

H610.5
P583

B 248018 M

Medical Lib

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. 2

SEPTEMBER, 1917

No. 1

FOUNDED AND EDITED BY

ALBERT ABRAMS, A.M., M.D., LL.D., F.R.M.S.

CONTENTS

Ubiquity of Syphilis	3
Electric Currents of Body	5
Similia Similibus Curantur	6
Immunodiagnosis	8
Electronological Comments	9-21
Spondylotherapy	22
Splenic Reflex	22
Heart Reflex	23
Interrogatory	24

PUBLISHED BY
PHILOPOLIS PRESS

2135 SACRAMENTO STREET

SAN FRANCISCO, CAL.

Works by **Albert Abrams,**

A.M., LL.D., M.D., (University of Heidelberg,) F.R.M.S.

One-time Professor of Pathology and Director of, the Medical Clinic, Cooper Medical College (Medical Dept. Leland Stanford Jr., University.)

SPONDYLOTHERAPY

Physio and Pharmaco-therapy, and Diagnostic Methods based on a study of Clinical Physiology—Fifth Edition, \$5.00, express prepaid.

The author gives evidence of high scholarly attainments, penetrating intelligence, admirable industry, along with that necessary quality in any pioneer work, intense enthusiasm. The result is a treatise of extraordinary interest and usefulness.—*N. Y. MED. JOUR.*, May 8, 1912.

NEW CONCEPTS IN DIAGNOSIS AND TREATMENT

Physico-Clinical Medicine.

The practical application of the Electronic theory in the interpretation and treatment of disease, 1916—\$5.00 express prepaid. The most important part of the work is a consideration of the diagnosis of disease * * * It is full of interest and abounds in valuable suggestions to physicians and scientists and its methods are well worthy of investigation—*JOURNAL of Electrotherapeutics and Radiology*, June, 1916.

DIAGNOSTIC THERAPEUTICS

A guide for practitioners in diagnosis by aid of drugs and methods other than drug-giving. A pioneer work and the only one of its kind published.—\$5.00 express prepaid.

SPLANCHNIC NEURASTHENIA

The Blues.

No variety of neurasthenia is more amenable to treatment than this form. 4th edition.—\$1.50, express prepaid.

AUTOINTOXICATION

An exposition of the causes, symptoms and treatment of self-poisoning.—\$1.50 express prepaid.

TRANSACTIONS OF THE ANTISEPTIC CLUB

Illustrating the fads and foibles of modern physicians.—\$1.00, express prepaid.

A few CHARTS on Spondylotherapy are still in stock and no more are to be published. The price of the latter has been temporarily reduced from five to three dollars. Express prepaid. Literature sent free on request.

PHILOPOLIS PRESS

2135 SACRAMENTO STREET

SAN FRANCISCO, CAL.

Physico-Clinical Medicine

Vol. 2

SEPTEMBER, 1917

No. 1

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.

Price of Subscription per year, Payable in Advance

To Subscribers in the United States, Canada and Mexico.....\$2.00

To Subscribers in other countries (Postage prepaid).....\$2.50

Price of Single Copies\$1.00

PHILOPOLIS PRESS

2135 Sacramento St.

San Francisco, Cal.

THE UBIQUITY OF SYPHILIS

Fournier, one of the most eminent syphilographers, insisted that general pathology should be made a mere annex to syphilography and time appears to have justified this paradoxical arbitrary viewpoint. It is unnecessary to remind those readers familiar with the Electronic reactions, of their delicacy and mathematic certainty in the diagnosis of syphilis and the ability to differentiate the congenital from the acquired form of the disease. The therapeutic results which they have achieved only emphasize the reliability of the Electronic reactions in comparison with the unreliable serological tests. One of the most difficult problems which the writer encounters is in dealing with the psychology of the patient after the diagnosis of syphilis is established and justifies the observation, it is more important to know what kind of a patient the disease has than to know what kind of a disease the patient has. The problem in question is solved in three ways. I ignore the moral aspects of the question and cast responsibility on the progenitors. The latter can bear the authorship of the disease with equanimity. There is an ethics of untruth and a lie should not be wasted, it should be kept for great occasions and if the patient can be the gainer, so much the better. It is rarely necessary to deceive the patient but it is not always necessary to undeceive him. I tell them that the life of each individual is practically a continuation of the lives of his ancestors and that we are all omnibuses in which our ancestors ride. If they choose

to ignore the pessimistic fatalism of the hereditarian, I then descant on the frequency of extra-genital infection (30 *per cent.*) but ignore the predominance of lip infection (51 *per cent.*) as it is unnecessary to implicate the osculatory act in the luetic entanglement.

Finally, I emphasize the innocuousness of syphilotherapy and suggest that the remedies in syphilis are equally indicated in other diseases. In making the diagnosis of syphilis, one elicits a reaction from the spine, liver and spleen. In the stress of my work, I have heretofore limited myself to the reactions from the spine only, but there were a number of patients with undoubted luetic symptoms in whom a reaction from the spine could not be elicited. In these cases reactions were made from the splenic region and to my utter amazement, syphilitic reactions were obtained. I have referred to the spleen as a nidus of syphilitic invasion elsewhere in this number of the Journal and the importance which this fact bears on the diagnosis and treatment of the disease. In all the cases where a reaction could only be elicited from the spleen, we were dealing with *congenital* syphilis. We found furthermore that the potentiality of the energy was low (not in excess of 2-25 of an Ohm). The blood in these cases yielded no reaction until the splenic reflex of contraction was evoked. This caused the extrusion into the blood of the luetic virus. Right here is a suggestion which we make to physicians before sending the blood to our laboratory for examination — before puncturing the ear or finger for blood, concuss the 2nd lumbar spine to evoke contraction of the spleen. I do not know whether the latter maneuver will prove of any value to the serologist whose lamentable failures with the Wassermann are a source of so much confusion. In five cases my results were as follows:

CASE	ELECTRONIC REACTION (Before elicitation of the splenic reflex)	WASSERMANN	
		Before	After the Elicitation of the reflex
1.	Positive	Negative	Positive (Plus)
2.	"	Positive (plus)	Positive (double plus)
3.	"	Negative	Positive (double plus)
4.	"	"	Negative
5.	"	Positive (plus)	Positive (double plus)

Elicitation of the splenic reflex of contraction is equivalent (in a greater degree) to a provocative Wassermann.

Even in acquired syphilis, the energy from the spleen must not be ignored in diagnosis. Let me cite one typical instance. The energy from the spine in a patient measures 18-25 of an Ohm and from his spleen, 2 Ohms and 18-25. In other words, the syphilitic energy from the spleen is 50 times in excess of that of the spine.

The writer who is sponsor for Abram's treatment of aneurysms encounters a large number of cases from all over the world. In several communications, he emphasized the fact that a number of his cases evidenced no syphilitic etiology nor was an electronic reaction elicited from the spine. He now amends the latter observation and concludes that in all the cases in which syphilis was excluded, the reaction of *congenital* syphilis was elicited from the *spleen* in every case.

Sabouraud (Presse Medicale, May 17, 1917), makes a practice of

applying the Wassermann, in all dubious affections in children and observes that all who do this will be appalled at the findings. He comments on the value in the diagnosis of syphilis of supernumerary cusps on the inner side of the upper first large molars (tubercle of Carabelli). This molar in the norm has only 4 cusps. Sabourand, notes that the Wassermann test shows that among the old syphilitics who consider themselves cured, there are now about 30 who are plainly not cured to every one that is actually cured. Just one more point bearing on this revelation. In answer to the question, is syphilis transmitted to the third generation? I answer yes. Recently, I demonstrated that this transmission was possible even to the fourth generation. *Syphilis may sleep but it never dies.* The Electronic tests are invariably positive in syphilis despite treatment irrespective of duration and intensity. All that we can thus far hope is to maintain it in its quiescent state (energy not in excess of 2-25 of an Ohm).

THE ELECTRIC CURRENTS OF THE BODY IN DIAGNOSIS

In the *British Medical Journal* (Sept. 30, 1916), there was a description of the work done by James Sheaver, relative to the delineation of organs. The method is supposed to utilize the electricity generated in the body. Even the presence of blood in the viscus could be demonstrated. There was likewise a description of the elaborate apparatus employed in executing the method. Commenting on the latter, the *American Journal of Electrotherapeutics and Radiology* (April, 1917, p. 205) publishes the following:

"This method of examination reminds one of Abram's work and it would seem that such methods were about to become better known. When the knowledge becomes a little more definite and a little better distributed we may look for many startling things both in diagnosis and treatment."

The foregoing ignores the most important feature of Abram's methods—their application in diagnosis and treatment. Furthermore, the methods do not utilize electric currents but radioactive energy. Were the Sheaver Electrical method true, it would have been indispensable in diagnosis. Unfortunately, the *British Medical Journal* (March 24, 1917), in commenting on the method in question, believes that the inventor has failed to satisfy the physicists consulted respecting the truth of his claims.

In 1914, Baines and Bowman, issued their book, "Electropathology and Therapeutics." A synopsis of their work may be found in "New Concepts in Diagnosis and Treatment" (p. 12). They professed to have demonstrated the electric currents in the body by aid of a galvanometer, and utilized them in diagnostic medicine. Now comes Bayliss, a distinguished physiologist whose recent work, "Principles of General Physiology" is perhaps the most classical work on the subject I have ever read and discredits the observations of Baines and Bowman. At the meeting of the Section of "Electrotherapeutics of the Royal Society of Medicine", (March 16, 1917), Bayliss cited the basis of the Baines System which consists of leading off currents from different points of the body by means of silver electrodes. When a particular skin area gives a large deflection of the galvanometer compared with that obtained in the norm by holding the electrodes in the hand, it is called a "nerve leak" and is interpreted as an escape of neuroelectricity. Objections to the foregoing were as follows: 1. In

using two electrodes although of like metal, there is always a potential difference between them and consequently, they cannot be equipotential; 2. Any skin changes (perspiration) produce "nerve leaks" of distinct physiologic origin and moist skin areas give no indications of nerve center lesions. 4. The escape of neuroelectricity from the nerves is devoid of evidence and contrary to the knowledge we possess of physiologic processes.

I shall have occasion later to show that while Bayliss may be correct from an electrotechnical viewpoint, the so-called "nerve leaks" are really of definite value for I shall show that while localized areas of sweating may not coexist with definite lesions, there are constant areas of augmented vascularity in the spine at definite points which account for the "nerve leaks". Bayliss is undoubtedly a great physiologist but he is not a clinician and I have for that reason, in "Spondylotherapy" suggested the term "Clinical Physiology" and insisted on its study so that the knowledge acquired in the laboratory could be attuned to that elicited at the bedside.

Physiologists concede that whenever the response to a stimulus ensues in animals or plants, an electrical change occurs as can be easily demonstrated by a galvanometer. Thus the relationship of life and electricity is established.

The formation of carbon dioxid as an evidence of life is shown by Tashiro, with his "biometer". My readers are advised to read the recent booklet of Tashiro, issued by the University of Chicago Press and entitled, "A Chemical Sign of Life."

SIMILIA SIMILIBUS CURANTUR

In the last issue of this Journal (June, 1917), we demonstrated that the doctrine of attenuation as advocated by Hahnemann, was correct and furthermore, we were justified in admitting the verity of the law of similars. The latter was shown by aid of the vibratory rate when a specially wound ohmmeter was employed. This law is capable of more ready demonstration by means of the areas of dullness in splanchnodiagnosis. Briefly, the latter fact may be shown as follows: If one conveys the energy of disease for which we possess specific drugs—diseases like syphilis and malaria, to the area for evoking the dull areas of the abdomen peculiar to such diseases, one finds that the energy of mercury and quinin similarly conducted will evoke like areas. If we have evoked the dull area of syphilis and later, the energy of mercury (metallic) is conveyed, the dull area peculiar to syphilis it at once dissipated. A similar phenomenon of evanescent dullness ensues when quinin energy is conveyed to the area of dullness elicited by the energy of malaria.

It is an accepted law that, bodies out of harmony with the tissues are either not absorbed or changed before absorption.

Pharmacodynamics seems thus to be identified with what I have denominated as *homovibrations*.

From my investigations, I am constrained to conclude that drugs of dissimilar vibrations (heterovibrations) are without remedial value. When drugs will be employed with relation to the vibratory rate of disease, we shall have an Utopian pharmacognosy which I shall anticipate by designating it as *oscillatotherapy*.

Let us seek a physical explanation for the facts observed by the writer, *viz.*, that the specifics employed therapeutically have the same vibratory rate as the diseases themselves.

The manner in which a disease can be destroyed by a substance having the same vibratory rate as the disease itself can best be understood from the physical analogy of resonance.

Every object has a certain natural period of vibration. If we approach an object with a source of vibration of the same vibratory rate as itself, the object will be set in vibration. This forced vibration of the object may attain such magnitude as to fracture and utterly destroy it. It is a trick of Caruso to take a wine glass and by tapping it determine its tone (vibratory rate), and then by singing that tone into the glass, to shatter it. This is exactly what happens when you impose on a disease, its own vibratory rate. Another instance of destructive resonance occurred in the early years of the 19th century. A troop of cavalry were marching over a new suspension bridge at Manchester, the time of the marching feet happening to be the same as the natural vibratory rate of the bridge. The bridge was set in vibration, the vibration got larger and larger, and the whole structure finally collapsed with great loss of life. Ever since then it has been the rule when either foot or cavalry cross a bridge, that they must break steps. Many other historical examples can be given. For example the well known story of Hughes, the inventor of the microphone. At the Paris Fair a new telephone transmitter was on exhibit, and as often happens, it refused to work. Edison, Siemens and all the rest failed to make it operate, when Hughes suggested that inasmuch as it was an English telephone it would not work until the name of a great Englishman was spoken into it. Thereupon Hughes spoke the word Faraday into the phone and surely enough, it responded.

The trick was that Hughes had tapped the diaphragm and determined its natural period of vibration and then spoke or rather sang, the word Faraday in that tune. Of course the telephone instantly resonated and reproduced the word.

Drugs unquestionably act by virtue of their radioactivity. It is an established fact that when we stimulate the 7th cervical spine in spondylotherapy, one may cause a retraction of the ventricles of the heart; this is the heart reflex of Abrams. If the energy from the left heart ventricle is conveyed to the depressor nerve (splanchnodiagnosis), a specific area of dulness can invariably be elicited on the abdomen. If the energy emanating from an opened bottle of digitalis infusion be conveyed to the depressor nerve, a like area of dulness (left ventricle only) ensues. This fact demonstrates that the cardio-tonic action of digitalis is limited to the left ventricle. Take the same bottle of digitalis and permit it to act on the region of the 7th cervical spine and note the following effect: percussion shows that the left ventricle of the heart has receded (heart reflex): *i. e.*, when compared with the delimitation of the ventricle before executing the test.

I want my readers to test this method in cases of tachycardia and inform the writer whether any slowing of the pulse ensues. The method is easily executed. Determine the pulse rate. Then apply the mouth of the uncorked bottle of digitalis infusion to the 7th cervical spine and again count the pulse after the lapse of a minute, 2 minutes etc., (the digitalis held at the spinous process in question during the entire period of observation.)

It may be observed parenthetically that Askenstedt (*Journal American Institute of Homeopathy*, Oct. 1916), employs the experiments of Schulz (*Deutsch. Med. Woch.*, May 14, 1914) in support of at-

tenuated dosage. Schulz, placed each subject under a black cloth and at intervals of 5 minutes he was made to compare the shades of green color shown by the colorimeter. A dose of 10 drops of digitalis tincture was administered to each subject and shortly thereafter his perception of green was invariably impaired. If only 2 drops of the tincture were given, the perception of green was enhanced in all cases but one. In one-half drop doses, there was a distinct increase in the acuteness of the perception of the shades of green.

IMMUNODIAGNOSIS

This new term which I have coined, suggests that it is now possible to ascertain from an examination of the blood by the electronic reactions whether the individual possesses natural or acquired immunity to certain diseases. Natural immunity has been referred to phagocytosis, and the action of the serum but our present knowledge warrants us in affirming that natural immunity is not capable of complete understanding. The bactericidal action of the serum owes its power to certain substances derived from the *spleen*, thymus, lymphatic glands and other structures rich in leucocytes. To these substances, the following names have been given: *Alexines* (Buchner), *Cystases* (Metchnikoff), *Complements* (Ehrlich). Immunity is effected by the interaction of:

1. The *antigen* (foreign substances like toxins and bacteria).
2. The *antibody* or immune body due to the action of the antigen.
3. The *complement*. These three constitute "An immune system."

The immune body links the antigen to the complement (a normal blood substance) and thus neutralizes the foreign substance. The immune body can only combine with its correlated antigen.

I found that the energy of a culture of typhoid bacilli yields a definite area of abdominal dulness. The energy from blood of patients who have had typhoid fever will invariably dissipate this area of dulness when synchronously conveyed. In perhaps a hundred examinations thus far made, it was ascertained that about 20 *per cent.* of individuals who have never had typhoid fever show the same action (natural immunity). In several individuals subjected to typhoid inoculations, the area of dulness (produced by the typhoid culture) was not dissipated thus showing the innocuousness of the inoculation. Tuberculosis, syphilis, measles, scarlatina and other infections are also capable of immunodiagnosis. In only about 8 *per cent.* of individuals examined was the blood capable of dissipating the cancerous area of abdominal dulness. Of course time only will decide the results of this observation.

The only explanation which we can offer for the foregoing phenomena is to solicit the theory of homovibrations (*vide* previous editorial) and suppose that the alexines vibrate in harmony with the toxins of disease.

ELECTRONOLOGICAL COMMENTS

AMYGDALOPHOBIA.—This neologism is suggested to indicate the fear inspired by the tonsil as an etiologic factor in disease. No physician is immune to his visceral fetish and the tendency to patronize special organs recurs periodically. Visceral fetishism is immortalized by the poet Crabbe:

"One to the gout contracts all human pain,
He views it raging in the frantic brain;
Finds it in fevers, all his efforts mar,
And sees it lurking in the cold catarrh.
Bilious by some, by others nervous seen,
Rage the fantastic demons of the spleen;
And every symptom of the strange disease,
With every system of the sage agrees."

A bacteriological study of the tonsillar crypts will reveal all kinds of microorganisms and the wonder is that the tonsils are not more often accused as factors in the etiology of disease. A study of the intestinal flora with an increase at the rate of 128,000,000,000,000 each day has not yet created the furor for enterectomies although the enterprising surgeon has not forgotten short circuiting. The basic constituent of the tonsil is lymphoid tissue which possesses a protective mechanism for screening out and destroying invading bacteria. Of course the tonsils swarm with saprophytic and pathogenic germs and this invasion eloquently proclaims their bactericidal purpose. If it were not for the tonsils the enemy would invade distant structures with the usual sequelae:—endocarditis, tuberculosis, anthritis and serous membrane inflammations. Let us not in our insane revelry forget what is taught us by immunology—that lymphatic tissue may be stimulated to perform a definite defensive function of antibacillary defense. Enlarged tonsils signify a reaction to bacterial irritation. My investigation of tonsils by aid of the electronic tests, show that the size of a tonsil is no index of infection and that a tonsil which does not protrude (submerged tonsil) may be as diseased as one that protrudes beyond the pillars. In any event were I to choose between an enlarged and a submerged tonsil, I should select the former. The lymphatic drainage of the tonsil is into the tonsillar glands located on either side at the angle of the jaw in front of the sterno-mastoid muscle and their enlargement may be the only evidence of tonsillar infection. In fact, electronic tests show that they are most frequently involved when the tonsils are *not enlarged*. When joints are involved by streptococci supposedly of tonsillar origin, one often finds that the metastatic focus yields an energy

of greater potentiality than the tonsil itself. In this sense, can any rational mind conclude that by elimination of one focus, one can subjugate a focus of greater virulency? Tonsillotomy and tonsillectomy are no doubt occasionally indicated but let us not forget the curative factors of immunity and that pathology is based on physiology and therapeutics on hygiene.

AN EDENTULATE RACE.—Now comes odontology into the lime light with its drastic dictum that pyorrhea is the *materies morbi*. The *Endameba buccalis* cited as the cause of pyorrhea which was present in 95 *per cent.* of our population has been swept into the discard by subsequent observations. Of late, I have encountered a toothless clientage, thanks to the misinterpretation of dental films. Read the observations of Jarvis elsewhere in this number of the Journal and note the accuracy and simplicity of electronic diagnosis in comparison with roentgenography. In my own practice, this ruthless dental slaughter has been curbed. I measure the intensity of the streptococcal infection and then note the diminishing virulency by the execution of correct oral hygiene. Bacteriology has contributed only to the scientific and not the curative component of medicine. Why? Because we ignore the soil in our mental astigmatism and see only the germ. It reminds me of the man who sees the fly on the head of the baby and uses a hammer to kill the fly. Malnutrition invites the germ. The latter wouldn't be there without the former. Subdue oral infection by pedantic cleanliness coupled with massage of the gums and you have the most formidable weapons of pyorrhoeal manifestations.

LOCOMOTOR ATAXIA.—Our conception of this disease has completely altered. Its other name, *tabes dorsalis* suggests that it is a degeneration of the posterior columns of the spinal cord. Now we regard it as syphilis of the nervous system and implication of the cranial nerves, notably optic atrophy anisocoria and pupils of irregular contour may yield the only clinical evidence of the disease. Lesions of the cord may be present yet there may be no tangible evidence of their presence.

Neurologists now base the diagnosis on the presence of the Argyll Robertson pupil plus the painlessness of intensive faradization of the calf muscles in the presence of subjective pains. Even the preservation of the patellar and Achilles tendon reflexes does not exclude *tabes* and what is more re-

markable is the fact that the loss of the Achilles reflex may precede that of the patellar reflex. This is a triumph of early diagnosis to those of us who once identified the disease with the classic tetrad: Ataxia, Romberg, fixed pupils and loss of the patellar reflex. The pathology of the disease is essentially a syphilitic meningitis and this meningeal reaction necessitates for an exact clinical diagnosis repeated lumbar punctures to demonstrate in the cerebrospinal fluid an increased globulin content, an augmented cell count and possibly a Wassermann reaction. I have emphasized possibly for the reason that the accurate observations of Collins show that 15 *per cent.* of paretics and 70 *per cent.* of cerebrospinal syphilitics fail to give a positive Wassermann reaction in the spinal fluid.

The electronic reactions in competent hands show that the syphilitic reaction is invariably present in tabes. That the central nervous system yields a reaction even in the preroseolar period. It does not follow, however, that there are lesions present. The latter may be recognized by the increased potentiality of the energy at definite areas of the cord. In the treatment of tabes, I must advert to the importance of localized syphilotherapy (J. Dec. 1916, p. 38) and the contribution in this number of the Journal.

THE PERIODIC LAW.—A correspondent wishes enlightenment respecting this law. It is known that Prof. Thompson (Cambridge, England), received in 1916, the Nobel prize for his theory of the electrons. The periodic theory first set forth by the Russian, Mendeléeff shows how it harmonizes with the electron theory. If the elements are arranged in the order of their increasing atomic weight, commencing with Helium (excluding hydrogen), their properties will vary periodically, that is, at certain regular intervals or periods, elements will be found which have the same properties, a certain increase in the atomic weight always causing a reappearance or return of properties.

Arranging the elements in order of their atomic weights we have:

1. Helium (He, equals atomic weight of 4);
2. Lithium (Li, equals 7.03);
3. Beryllium (Be, equals 9.1);
4. Boron (B, equals 11.0);
5. Carbon (C, equals 12.00);
6. Nitrogen (N, equals 14.04);
7. Oxygen (O, equals 16.00);
8. Fluorine (F, equals 19);
9. Neon (Ne, equals 20);
10. Sodium (Na, equals 23.05);
11. Magnesium (Mg, equals 24.36);
12. Aluminum (Al, equals 27.1); etc.

When the 9th element neon is reached it is found to be very much like helium (the first element). Similarly the 10th element, sodium, is found to be very much like lithium (the second element) and so on. In other words, certain properties of the elements periodically recur. This leads to the construction of the periodic table as follows:

The first eight elements are arranged horizontally in the order of their increasing atomic weight, viz:



When the 9th element is reached, since its properties are similar to the first element (He) it is placed under helium. The remarkable fact is then found that if the succeeding elements are arranged horizontally in the successive columns simply in the order of their atomic weights, the vertical columns will contain elements similar in all their properties, *e. g.*,



This leads to the law that, THE PROPERTIES OF THE ELEMENTS ARE PERIODIC FUNCTIONS OF THEIR ATOMIC WEIGHTS.

If we know the properties of an element we can very approximately state its atomic weight, and *vice versa*, if we know the atomic weight of an element, we can predict its properties.

An inspection of a table shows that there are several gaps. Originally there were three more gaps than at present, Mendeleeff at the time of drawing up the table, predicted that these gaps represented undiscovered elements, and stated their general properties. These three elements have since been discovered and now occupy their proper place in the table. They have exactly the properties predicted for them.

Of course there are imperfections in the table. Hydrogen has no place, etc., but on the whole it undoubtedly represents a fundamental law.

The experiments of Moseley give a theoretical explanation of the periodic law which has been lacking.

Now VIBRATION is the primal law of Nature. Thomson has shown that the violent motion of the electron within the atom creates magnetism and that the atoms of the different elements are composed of different numbers of electrons and that each element has its own peculiar vibration and ether

wave and every element must of necessity have a magnetism peculiar to itself caused by its own individual vibration. The number of electrons in the group first cited is as follows: He, 3080; Li, 5390; Be, 6930; Bo, 8470; C, 9240; N, 10,780; O, 12,320; F, 14,630; Ne, 15,400; Na, 17,710; Mg, 18,788; Al, 20,790.

This is an opportune moment to direct attention to a remarkable book, "Therapeutics of Vibration," by an homeopathic physician, Wm. Lawrence Woodruf, M. D., which was published in 1907.

Dr. Woodruf, in this booklet seeks by the electronic theory to justify the doctrines of Hahnemann, but as a matter of fact, he is going to destroy the chaos of our so-called pharmacology and make it subject to the electronic theory which is destined to be the foundation of a new medicine—a scientific medicine. Not an art which is the obloquy of the scientist who views our conclusions as guesstimation in lieu of estimation.

Woodruf's observations although deductive are now fully confirmed by the objective evidence of the writer's electronic reactions which are noted elsewhere in this number of the Journal. Woodruf utilizes and modifies the periodic table and shows the close relationship of drugs according to their position in the table. He also concludes that the action of a drug is dependent on the number of its electrons and that its specific effect is dependent on whether or not it vibrates in unison with the structures which it influences physiologically. I have learned since writing the foregoing that Woodruf is dead, but I can safely predict that the honor denied him by his contemporaries not because they doubted but because they could not understand, will be accorded him by posterity. It is only a question of time when medical problems will be solved by the same laws which govern physical science. Let us recall the IATROPHYSICAL SCHOOL OF MEDICINE in the 17th century which explained all physiologic and pathologic phenomena by the laws of physics.

BIOPSY.—This term signifies the examination of tissues excised from the living body. Commenting on the service recently inaugurated by the New York Board of Health, for the examination of specimens excised from suspected cancer, in order to establish the microscopic diagnosis before surgical operation, L. D. Bulkley, M. D., observes as follows:

"There could hardly be devised a more effective plan to increase the mortality from cancer and to render many cases more really inoper-

able than this one would surely be; for by thus cutting into cancerous tissue and opening lymphatic channels and blood vessels, with the opportunity of absorption of cancerous elements during the necessary delay, metastases would certainly be induced, which would render a surgical removal or a dietary of medicinal treatment immeasurably less effective. It is to be hoped that this scheme will be immediately abandoned."

Elsewhere (advertising pages) in this number of the Journal, Dr. Geo. Jarvis, refers to his experience with the electronic reactions in the diagnosis of cancer to which the reader is referred. In the Journal of Cancer Research, April, 1917, Dr. Maud L. Menten, announces the discovery that in cancer the blood plasma is hyperalkaline. This view was first promulgated by Prof. E. M. Perdue of Kansas City, to whom no credit is given.

CANCER OF PLANTS.—In this Journal (Sept. 1916), reference was made to the investigations of Smith, of the U. S. Dept. of Agriculture who suggested that crown gall, a cancer of plants is due to the *bacterium tumefaciens*. The writer found that crown gall yielded the same electronic reactions as human cancer. In a more recent communication, Smith seeks to determine what by-products of the organism are the direct cause of the growth. The substances produced by the *bacterium* in simple culture mediums include aldehyde, ammonia, amins, acetic and formic acids and that some of them applied to plants subject to crown gall have actually given rise to tumors.

BACILLUS EPILEPTICUS.—In this Journal (Dec. 1916), I referred to the observations of Reed, which he has since then practically discredited in which a specific organism was found to be identified with epilepsy. My electronic reactions with the *bacillus epilepticus* sent me by Dr. Reed were found to be identical with the *bacillus subtilis* which is also found in the feces. In the many epileptics whom I examined, a reaction was invariably elicited from the cecum. Since then, I have sought for this reaction in syphilitics, some of whom were epileptics and others were not. To my utter amazement, the electronic reaction was obtainable in practically every syphilitic examined. My examinations show that practically every epileptic is a syphilitic although every syphilitic is not an epileptic. I concluded that my reaction was merely a question of *symbiosis*.

In other words, a syphilitic soil was propitious for the growth of the organism in question. The growth together of the cholera bacillus, an ameba and the lepra bacillus (not alone capable of culture) is an example of symbiosis.

GUNSHOT WOUNDS.—Recent investigations by the writer show the availability of the electronic reactions for the localization of projectiles and lesions sequential to them. Lead and steel are the essential elements of projectiles. Their localization in the usual way is entrusted to the radiologist and predicates a radioopaque foreign body in the tissue. Bergonie's 'vibreur,' suggested as a reciprocal aid to the x-rays will only localize magnetic metals (steel and iron) and not a non-magnetic body like lead. Bullet probes used for locating metallic masses utilize the body current of the subject but contact of the probe with the metal is necessary to complete the battery. When the latter occurs, a grating sound is heard in the receiver with one kind of probe or a metallic taste is appreciable with another kind. The modern leaden bullet with its hard metallic jacket no longer permits of its detection by Nelaton's porcelain headed probe on which a black mark could be seen when it came in contact with the lead.

In electronic diagnosis when the receiving electrode is permitted to pass over lead or steel, irrespective of depth or quantity, specific areas of abdominal dulness will supervene when the energy is conducted to the area between the 3rd and 4th dorsal spines (splanchnovascular reaction) or to the 2nd lumbar spine (enterodiagnostic reaction). These areas may be seen in figs. 1 and 2. By aid of an ohmmeter, the vibratory rate of lead is at 3 ohms of the scale and steel at 4 ohms. The radioactivity of lead and steel will not traverse a non-conductor (rubber) unless at their vibratory rates.

When lead and steel are synchronously present one elicits the specific abdominal areas of both.

No gunshot wound is bacteriologically clean. I shall specify at this time only two sources of infection, the tetanus bacillus and the *bacillus aerogones capsulatus*. The localization of the streptococcus area has been shown (J. 1. Vol. 1, Fig. 2.) If infection is not strictly localized to the wound and has invaded the blood the specific areas of abdominal dulness (Figs. 3-4) are demonstrable from a few drops of blood extracted from the patient and allowed to dry on a clean white blotter. A reaction is then made with the electrodes directly or through the ohmmeter if corroboration of the results is desired at the vibratory rates. (Tetanus at 3 and *Bacillus Aerogones* at 4 ohms). The polarity of tetanus is neutral and the *bacillus aerogones* is negative. The reaction of the tetanus bacillus suggests many possibilities, notably, the contamination of vaccine. Ampoules containing vaccine (pro-

vided the glass is white) will yield the reaction of the tetanus bacillus if it is thus contaminated. Syphilitic contamination is amenable to the same test. The antivaccinationists will

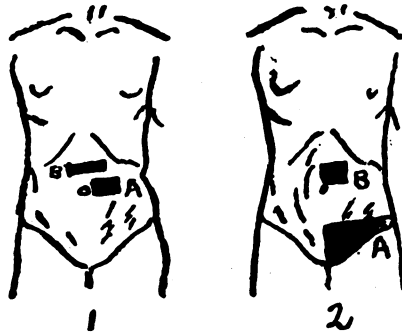


FIG. 1.—Splanchnovascular reactions of lead (A) and steel (B).
 FIG. 2.—Enterodiagnostic reactions of lead (A) and steel (B).

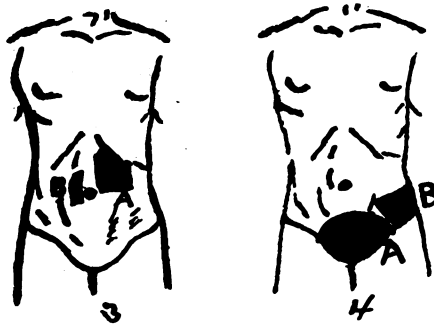


FIG. 3.—Splanchnovascular reactions of the tetanus bacillus (A) and the *bacillus aerogenes capsulatus*. FIG. 4.—Enterodiagnostic reactions of the tetanus bacillus (A) and the *bacillus aerogenes* (B).

soon have nothing to anti. Have you stopped to consider that the positive utterances of the true scientist are rarely negated by the laity. Medicine dignified as a science and in reality a mere art has always been the butt of ridicule.

Occasionally the physician is able to refute the sophistry of his opponents. When Simpson introduced chloroform to relieve the pains of childbirth, the Scottish clergy reviled him and reminded him of the primeval curse; "In sorrow shalt thou bring forth children." He answered that the first opera-

tion recorded in history was performed under anesthesia for when God created Eve from one of Adam's ribs, he "caused a deep sleep to fall upon Adam." Tyndall's reply to the church is also historic. The theologians contended that God made water the only matter which expanded on solidification, thus implying that this provision prevented the destruction of marine life and was for the benefit of man for whom this universe was created. Tyndall answered that the metal bismuth, which was in no wise associated with the welfare of man, likewise expanded.

AUTOELECTRONIC REACTIONS.—In some instances, when the patient's abdomen is sufficiently tympanitic, one may employ the patient in lieu of an intermediary (subject) for executing the electronic reactions. This subject has already been exploited (J. Vol. 1, No. 4, p. 91). The reactions are most pronounced when the patient is grounded and the dulness of the areas is less if the patient does not stand on the aluminum plate. In executing percussion in electronic diagnosis don't use a strong percussion blow, for by so doing, you elicit even in the norm, the intestinal reflex of contraction which likewise yields a dulness.

POSTURAL POLARITY.—W. R. Scroggs, M. D., First Lieutenant, Medical Corps, U. S. Army, an ardent student of my methods, directed my attention to the fact which I have corroborated, that one may determine the polarity of energy by the position of the subject, thus dispensing with the use of a bar magnet. All reactions are executed during the time the subject faces west. During the time cancerous energy is conveyed the area of dulness is dissipated if the subject faces south and continues when he faces north. The streptococcic reaction disappears when the subject faces north and continues when the south is faced.

The energy from tuberculosis and syphilis causes no area of dulness when the subject faces north or south. The polarity of cancer is positive, streptococcus, negative and tuberculosis and syphilis neutral. In other words the area of dulness in cancer is dissipated by the negative pole, streptococcus by the positive pole and tuberculosis and syphilis by either pole. Why these postural differences?

Our earth is a gigantic magnet with magnetic poles. It is generally accepted although the reverse may be true, that out of the earth's north magnetic pole in the Southern Hemisphere a stream of magnetic flux emerges which traverses

the atmosphere until it attains the earth's South Magnetic pole in the Northern Hemisphere. This flux emerging from the north and reëntering at the south pole or *vice versa* suffices to account for postural polarity.

UTILIZATION OF THE HEART IN DIAGNOSIS.—To avoid repetition, reference is made to a previous number of this Journal, (Vol. 1, No. 2, p. 43), where it was shown that one may cause the heart to assume a definite rate of vibration dependent on the nature of the energy conveyed to it. In other words, I am employing the heart as a detector of different kinds of vibrations. What is done in wireless telegraphy can be accomplished more delicately by the heart. If one drops a stone in a quiet pond, waves may be seen radiating across the water, and, if one observes a cork floating on the surface, it bobs up and down and even were the waves unseen, the cork would reveal them. It is practically a wave detector. If one could make ripples in the water of different lengths the bobbing of the cork would spell out the words. Now this is precisely what the heart can do. After much experimentation, my assistants and myself found that the best reaction of the heart to the conveyed energy was attained when the electrode was fixed in the third right intercostal space contiguous to the sternal border. This area corresponds approximately with the *sinus node* (pacemaker). The heart (regular in rhythm) of any individual may be selected as a detector. The oscillations of the pulse are conveyed to a tambour on which is cemented a tiny mirror. On the latter, a band of light is projected which is reflected to the lens of a photokymograph. The bromid paper within the kymograph is moved at a definite speed by a motor, the speed of which is controlled by a rheostat. The schematic tracings invariably obtained in cancer and tuberculosis are shown in fig. 5. The tracings of the disease (dotted lines) are superimposed on the normal tracings (continuous lines).

No scientist has ever monopolized mentalization. "Full many a flower is born to blush unseen," and this applies in all cogency to John E. Purdon, A. B., M. D., who sent me a series of tracings taken with Dudgeon's sphygmograph. Typical British soldiers were employed in his investigations. He uses the pulse in estimating the quantity of nervous reactions and specifies the pulse as a "neurometer." His tracings show that the mere presence of another person will so influence the tracings that they correspond with the tracings

of the other person. Such sphygmograms are referred to as "sympathetic and telepathic pulse tracings."

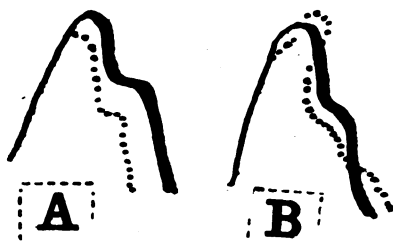


FIG. 5.—A, shows the tracing in cancer and B, the tracing in tuberculosis. The departure from the normal curves as shown by the dotted lines is constant in both diseases and is of great significance to the physician skilled in the interpretation of pulse tracings.

GONOCOCCIC INFECTION.—It is not often in the literature as yet that one encounters an electronic conception in pathogenesis. *Mirabile dictu*, Roucayrol (*Paris Médical*, Jan. 13, 1917), while regarding the urethra as the portal of entry of the gonococci finds that they are soon disseminated not by the lymphatics nor the bloodvessels as is currently supposed but by the *nerves* owing to their electric currents acting on the electric charge of the gonococcus.

SPLANCHNODIAGNOSIS AND VASODILATION.—Reference has been made (J. Vol. No. 3, p. 64) to the observations of Dr. Geo. Jarvis, in explanation of the areas of dullness occurring in splanchnodiagnosis. Jarvis has continued his investigations. Thus, after paravertebral anesthetization with novocain and adrenalin to produce anesthesia of the abdominal parietes, the stomach was exposed. Each time energy was conveyed to the area between the 3rd and 4th dorsal spines from a Cancer (specimen), within three seconds there was a dilation of the bloodvessels corresponding to the splanchnic area of dullness obtainable from the radioactivity of a carcinoma. The dilation was approximately twice the size of the vessels. Coincident with the dilation, percussion elicited dullness, but both evanesced immediately on withdrawal of the source of energy. The results in a series of tests were uniform and were witnessed by a number of physicians and nurses. Throughout my work on "Spondylotherapy," I show the nullifying effects of anesthetics on the reflexes and one can only wonder concerning the degree of vasodilation without anesthesia.

VALUE OF ELECTRONIC REACTIONS.—A correspondent is desirous of knowing, the value attached to these reactions and whether he can execute them within a few days. I am going to rebuke modesty for the occasion to reply to the interrogations of my correspondent. The law of Bowditch, shows that any stimulus, however feeble, which will excite a cardiac pulsation will produce as powerful a pulsation as the strongest stimulus. This fact is referred to as the "all or none" law. So it is with the electronic reactions, they signify either the most stupendous departure in medicine or they signify nothing. No intermediate conclusion is possible. In a previous number of this Journal, reference was made to a symposium on the diagnosis of syphilis and the consensus of opinion was, that it was so inadequate that one was constrained to rely on the results of treatment—the therapeutic diagnosis if you will. When one is confronted with this composite conclusion emanating from the most exalted authorities respecting a disease which has been made the object of such exhaustive study, we must awaken to the lamentable difficulties of diagnostic medicine, for after all, the highest skill of the physician lies in his diagnostic acumen. Treatment is a subsidiary phase and is the implied resultant of a correct diagnosis—*Qui bene dignoscit, bene curat*. Without the ability to diagnose you are on a par with the suggestionist (specify him as you will) and if you are a surgeon, your acrobatic performances are superseded by the most abject vaudevillist. Drastic language this, no doubt, but true. With electronic reactions, you do not doubt, guess or procrastinate with a decision.

Classify me as an hyperbolist if you will. You are justified in so doing if you are not of the *cognoscenti*. Any one who attempts to annihilate accepted dogmas will have hurled at him the contumelious stone. This confirms history. Ask any detractor of the electronic methods what he knows about them. You will, of course, confuse him and he will be like the bookreviewer who never read a book before he reviewed it—he didn't want to be prejudiced. Of course you can learn the methods if you will try. Let me thwart your ambition, however, as far as speed is concerned. More than a few days will be requisite. The essence of the entire procedure lies in PERCUSSION. If you are able to detect an area of lung consolidation, you can execute splanchnodiagnosis. Percussion is, however, an exalted art demanding time, practice and skill. It is not only an education of the *tactus eruditus* but also of

the ear. With a musical ear and a light hand, you will possess advantages over those less favored but, in any event it will always be a matter implicating the personal equation. The phonetic recognition of a reflex dulness is a matter of experience. In telegraphic transmission the mechanic device first used for impressing the dots and dashes was discarded for the operators found they could read them unerringly from the click of the instrument. Let me urge you in conclusion to give some time to the study of electronic diagnosis. Much of the medical knowledge which you have acquired is entitled to forgetfulness. Sisyphus like, throughout your career, you have imbibed knowledge only to disgorge it after it has been discredited. An educated physician is not expected to know or remember all he has learned, but at least he is supposed to have forgotten some of it. The art of memory consists of learning to forget. Emulate the eminent attorney who said it is unnecessary to remember the law if you know where to find it.

EARLY DIAGNOSIS OF PULMONARY TUBERCULOSIS.—Physical diagnosis must be the most difficult task of the physician otherwise, so many errors in the diagnosis of this disease would not be perpetrated. One of the main difficulties consists in misinterpreting a healed for an active tuberculosis and accounts for a statement made by Roepke, that 10 *per cent.* of the inmates of sanatoria for tuberculosis are not tuberculous. Dulness on percussion may indicate a healed lesion and so may adventitious sounds. The earliest lesions must be sought for not in the apices, but in the hilus, the disease extending as a peribronchial process and it is only when the apices are reached that the disease is clinically manifest. Radiology in early diagnosis is a disappointment. An x-ray picture like bacilli in the sputa is a late manifestation. The x-rays do not show tubercles but the effects of tubercular inflammation. Lung shadows may be produced by streptococcosis, syphilis, anthracosis, bronchiectasia, congestion, etc. Electronic diagnosis makes a differential diagnosis of the foregoing possible and a lesion is always *healed* if the splachno-diagnostic reaction of tuberculosis cannot be elicited when the index of the resistance box is beyond 2/25 of an ohm.

SPONDYLOTHERAPY

THE SPLENIC REFLEX OF CONTRACTION IN SYPHILOTHERAPY

The employment of this reflex in a symptomatic and therapeutic direction is of great value (S. 354, 506 and J. March, 1917, p. 63). My experience with this reflex permits me to conclude that, if in a suspected case of malaria, typical or atypical symptoms of the disease do not supervene after elicitation of the reflex in question, the disease is not malaria. Similarly, suspected symptoms of *syphilis* are often accentuated after the same maneuver. Take a typical case of acquired syphilis and measure the syphilitic energy from the spine, liver and spleen and we have the following figures: spine, 6/25, Liver, 23/25 of an ohm and spleen, 1 ohm and 10/25 of an ohm. Immediately after concussion to elicit the reflex (the patient is undergoing mercurial treatment), the reactions are as follows: spine, 1 2/25, liver, 12/25 and spleen, 18/25. Thirty minutes after evoking the reflex: spine, 1/25, spleen, 22/25.

The elicitation of this reflex causes a hyperleucocytosis (S. 106). It has been shown experimentally that intravenous injection of splenic extract evokes a like condition. Wells, has shown that the splenic pulp contains the greatest number of leucocytes (in one instance 180,000 per cb. mm.). This concentration is evidently the result of the fixation in the spleen of the presence of the products of disease which exert a positive chemotactic influence toward the leucocytes. Evocation of the splenic reflex of contraction is in my opinion, one of the most valuable adjuncts in the treatment of infections. This not only applies to syphilis, reference to which has already been made, but to streptococcal and gonococcal infections. Although the organisms of these diseases may be absent in the blood, their presence in the latter may be shown after elicitation of the splenic reflex. *When blood is sent to the physico-clinical laboratory, secure it immediately after the splenic reflex of contraction is elicited.*

From an investigation of a comparatively large number of cases of syphilis coupled with observations bearing on the results of treatment, we deduce the following:

1. The usual depositories for the luetic virus are the spleen and liver, notably the former.
2. When the splenic and liver reflexes of contraction are

evoked by concussion of the 2nd lumbar spine, there is an immediate extrusion of the virus into the circulation.

3. The spleen is not a quiescent viscus but undergoes periodic changes in volume and in these contractions, physiologists inform us, the spleen loses about 18 *per cent.* of its volume. The volume changes are akin to the peristalsis of the gastrointestinal tract and are caused by rhythmic contraction of the smooth muscle tissue in the capsule and trabeculae.

4. Emotions, digestive disturbances and other factors may precipitate extraordinary volume changes in the spleen, thus eliminating the products of the disease into the circulation, causing an exacerbation of symptoms present or producing them if absent.

5. In parasyphilitic diseases, the parasites are found in the "dead corners" of the organism and resist the action of drugs. Similarly, virus lodged in the spleen is equally resistant. Elicitation of the splenic reflex is therefore a valuable adjunct in syphilotherapy.

THE HEART REFLEX FOR SEPARATE TESTING OF THE AURICLE AND VENTRICLE

"Minerbi is instructor in medical semeiology at the University of Rome, and he here reviews the various methods by which the functional capacity of the heart and of its component parts can be estimated. He calls attention in particular to the prompt retraction of the sound heart when the precordial region is tapped along certain specified lines. This tapping with twenty strokes of the hammer and pleximeter is followed by retraction of the auricle, atrium or ventricle according as one or the other is nearest to the line of strokes. The outline of the auricle, atrium or ventricle will then be found 1, 2 or even more centimeters inside of the previously drawn outline. In his tests on normal persons, the retraction thus realized often amounted to a total of 4 cm. for the entire heart in the course of three minutes. The retraction is evidently due to the direct or autonomic excitability of the muscle tissue, independent of the diastole proper. By this means he has learned that the auricle and the atrium can contract independently of each other as well as of the ventricle. Another instructive test is a modification of the Azoulay-Varisco test. The subject reclines horizontally, without a pillow, and the extended legs are slowly raised by an assistant to an angle of 75 or 80 degrees, the subject entirely passive. The pulse, pressure and limits of the heart are then recorded anew. Then the assistant releases the legs, and the subject lowers them very slowly to the bed, taking five or eight seconds for this. It requires considerable muscular effort to keep from dropping the legs, and the pressure, etc., are recorded anew. In his research with 600 applications of these various tests on thirty persons, including both sick and normal subjects, he found that with the Azoulay-Varisco test the sound heart reacted exclusively with pronounced retraction of the auricles.

With a weak heart muscle, the auricles became enlarged at once, instead of contracting and with extreme weakness the ventricles also became enlarged. The behavior of the heart under reflex action from the skin is also instructive as he relates in detail, discussing the mechanisms of the various muscular reactions of the heart. They all demonstrate, he says, a delicate and effectual auto-regulating mechanism in the heart."—*The Journal of the A. M. A.*, June 30, 1917.

INTERROGATORY

PARALYSIS AGITANS.—A correspondent seeks any new knowledge we possess concerning this affection. The anatomic basis of this disease is unknown. To refer the changes found in the cord to senility is only a matter of conjecture. In 5 cases examined within the last two years by my methods, I found congenital syphilis in 2 cases and *malaria* in all the cases. Malaria has always been supposed to be in some way associated with this disease but heretofore there was no satisfactory evidence. The parathyroid glands (insufficiency) have been accused as an etiological factor, but patients to whom parathyroid substance has been given react variously. Some laud, and others condemn its use. Parathyroid insufficiency is characterized by increased irritability of the nervous system and tetany is associated with it. Berkeley, is one of the most ardent enthusiasts of parathyroid treatment and his patients numbering hundreds, show benefit in over 80 *per cent*. Commercial preparations yield indifferent results. His success is attained with a nucleoproteid solution of the parathyroid. My treatment consists in combating the syphilis and malaria. The latter can only be effectually subdued by quininism plus elicitation of the splenic reflex. If blood is sent to my laboratory for examination, only prick the finger or ear *after* excitation of the splenic reflex of contraction for reasons cited elsewhere in this Journal. My measurements of the functional activity of the parathyroids show a practically constant activity (23/25 of an ohm in both sexes). In paralysis agitans, their functional activity is very much reduced. We know what can be done by spondylotherapy in exciting or suppressing the functional activity of the thyroid glands. My investigations show that *concussion of the 6th cervical spine* will augment the functional activity of the parathyroids. Thus, in a physician with paralysis agitans, the right parathyroid shows an activity of only 5/25 of an ohm and after concussion it rises to 16/25; eleven times its ordinary activity. This activity soon drops and increases with repetition of the maneuver. Symptoms usually abate temporarily after concussion.

MISCELLANY

SUBSCRIPTION RENEWAL.—Subscribers are respectfully requested to forward their subscriptions promptly. The second volume of this publication begins with this issue. We regard this Journal as an artistic success but a financial failure, but it is only a realized anticipation. The Journal will no longer be sent to those in arrears.

EPILEPSY.—In several instances, we have noted that a paroxysm of this disease was subdued in intensity by concussion of the 7th cervical spine and accentuated, when concussion was executed between the 3rd and 4th dorsal spines. We await further confirmation of this observation from our readers.

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 say whether SYPHILIS is congenital or acquired.

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. 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 50 per cent., and positive reactions with this test are elicited in non-syphilitics (2.6 to 18.1). 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. Physicians of prominence no longer rely on the Wassermann test. The same fate is destined for the reactions of Aberhalden, 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 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 out 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 Abrams' 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. Abrams' 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 Abrams is due the credit for this epoch-making discovery. It is the external counterpart of the Abderhalden reactions."

SPECIMENS

Blood specimens should be placed on a paper or blotter enclosed in the specimen container or envelope and mailed immediately. Examination will be made at once, and reported on fully and promptly. Fees should accompany specimens. Special correspondence is invited, with a view to informing you in detail about any part of the work of the Laboratory which may not be clear to you.

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 Electric Diagnosis\$100.00

(Limited to reputable physicians in possession 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, streptococcic 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."

Victor G. Vecki, M. D.

PHYSICIANS' BUILDING
516 SUTTER STREET, COR. POWELL
SAN FRANCISCO, CAL.

June 13th, 1917.

Albert Abrams, M.D.
2135 Sacramento St.,
San Francisco, Cal.

My dear Dr. Abrams:

It conforms only with exact and plain truth to say that in all cases submitted to you for diagnosis by means of your electronic reactions your findings were absolutely correct and justified by subsequent therapeutic results.

Sincerely yours,

V. G. Vecki, M. D.

VGv/JH

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 sig-
nifican cases, great as was the surprise
to me in many instances in practically
all cases his judgment was later
demonstrated to be correct and in no instance
was he found to be in error.
H. E. Macdonald M.D.

When I first began to investigate the subject of Electronic
Diagnosis, I found the work most confusing but further investiga-
tions 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 investiga-
tion 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 M.D.

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

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

-2-

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

-3-

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 to 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.

AMON THATCHER NOE, M. D.
Pacific Grove, Cal.

July - 27 - 17

Dear Doctor Abram's

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. Noe

Diseases Diagnosed by an Examination of Dried Blood

Acidosis	Insanity	Pneumococcic infection
Adrenal Sufficiency	Paranoia	Psychasthenia
Amebiasis	Dementia Precox	Pregnancy (prediction of sex)
Colicsepsis	Acute Mania	Paresis
Carcinoma	Dipsomania	Polioomyelitis
Cholelithiasis	Chronic Dementia	Rheumatoid arthritis (variety)
Chorea	Leprosy	Sarcoma
Diabetes	Malaria	Scarlatina
Diphtheria	Measles	Staphylococcic infection
Epilepsy	Menstruation	Streptococcic infection
Gonococcic infection	Meningococcic infection	Syphilis (differentiation of congenital and acquired, and specific strain.)
Gout	Neurasthenia	Teniasis
Hookworm	Paralysis Agitans	Tetanus
Hyperpituitarism	Parotitis	Typhoid
Hyperthyroidism	Parathyroid insufficiency	Tuberculosis (varieties)
Influenza	Paratyphus	

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.

A Few Visitors to Dr. Abrams' Research Laboratory, San Francisco, Cal.

B. L. Baker, M. D., Washington	E. A. Julien, M. D., California
W. A. Briggs, M. D., California	H. Kerber, M. D., Illinois
W. A. Brown, M. D., Washington	W. E. Keith, M. D., California.
I. C. Boerke, M. D., New York	H. Lischner, M. D., California
A. W. Boslough, M. D., Oregon	J. R. Leadsworth, M. D., California
T. D. Bristol, M. D., Ohio	A. Lowry, M. D., France
W. J. Caesar, M. D., California	E. Majors, M. D., California
J. E. Cox, M. D., California	J. Hunter Miles, M. D. Pennsylvania
A. Crawford, M. D. California	W. H. McChesney, M. D., New York
F. S. Cook, M. D., California	H. E. MacDonald, M. D., California.
W. M. Collins, M. D., New York	P. Norwall, M. D., Oregon
F. Caldwell, M. D., New York	A. W. Penniman, M. D., California
Ernest Cleverdon, M. D., California	J. C. Pickett, M. D., California
F. E. Coulter, M. D., Nebraska	F. M. Planck, M. D., Kansas
Chas. Cross, M. D., California	B. D. Plymire, M. D., Pennsylvania
A. E. Dickinson, M. D., California	W. H. Scholtz, M. D., California
Chas. P. Duffy, M. D., New York	H. C. Sawyer, M. D., California
B. E. Dawson, M. D., Missouri	S. Ringolsky, M. D., California
M. Evans, M. D., California	W. P. Ryder, M. D., Iowa
O. Eastland, M. R., California	F. Starkey, M. D., Pennsylvania
J. H. East, M. D., Colorado	Hugo Summa, M. D., Missouri
J. T. Fisher, M. D., California	V. Sillo, M. D., New York
T. Gottlieb, M. D., California	V. Sterns, M. D., Paris, France
P. G. Garlick, M. D., California	W. R. Scroggs, M. D., California
A. R. Gould, M. D., Washington	E. Stone, M. D., California
F. Gramenz, M. D., Minnesota	E. A. Stone, M. D., California
A. L. Gustetter, M. D., Arizona	G. M. Terrill, M. D., California
G. F. Harding, M. D., Utah	J. W. Thayer, M. D., California
W. D. Huntington, M. D., California	S. P. Terry, M. D., California
D. B. Holcomb, M. D., Illinois	J. W. Torbett, M. D., Texas
E. H. Howell, M. D., California	B. E. Witte, M. D., Texas
H. Johnson, M. D., Paris, France	J. W. Wright, M. D., California
G. Jarvis, M. D. Oregon	S. V. Young, M. D., Texas
	J. Zeig, M. D., Michigan



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 Street, San Francisco, Cal.

THE NEW SPHYGMOMANOMETER

Devised by Dr. Harley E. MacDonald, Los Angeles, Cal.
A FEW OF ITS MANY ADVANTAGES

Absolutely correct readings; portability (carried in the pocket) parts cheaply replaced, systolic and diastolic readings; durability and simplicity; mercury never spills and apparatus always in order. \$10.00 postpaid. Money back if not delighted. Philopolis Press, 2135 Sacramento Street, San Francisco, Cal.

DR. ABRAMS' ELECTRODES
for

ELECTRONIC DIAGNOSIS

These consist of four electrodes of aluminum with conducting cord of copper wire (flexible). Price \$3.50, express prepaid.

OHMMETER

(*Biodynamometer*)

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

BIOMETER (Abrams)

Described on Page 272, *New Concepts in Diagnosis and Treatment*. Measures the vibratory rate, wavemeter index and potentiality of human energy. Price \$85.00, express collect.

DR. ABRAMS' REFLEX SET

This consists of a plexor, pleximeter, single and two pronged instrument. Price \$5.00, express prepaid.

DR. ABRAMS' ELECTRO-CONCUSSOR

Described on page 652 in *Spondylotherapy*. In writing, state current available. Price \$85.00 f. o. b. *No apparatus sold on credit. Terms cash. Price of other apparatus on application.* Philopolis Press, 2135 Sacramento Street, San Francisco, Cal.



