (A. J. M. Sc. 1916), estimates that 15 per cent of paretics and 70 per cent. of cerebrospinal syphilitics fail to give a positive Wassermann in the spinal fluid. One of the most serious and almost tragic arraignment suffered by the Wassermann emanates from the recent report of Symmers, Darlington and Bittman. The report is based on nearly 100,000 reactions made by the most competent serologists procurable. Their conclusions are briefly as follows: 1. The reaction executed in the living patient at the Bellevue Hospital, gives a negative result in from 31 to 50 per cent. of cases in which the characteristic anatomic signs of syphilis are demonstrable at necropsy. 2. The reaction in the

living patient is positive in at least 30 per cent. of cases in which it is not possible to demonstrate any of the anatomic lesions of syphilis at necropsy. Physicians of prominence no longer rely on the Wassermann test. The same fate is destined for the reactions of Abderhalden, when one-third of all MEN yield the test of pregnancy!

NEARLY 100 PER CENT. POSITIVE.

Geo. O. Jarvis, A. B., M. D., (formerly of the University of Pennsylvania), found that the electronic tests of Abrams were POSITIVE in nearly 100 per cent of syphilitic affections (hereditary or acquired).

VECKI.

"I have witnessed marvelous results," observes Vecki, the noted syphilologist in his **SEXUAL IMPOTENCE** (W. B. Saunders & Co., 1915) "in the diagnosis of syphilis by the **ELECTRONIC TESTS OF ABRAMS.**"

The tests embody the employment of the visceral reflexes of Abrams.

FROM ENGLAND.

Sir James Barr, in his Presidential address at the 18th annual meeting of the **BRITISH MEDICAL ASSOCIATION** (**BRITISH MEDICAL JOURNAL**, July 27, 1912), observes as follows:

"The versatile genius of Dr. Albert Abrams, who has come all the way from San Francisco to do honor to this meeting of the **BRITISH MEDICAL ASSOCIATION**, has taught us how best to cure intrathoracic aneurysm, and he has shed light on the nature of the cardiac and respiratory reflexes. In the treatment of diseases of the heart and lungs, his work does great credit to the new Continent and he has given us further insight into methods of prevention."

CANCER.

Prof. Perdue, Director of the largest laboratory for cancer research in America, observes:

"Nothing in recent medicine has been so revolutionary in diagnosis as the reactions of Abrams. For many years the profession has looked to the laboratory for exactness in diagnosis, and our literature has been full of the Wassermann reaction and the Abderhalden tests for pregnancy and cancer. In the midst of all this came the diagnostic methods of Abrams. Methods so simple, so scientific, so exact, so practical, at once made the **PROCESSES** of the **LABORATORY OBSOLETE** and historic in medicine. I have **NEVER SEEN** the reactions of Abrams fail or be misleading."

INCIPIENT TUBERCULOSIS.

Dr. W. J. CAESAR, Richmond, Cal., observes as follows:

"Like many physicians, I had heard of but had never investigated Abram's Electronic tests. At the solicitation of Dr. W. R. Scroggs, who had studied the reactions, I was induced to bring one of my patients (a chronic neurasthenic?) to San Francisco for diagnosis. To my utter amazement, the diagnosis made was that of **INCIPIENT TUBERCULOSIS**, which could never have been demonstrated by the conventional methods. The results of treatment (rapid recovery of the patient and weight increased from 140 to 171 lbs.) by Dr. Abram's method of polaritherapy, fully justified the diagnosis. Since then, I have witnessed the confirmation of many other diagnoses by the same tests. I have taken Dr. Abrams' course, and am constantly using his methods of diagnosis, and I am fully justified in saying that, were I compelled to hark back to the accepted methods of diagnosis, I would rather relinquish practice than to continue it."

DIAGNOSIS AT THE VERY BEGINNING

"It is many years since the medical profession has shown such interest in any new discovery as they have in Electronic diagnosis, first discovered by Dr. Albert Abrams, of San Francisco. To be able to **DIAGNOSE AT THE VERY BEGINNING** tuberculosis, carcinoma, syphilis, pus formation, and so on, and not have to rely upon doubtful laboratory methods, is almost beyond comprehension or belief."—George Starr White (**AMERICAN JOURNAL OF CLINICAL MEDICINE.**)

In another communication to the same Journal, George Starr White observes as follows: "This same human energy can be used to diagnose disease in its early stages better than any other known method. To Dr. Albert Abram is due the credit for this epoch-making discov-

ery. It is the external counterpart of the Abderhalden reactions."

"I shall place all knowledge learned with you in the foreground."
"The inspirations I gained while with you repaid me well for a year's wanderings." "The more I study the electronic reflex phenomena first discovered by Dr. Albert Abrams the more I am overwhelmed."
From signed personal letters.

Physicians will please observe that in any conflict among the reactions that the accuracy of the Electronic test will be determined by the therapeutic results.

FEEES

(Which include all diagnostic information necessary.)

Blood examinations which include tests for all diseases\$10.00

Subsequent blood examinations to gauge the course of the disease 5.00

Examination of patients 25.00

(With full instructions to the physician for executing Abrams' methods of Electronotherapy. By the latter, most uncomplicated and incipient forms of tuberculosis are amenable to symptomatic cure within a few weeks.)

Course to physicians on Electronic Diagnosis\$100.00

(Limited to reputable physicians in possession of of the M. D. degree.)

STATEMENT OF W. J. CAESAR, M. D.

"After taking Abrams' course on Electronic Diagnosis I am able to accurately detect and measure the virulency of tuberculosis, syphilis (and to differentiate the acquired from the congenital form of the latter), colisepsis, streptococcal infection, cancer, sarcoma, gonorrhoea, etc. The functional activity of the organs including the ductless glands may be mathematically gauged. The topography of the viscera may be accurately defined. The foregoing has been formulated after mature deliberation based on therapeutic results and corroboration at the operating table."



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Electro-Concussor of Dr. Albert Abrams

SPONDYLOTHERAPY is a scientific method for eliciting Abrams' reflexes in the treatment of disease. Its rapid recognition by leaps and bounds emphasizes its great importance. To execute these reflexes, a suitable concussor is necessary and the Electroconcussor is the only one made under the supervision of Dr Abrams and meets with his absolute approval. It is portable. State current available. Purchasers may secure free, either a copy of Spondylotherapy (6th Edition) or a chart on Spondylotherapy.

Price \$100.00, f. o. b. Cash with order.

The electronic reactions of Abrams have been introduced to the profession at a time when the electro-chemical conception of cellular activity is beginning to make its way.

Without a clear idea of this electro-physical concept of physiologic and pathologic activities the electronic reactions of Abrams are difficult to comprehend, even though comparatively simple.

These reactions are based on the facts (1) that electro-chemistry in normal tissues differs from that in abnormal tissues; (2) that energy from the tissues can be conducted along any insulated conductor; and (3) that the ganglion cells of the spinal cord, the peripheral ganglia, or the parenchymatous cells themselves of the various organs will all respond to energy conducted from an anlage of special physiologic activity (such as the beating heart) or from an anlage of pathologic activity (such as a cancer node or a focus of infection).

These reactions show themselves in the organs by change of density, of shape, and of percussion note. Alterations in the blood pressure may also be demonstrated in a test subject if the energy is conducted in an appropriate manner.

It is recognized that the Wasserman reaction is not an entirely satisfactory guide in the diagnosis of syphilis and that it is especially unreliable in the diagnosis of recent and of inherited lues. The writer has made positive diagnosis of syphilis in a number of patients in whom the Wasserman tests have been executed by one or more competent serologists and returned as negative.

In some of the "recent" cases the presence of mucous patches, demonstration of the Spirochaetae pallidae, and the therapeutic results permit of no doubt as to the diagnosis. In cases of long standing and in inherited infection demonstration of the Spirochaetae was not made; but the case histories, the family histories, and the immediately beneficial results of treatment left no reasonable doubt as to the accuracy of the diagnosis as made by the electronic reactions of Abrams.

Some of these cases had been repeatedly examined by competent serologists at the largest clinics in the country and had there been treated for various non-existent diseases; this because an accurate diagnosis could not be made.

In eighteen cases in which both Wasserman and electronic tests were made there was only one in the electronic

DR. GEORGE O. JARVIS
THE SANITARIUM
ASHLAND, OREGON

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reaction which yielded a doubtful result and this case had been examined by various physicians from New York to San Francisco and had been treated for possible luetic infection, including a sojourn at the Kansas Hot Springs. A course of neosalvarsan with intensive mercurial treatment failed in my hands to produce marked improvement though there was an amelioration of certain symptoms. This case was a failure in diagnosis both on the part of the writer and upon the part of a number of eminent syphilographers.

In cancer the matter of diagnosis is so important that authorities agree that a cancer subjected to early and radical removal offers a fair prospect of freedom from recurrence. In external cancers it is naturally possible to make a diagnosis earlier than if the growth be located internally. In gastric cancers the diagnosis must await the appearance of "a cancer rest";—but this implies a fairly advanced carcinoma.

By the electronic reactions of Abrams Dr. A. W. Boslough, of Ashland, Oregon, and the writer have been able to diagnose eleven gastric and other internal cancers at a time when there was only the smallest macroscopic sign of a cancer in the removed specimen. When the specimens were submitted to one or more competent pathologists, who had no knowledge of the case beyond the region from which the tissue was removed, they returned a diagnosis of malignancy with one exception. In this case one pathologist pronounced it malignant and another benign; but the recurrence of symptoms after operation and the subsequent death of the patient left no reasonable doubt but that the growth was malignant.

final judgment

Specimens in which a suspicion of malignancy might exist, both from the history and from the macroscopic appearance, but which the reaction of Abrams showed to be benign, invariably proved on pathologic examination to be non-malignant. The subsequent history of those pronounced benign have shown, so far as the lapse of time permits, that the diagnosis of a benign process was justified. The clinical course of those in which the diagnosis of malignancy was made has shown, unless complete extirpation was possible, the best foundation for a diagnosis of malignancy.

In a few of the cases diagnosed as cancer by the electronic method the macroscopic evidences of malignancy were so slight that the writer was strongly inclined to doubt the diagnosis until an examination of the specimen by two independent pathologists in different cities had proven beyond cavil the presence of cancer.

DR. GEORGE O. JARVIS
THE SANITARIUM
ASHLAND, OREGON

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With regard to bacterial infections;—the tests made by the writer have been largely upon teeth, the roots of which were infected and in which radiographs were made to show the possible existence of peri-radical tissue changes possible to demonstrate by the x-ray. Of these there were thirty-two cases in which x-ray plates were made, the electronic test performed, and extraction with examination of the extracted teeth done.

Extractions of the suspected teeth proved the accuracy of the diagnosis of streptococcic infection. It cannot be said that no cases went undiagnosed because teeth which yielded no reaction were not extracted. The subsequent clinical history of the cases of suspected focal infection strongly substantiated the findings of the electronic method.

With regard to sarcoma, the writer has had but two cases since learning the method of Abrams and is therefore unable to say more than that the reaction was positive and correct in these two instances.

Of the accuracy and delicacy of this method of Dr. Abrams there can be no question. Its simplicity leads some to overlook the necessity for care and accuracy joined by considerable study and experience. In the hands of those who lack accurate and delicate percussion, who are unable to distinguish variations in density of tissues (resistance) and percussion sounds, or are unwilling to give time and labor to the investigation of the methods and perfection of the technique the results will be unreliable; as would be the case with any other diagnostic procedure.

Respectfully,

Geo. O. Jarvis.

When I first began to investigate the subject of Electronic Diagnosis, I found the work most confusing but further investigations at the Physico-Clinical Laboratory of Dr. Abrams, convinced me from therapeutic results observed, of the correctness of his diagnoses. It is impossible to form a very intelligent opinion of these methods from reading about them. One must come to Dr. Abrams' laboratory and watch him at his work and hear his explanations and comments and if he approaches the investigation in an unprejudiced frame of mind the physician will soon discover that he has found something that will be of vast usefulness to him in his medical work. I consider the last five months that I have spent in this investigation as the best spent time of my medical life and would heartily advise any of my confreres to pursue a like course.

Very sincerely,

W. R. Scroggs

1st. Lieut. Medical Corps
U. S. Army.

DR. HARLEY E. MACDONALD
PHYSICIAN AND SURGEON
OFFICE AND SANITARIUM
1521 SO HOPE STREET
COR SIXTEENTH AND HOPE ST
LOS ANGELES, CALIFORNIA

To Whom it may concern:
This is to certify that
Dr. Albert Abrams has examined ^{for me} by
his new method one hundred ^{of} sig-
nificant cases, for as was the purpose
to me in many instances in practically
all cases his judgment was ^{shown}
demonstrated to be correct and in no instance
was he found to be in error.

H. E. Macdonald M.D.

ANON THATCHER ROE, M. D.,
Pasadena, Cal.

July - 27 - 17

Dear Doctor Abrams

Your letter explaining blood test no. 3 received.
Your diagnosis is correct. I thought I might
stump you on this one - but failed.

I am sending you blood specimen of case no. 1.
to day - I trust you will be able to find some
improvement in this test case - this time.

I can hardly wait the time I can leave for the
city and spend the time with you.

Thanking you for past favors I am sincerely yours.
A. W. Roe

**REPORT OF 192 BLOOD-TESTS MADE AT THE STATE HOSPITAL
STOCKTON, CAL., MARCH 6, 1918, USING THE
ELECTRONIC REACTIONS OF ABRAMS**

By W. J. CAESAR, M. D.

The specimens submitted for examination consisted of several drops of blood absorbed by white blotting paper, and derived from patients with the following diseases:

1. Syphilis (congenital and acquired). In these cases the diagnosis had been positively established by serological tests and the clinical findings.

2. Tuberculosis. The diagnoses had been previously confirmed by tuberculin tests, the presence of tubercle bacilli in the sputa and by the physical examination.

3. Carcinoma. The correctness of the clinical diagnosis was confirmed by microscopic examination.

4. Syphilis and Tuberculosis. In these instances the specimens of blood on the same blotting paper were derived from different patients.

5. Syphilis, Tuberculosis and Carcinoma. Like in the latter instance, specimens on the same paper were derived from different patients.

This report is an unequivocal demonstration of the fact that the **ELECTRONIC REACTIONS OF ABRAMS** were absolutely correct in 186 instances among 192 specimens of blood submitted for examination (3 very small specimens were not examined, making 189 actually examined). The specimens were submitted by physicians of the hospital, including the pathologist under rigorous conditions, with the object of eliminating any previous knowledge on the part of the executant relative to the disease or the patient from whom the blood was derived.

Diseases Diagnosed by an Examination of Dried Blood

Acidosis	Acute Mania	Paresis
Adrenal Sufficiency	Dipsomania	Poliomyelitis
Amebiasis	Chronic Dementia	Rheumatoid Arthritis (Variety)
Collisepsis	Leprosy	Sarcoma
Carcinoma	Malaria	Scarlatina
Cholelithiasis	Measles	Staphylococcal Infection
Chorea	Menstruation	Streptococcal Infection
Diabetes	Meningococcal Infection	Syphilis (differentiation of congenital and acquired, and specific strain.)
Diphtheria	Neurasthenia	Teniasis
Epilepsy	Paralysis Agitans	Tetanus
Gonococcal Infection	Parathyroid Insufficiency	Typhoid
Gout	Paratyphus	Tuberculosis (Varieties)
Hookworm	Pneumococcal infection	
Hyperpituitarism	Psychasthenia	
Hyperthyroidism	Pregnancy (prediction of sex)	
Influenza		
Insanity		
Paranoia		
Dementia Praecox		

The virulency of all diseases is mathematically measured and serves as a valuable guide in noting their progression or retrogression and the efficacy of treatment—notably, syphilis.

A personal examination of the patient is necessary in estimating the functional activity of the ductless glands and viscera.

IMMUNODIAGNOSIS is also capable of demonstration in some of the foregoing diseases. It can be shown from the blood whether the subject possesses natural or acquired immunity to typhoid fever; whether typhoid inoculations are necessary or, if given whether they will prove effective, thus dissipating any false security against infection. Some people show a natural immunity to cancer and this is demonstrable by a blood examination.

ELECTRONIC REACTIONS OF ABRAMS (ERA)

(A few brief and curtailed references from Journals and signed letters)

NOE, A. T., M. D.—“I feel that Dr. Abrams has brought to the medical profession the most scientific method of diagnosis that we have ever known.” N. A. J. H.

ANTHONY, J. C., M. D.—“Made wonderful diagnoses for me which would have been impossible by other means.”

HESS, H. A., M. D.—“Dr. Abrams has made 50 examinations of the blood for me and all correct as far as I can judge.”

MEACHAM, S. F., M. D.—“E R A are greatest contribution to medicine.”

POPE, CURRAN, M. D., (Author of classic on Hydrotherapy).—“Not a day passes that I do not use your methods.”

BOOLSEN, S., M. D.—“I regard the E R A as a great help and have frequently contributed the fee myself because results talk and success follows a correct diagnosis.”

JAWORSKI, H., M. D., Paris, France. (Author and medical authority; translator of E R A into French).—“I have carefully studied your methods and regard the discovery and its immensity with admiration.”

KING, J. W., M. D. (Penna.) “Physicians should at once form a caravan and go out and worship at ‘Abrams’ shrine.’” “Am getting wonderful results therapeutically from diagnoses made for me by you.”

PAREDES, F. M. D. (Mexico).—“I shall popularize your marvelous methods of diagnosis in Mexico.” (Dr. P. studied the E R A at Dr. A.’s laboratory.) Dr. F. Vasques Gomez, for many years private physician to Diaz, former President of Mexico; Prof. Surgical Pathology, University of Mexico; President, National Academy of Medicine and Minister Public Instruction has also studied the E R A at Abram’s laboratory.

POWELL, C. S., M. D.—The E R A are very helpful in my work especially in cong. syphilis brought to light and helped by treatment. Wassermann eclipsed by E R A.

MAJORS, ERGO A., M. D.—“E R A have conformed remarkably with my office findings and I am grateful to Dr. Abrams for his wonderful work. (Dr. M. has forwarded 173 blood specimens. At least 100 specimens were sent without comment of any kind.

**Practical Courses in Spondylotherapy
and
Electronic Diagnosis and Treatment**

Dr. Albert Abrams, will give courses on these subjects in San Francisco, beginning on the first of each month until further notice. Only reputable physicians can gain admission to the classes, which are limited. The course lasts two weeks, and the fee, in advance, is \$100.00 Applicants may address Dr. Abrams, 2135 Sacramento St., San Francisco.

**Dr. Abrams' Electrodes
for
Electronic Diagnosis**

These consist of four electrodes of aluminum with conducting cord of copper wire (flexible). Price \$6.00, express prepaid.

**Ohmmeter
(Blodynamometer)**

Described on page 44, New Concepts in Diagnosis and Treatment (Abrams), and in Sept. issue of the Journal. Price \$25.00, express collect.

Dr. Abrams' Reflex Set

This consists of a plexor, pleximeter, single and two pronged instrument. Price \$6.00, express prepaid.

Dr. Abrams' Electro-Concussor

Described on page 652 in Spondylotherapy. In writing, state current available. Price \$100.00 f. o. b. No apparatus sold on credit. Terms cash. Price of other apparatus on application. Physico-Clinical Co., 2135 Sacramento Street, San Francisco, Cal.

