

JOURNAL
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BRITISH SOCIETY OF
DOWSERS



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JOURNAL OF THE BRITISH SOCIETY OF DOWSERS

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NOTICES

The President would be glad to hear from anyone who would be prepared to hold the Summer Meeting on their property this year.

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It is proposed to devote space in the Journal for answers to questions regarding the various branches of dowsing in so far as answers can be obtained.

* * * * *

Lectures were given at the rooms of the Royal Asiatic Society on December 2nd by Dr. J. Braun on "The Pendulum in Medical Diagnosis and Treatment"; and on January 13th by Mr. E. P. Wilson, A.M.I.Mech.E., on "Dowsing with the Angle Rod."

* * * * *

Those members of the B.S.D. who are particularly interested in Medicine, Biology, Health and Food are forming a special branch of the Society. A very good beginning was made on February 8th, when Herr Dannert, one of the most successful of all the German dowsers, told a number of us what they were doing in his country. We were all convinced, after hearing him, of the urgency and need of such a branch.

Dr. Adolph Selige, of Miami, Florida, U.S.A., writes describing the movement in America, where he has formed a League for Radioscopic Research and Practice. He kindly sends us the monthly Bulletins of the League.

There are several similar movements in France, Switzerland and Germany.

Members who are interested should communicate with Dr. Hector Munro, 12 Park Crescent, Portland Place, W.1.

* * * * *

Angle rods with a swivel handle can be obtained from Messrs. Windley Bros., Crown Works, Chelmsford, for 6s. 6d. post free to any address in England.

Messrs. Devine and Co., St. Stephen's Road, Old Ford, London, E.3, supply pendulums of whale ivory, with central suspension and cavity for sample, at the price of 6s., and other dowsing instruments.

They also supply whalebone for rods, cut to size.

Pendulums of rosewood can be obtained from the Hon. Secretary at 3s. each.

Communications for the Editor, and inquiries, should be sent to Colonel A. H. Bell, York House, Portugal Street, London, W.C.2.

THE PENDULUM IN MEDICAL DIAGNOSIS AND TREATMENT

(Address given by Dr. J. BRAUN, to the British Society of Dowsters on December 2nd, 1937).

MR. CHAIRMAN, LADIES AND GENTLEMEN,

My talk to-day is on a new method of diagnosis and treatment through the use of the pendulum. This method is known on the Continent as Radiesthesia, that is sensitivity to radiations. So let us see what we mean exactly by the word Radiation. We can define it as the oldest of all facts, the fabric of the world, Life itself, a sort of bombardment of infinitely small particles through the ether going and coming from and to everything in this world.

The existence of these radiations has always been admitted by thinking people of all types from the mystic to the scientist. The ancient Egyptians acknowledged them. The Druids built their temples where favourable radiations emanated from the ground. The study of the molecule has been followed by the study of the atom, and this one, considered as undividable, revealed itself as a complete planetary system with many components. From radiations we arrive at radioactivity, a universal manifestation of the matter with a constant disintegration and dematerialisation. The energy thus liberated would constitute the perceptions of radiesthesia.

It is therefore a recognised fact that everything radiates. Radiation is everywhere. Its origin may be animal, mineral or vegetable, it may be cosmic or it may be artificial.

Dr. G. W. Crile, of the Cleveland Clinic, demonstrated before the National Academy of Sciences in 1935 that the brain tissues emit visible and coloured radiations, infra red radiations, and some of a wave length in and beyond the ultra violet frequencies. His observations confirm that the sun shines through the protoplasmic cells. Through his famous production of heavy water he showed that the structure of elements may be changed by altering their specific frequencies of vibration.

He says that Man is a mechanism run by electricity and chemical reaction. A machine made up of 28 trillions of electric cells. Every one of these is a tiny battery with positive and negative poles. The brain cells are mostly positive, the liver cells mostly negative. The greater the difference between positive and negative (called potential) the greater the energy. Fatigue and emotions cut down the difference. Rest and sleep restore it.

The processes of life involve a mechanism similar to a radio set depending for its working on a definite series of radiations, of life rays of various wave lengths from the living substances of the body. These rays change with the state of activity of the protoplasm.

Dr. Glasser demonstrates radiation from living bodies. The protoplasm of animals emits radiations of various wave lengths, some as short (hence as powerful) as those emitted by the sun. Therefore, animals can confer on atoms, chemical affinities such as are conferred by the sun. The blood, as well as the nerves, brain, &c., emanate specific types of rays known as Mitogenetic or M rays or life rays. They are of the ultra violet type of radiation as the result of definite chemical and physical processes of the living body.

The finger-tip rays of several persons tested at the Cornell Bacteriological Laboratory killed yeast cells readily. The right hand radiates more than the left one, even in left-handed persons. Through quartz placed above the cells, the killing required about 15 minutes. Without it, two to five. The quartz helped to show that ultra violet rays were the cause, as yeast cells under ordinary glass, which is impervious to ultra-violet rays, were unharmed.

Dr. J. Hardy writes: "The human body casts off radiations with the steady constancy of a 40-watt electric lamp. The human body dissipates about one half of its heat and energy daily in waves which can be measured. Human radiations fall within the infra red range. The brain emits one quarter of the short waves. Each organ has a + and a - pole. It has its own polarity, its specific rate of electric vibration, and definite

chemical functions. Health is a normal balance of vibrations and perfect functioning of the entire body. Ill-health is, then, of course a result of an unbalanced condition or function in some system or organ or tissue of the body. The heat (rise in the temperature), pain and the like, arising from such unbalanced condition are but the signals sent out to call attention to the abnormal condition and the need for help."

Light, heat, electricity are all manifestations of the same system of radiations, the difference between them being only one of length or frequency of the vibrations of what is called the Ether. Think how familiar we all are with its artificial forms, wireless telegraphy, electric lighting, &c. We need not have waited for man's inventions to make us wise. Study of the animals could have taught us long ago, for animals are always sensitive to Nature's radiations. A good example of this faculty is the homing pigeon. Have you ever noticed its actions on being liberated after a journey over great distances? The bird flies round and round in a circle until, having picked up the radiation of its home, it will fly in a straight line to its dove cot. I could give many such examples, but we are concerned to-day with the human radiations.

Our five senses work by means of radiations.

Our eyes perceive luminous radiations—Light rays.

Our ears hear radiations of sound.

Our noses detect the pleasant or unpleasant odours radiating from various sources.

Through our skin we feel the changing radiations of heat and cold. Tongue and palate by their sensitiveness to radiations from what touches them allow us to taste what we are eating or drinking.

In the colour-blind man, in the woman sickening for 'flu, who complains that food has no taste to-day, there is a chronic or a passing lack of response to certain sets of radiations.

Health is a harmonious balance of radiations.

Illness is a loss of that balance.

A cure will be brought about by a return to it.

I work with a pendulum, I do not need to explain what a pendulum is. It may vary in weight, form or colour; it is a question purely of taste or habit.

The pendulum is not a new instrument. Some were found in ancient tombs in Egypt. It was probably connected with the arts then ambiguously called Mysteries. The uses to which they were put have long been forgotten, together with a great

deal of other ancient wisdom. Many theories have been advanced to explain the pendulum's power to detect states of sickness or health.

For Chevreul, the well-known French scientist, it was all a matter of will.

For Maxwell and Grasset a subconscious psychic phenomenon.

For Regnault a reflex movement of the muscles.

For another a magneto-electric action of a moving current attracted or repelled by a fixed current in the ground.

And, lastly, for Father Lebrun, of the Roman Church, it is nothing less than an act of demons.

None of these theories is quite satisfactory. The thought of demons brings on a smile, as it would be a real novelty to find demons working for the good of humanity.

The "will" explanation seems rather childish. One can hardly believe will by itself can lead a searcher to gold or water. Were this so, why do people lost in the desert often die of thirst? Why doesn't every gold prospector come home rich?

I think that the will plays only a passive part. It can and should place us in a receptive condition to allow the passing of waves and radiations. Neither in patient nor practitioner must it produce a current of resistance. Regnault is partly in the right with his theory of reflex movements. We do indeed have reflex movements, but they are only to permit the catching of radiations in the network of nerves carrying sensations to the brain, there to be transformed and sent back by other nerves to eyes, hands and feet, through which they once more pass into the ether.

The current goes from the negative towards the positive pole. When there is a different polarity the current is either attracted or repelled by the other current. The pendulum simply closes the circuit. It acts as the needle of that electrometer, the human body. How does it work? Suppose we have here a wireless set and at this moment Paris is transmitting a concert, to which through the wide world thousands of people are listening. Yet we hear nothing. As far as our perceptions are concerned Paris might be a silent void. Why? Simply because we have not tuned up our wireless set. As soon as we tune up to the wave length on which Paris is broadcasting the French music pours through our loud-speaker. We have placed our set in the magnetic field of the broadcasting apparatus.

When we use the pendulum for diagnostic work we follow exactly the same principle. The lesion or illness the practitioner

is looking for, is the broadcasting set, the practitioner's central nervous system is the receiving apparatus, the pendulum the loud-speaker. As soon as the practitioner enters the magnetic field of the illness he is trying to discover, the pendulum starts moving; it then only remains for the human intelligence to explain these movements, to explain the language used by the loud-speaker. There are various methods of using the pendulum for diagnosing purposes just as for the study of any language. They all are based on wave lengths. Each illness, or I should say each class of illness, has a definite wave length, which never alters.

Having given you a short description of what is radiesthesia as connected with the human body I must try and give you an idea of how this method is worked out.

We divide radiesthesia into various branches: there is the purely physical and there is the psychic, if I may use this word. By this, we come to think of what Professor Charles Richet called our sixth sense, a subtle extension of the human sensitivity.

This last method may also be called intuitive.

Taking the first one, we can work it in two different ways, the direct and the indirect.

The direct method consists in examining the whole body of the patient and finding the weak spots. These will be detected by the movements of the pendulum.

The other method consists in taking the radiations from either the blood, the saliva, or the urine of the patient and finding out the wave length. This method is worked on the fundamental principle that the normal human wave length is eight metres. Any trouble, any disease will have the immediate effect of shortening this normal wave length. To apply this method one has to tune in, that is what is called syntonising. For that purpose one takes the radiation of the patient. There are, of course, some radiesthesists who use some electrical machines, all rather complicated. Personally, I believe that the simplest way is the best. We must not forget that we are dealing with medical or surgical cases, and therefore we must in no way try to eliminate the personal element in our research for the truth. It has been the mistake of what I might call the new thought in medicine to transform the patient in a sort of laboratory accessory. By so doing we forget the highest principle in medicine, that we are treating patients and not diseases. We medical men are not scientists, we are the representatives of the Medical Art. This will explain that between patient and medical man there

is that personal link, the bond of sympathy. And, curiously enough, that bond is found also when we apply the pendulum for diagnosis. The tuning in of the pendulum with the patient is the principal factor in this method. I spoke of wave lengths.* We find that every organ of the body has its wave length. With the pendulum we get a very important factor in treating a patient, that is the vitality or resistance of the human body. It is admitted and recognised by all that the human wave length corresponds to eight metres. If the person tested is ill, the vitality will naturally be lower and therefore the wave length shorter. The treatment consists in finding the remedy that will lengthen the wave length and by so doing re-establish the normal balance of the system.

In May, 1936, a lady consulted me for a troublesome case of acne of the face. I tried the pendulum and discovered an infection due to the microbe known as B Coli, an inmate of the intestinal tract. I also found the radiations of the appendix in an abnormal condition. The patient would not accept my diagnosis. She denied ever having had any discomfort in the intestines or near the appendix. She left London. Four months later, that is, in September of the same year, she rang me up, complaining this time of a rather severe pain in the right hand side of the abdomen. I tested her radiations, and again found that the trouble lay in the appendix. This time she consented to see a surgeon. But, at the hospital she went to, the theory of appendicitis was turned down, as it was considered that the painful spot was too high. The case was diagnosed as one of gall stones. However, the X-ray picture taken showed only some indistinct shadows. The surgeon, not being satisfied, wanted to see if the trouble was not in the kidneys. The result of a very painful examination was a verdict in favour of appendicitis. This was confirmed by the operation. This case clearly shows the very great value of the pendulum. The correct answer was given four months before the pains were even noticeable. Suppose that in May that woman had been going to settle in a wild part of the globe, many miles from any surgeon, warned by the pendulum she could have had her appendix removed before she left London, thereby saving her life. Even in the

* In reply to a question, the lecturer stated that the term "wave length" had no connection with electro-magnetic waves but referred to the distance from the body or object up to which an effect is perceptible by the operator.

actual circumstances, she would have been spared the needless anxiety, suffering and mental strain caused by the superfluous examinations. Another example. A man who had spent the best part of his life in the East was suffering from severe neuritis of the right arm. He was treated in several ways for a very long time, with no results, before he asked me to take his radiations. The result of this test showed me that the neuritis was caused by an infection of a specific nature. He himself was not convinced at first, but allowed me to try a treatment selected through his own radiations. This brought about a very rapid cure. A third and last case. For years another patient of mine had been suffering from sudden and acute attacks of pain in the right side of the abdomen. The pain was such that it compelled him to lie flat on the ground and wait for its subsidence. In spite of the advice of several doctors, his condition did not improve. At last he was sent to Vichy for a cure. The doctors there declared that all the trouble was due to an inflammation of the gall bladder. The patient returned from his cure no better; indeed, in my mind, worse, and in spite of my own efforts on orthodox lines. This brought no improvement. One day while in Paris some friends advised him to see a radiesthetist. He went more as a joke than in earnest. Only a few minutes after having met the radiesthetist he was told: "Your trouble has nothing to do with either liver or gall bladder. You are suffering from a duodenal ulcer." He came back to London and after some further treatment he decided to be operated on. The result was the finding of two ulcers healed up and a third one on the verge of bursting. With the aid of the pendulum we are able to join in the fight against such plagues as tuberculosis and cancer.

Through this method we can detect such conditions known as pre-tubercular or pre-cancerous. We get the radiations long before any sign could allow the diagnosis of such cases to be accurately made by orthodox methods. In the cancer campaign you must know that there is much talk of cancer houses. What is exactly a cancer house? It is a house in which some of the inhabitants have had cancer. In such houses the people, one after another, are affected by the disease. The house by itself is not at fault. The cause of the trouble lies in or from the soil on which the house has been built, either a seam of ground or polluted water. From these emanate radiations called on the continent "Ondes nocives" or "Harmful waves." These cannot be destroyed, but their direction can be altered so as to free the house from their ill-effects.

Speaking of cancer reminds me of a startling fact. You know that transfusion is quite a modern craze. For that purpose donors are divided in groups according to the constitution of their blood. Not long ago a radiesthetist discovered that one of these future givers showed cancer radiations.

Every human being has a "polarity" which is either male or female. "Polarity" here means the direction normally taken by a person's own radiations which, like all electric currents, move between a "positive" and a "negative" pole. Suppose that I hold the pendulum over the hands of a normal man. It will swing back and forth in a straight line over the back of the right hand and the palm of the left; it will swing round and round in a circle over the palm of the right hand and the back of the left. This is called a normal male polarity. The female polarity is the exact reverse; circular over back of right hand and palm of left, and in a straight line over palm of right hand and back of left.

A man is occasionally found to have a "woman's polarity"; a woman, that proper to a man. This does not denote any sexual abnormality. Nor is it of any consequence to the radiesthetist once he knows the fact, which is one he cannot yet explain, any more than *why* some people are left-handed. But in marriage correct polarity does matter a very great deal. Following the well-known fact that poles of opposite directions are attracted to each other, while those of the same direction repel each other, it is easy to see how a couple will react. If both their polarities are normal, all should be well. But if both have the polarity proper to one sex only, the happiness of the future home is greatly compromised. Again, are the wave lengths of this individual man well suited, "sympathetic" to those of the woman he wants to marry? Only if this is so are the couple likely to have permanent love for each other. We hear much nowadays of the need for medical examination before marriage. I do not think it will be long before pioneers declare a radiesthetic examination to be still more essential.

The polarity never changes in a lifetime. This fact permits us to find out whether material sent for examination—blood, urine, or any object imbued with the person's radiations—is from a man or a woman. It has also led me to make investigations with interesting, I may almost say startling, results connected with psychic science.

I once, from curiosity, took the polarity of a woman medium when she was in a trance. She was, it was claimed, under the

control of a spirit guide, one who, in the earth life, had been a man. That woman's polarity was *that of a man*. When she came out of her trance, I again made a test. Her polarity had changed. It had become that of a normal woman. I then made experiments with other mediums, ascertaining their own polarity before going into trance. Once under control I took the polarity and immediately after coming out of trance. In every case the result was the same. The first and third test gave the polarity of the medium. The intermediate one the polarity of the control. I believe that this test is of very great significance to spiritualists, as it would seem to confirm the idea of someone actually controlling the medium. Here I must point out that it is impossible for anyone to change one's own polarity at will. I myself believe that the basic theory of radiesthesia, that everything and everyone send out vibrations, would explain the possibility of establishing contact with those who have passed to another plane. Here, again, we are not able to prove facts by scientific methods. I want to stress the fact that radiesthesia is not what is called a psychic science. It is not essential that either patient or practitioner be a medium or a spiritualist.

There is a certain personal advantage to the practitioner in being very sensitive to radiations. For this reason, when working with the pendulum, one incessantly increases one's own sensitivity. To such an extent, sometimes, that the pendulum can be dispensed with, and, with some practice, the hands can detect the bad spots in the patient's body. Hands that are sensitive to radiations perceive changes through a hot, or cold, or tingling sensation. I, for instance, can tell the North by stretching my left hand towards the four cardinal points. When I point to the north I get a sort of cold tingling in the hand. We must keep in mind that our hands act as the two poles of a battery, left hand negative, right hand positive. The fluid or current emanating from them can be directed to any part of the patient's body. This fluid does not emanate through our hands only, our eyes are a very powerful means of directing this power. A French scientist, Rousseau, had been able to kill several toads through the radiations coming through his eyes. One day a toad started to fix his own life was in danger. This method is called magnetism. This same fluid allows some people to actually mummify things, such as meat, flowers, fruit, fish, &c. This is done by passes over the material one wants to mummify. It is done fairly rapidly a few minutes once or twice a day for a few days. The

kind of healing in which working without a pendulum one uses one's own vital force is very exhausting. It causes a loss of vitality which must, of course, be recuperated by rest. This constitutes the great difference with spiritualist healing. In this case the healer remains quite neutral. He works under control, he does not lose an atom of his own vitality. He simply acts as a transmitter of the power coming from the control. He is then a healer.

We have seen how study of radiations can help us in the choice of companions. Surroundings also have an immense influence on our mental and spiritual health, our output of work, our state of mind. One house or room may give you a delightful feeling of peace and happiness; in another, you feel ill at ease and depressed. For no apparent reason. But search, and you find the reason—in the radiations that emanate from *things* as well as from people. Very often it is only the *colour* that is out of harmony for the person. All colours have their own special wave lengths; hence their influence upon the human body and the human mind. Their power for good or evil has always been recognised. For the Egyptians, yellow meant intelligence; blue, love; red, life; emerald green, light; pure white, the highest degree of philosophy. To-day we speak of "Having the blues" or "Seeing red," or "Being in the pink of health." Some people find more energy for work in a room where walls and hangings are red; others choose a blue bedroom because this colour brings them the most restful sleep. What is true about rooms is true also about clothes. The colours on our own bodies, with their special wave-lengths, create this need for surroundings of a "sympathetic" colour.

The medical man of the future will tune in on the living body as one does now on the ordinary radio. By listening-in to the short waves and the long waves he will hear the symphony played by the living organism and will determine the rhythm of the dance of life. Long before any outward evidence of disease he will be able to tell by the reception of these life waves whether they are playing a melody of health or whether they are sending out an S.O.S.

Mr. Chairman, Ladies and Gentlemen, I could go on bringing to your notice the numerous uses of the pendulum for helping to keep or regain good health, but my time is over. Before leaving you I am glad to have the opportunity of expressing my deep gratitude to my colleague and friend Mr. Dudley Wright. It was he who presented me to this Society and guided my first steps in the use of rod and pendulum. I really do not know how to thank him for his valuable help and advice.

WINTER SPORT FOR DOWSERS

By DR. ADOLPH SELIGE

When the snow is deep on the ground or the fields are covered with ice, or when it is raining "cats and dogs" or fog makes the atmosphere look like "pea soup," there is not much to do for a dowser who is "itching" to locate something.

Even when the weather is suitable and he goes out and locates a nice underground stream of water, or some promising pool of crude oil that might be worth millions, or a gold mine, a silver mine, or copper, zinc, or whatever it may be that might contain the wealth of Croesus, what good does it do the average dowser, especially the amateurs among them, unless the property on which it is located is his own and he is able to invest a fortune in order to dig it out and bring it to the market?

There is not one chance in a thousand. All he gets for his efforts is the fun he sees in dowsing and getting a promising reaction of the rod—the satisfaction that he has located something.

But even that pleasure is denied him when the weather is too bad for out-door work, and that is why I offer him a suggestion for a useful "indoor sport" by which he can profit greatly.

I presume you are in the habit of working with a sample. Go to your apothecary, and get a small amount of oxalic acid, both the carbon oxalate and the calcium oxalate. These are two samples you can begin with. Use your rod if you wish, but I think you will find the pendulum more serviceable for indoor work; in fact, I use it entirely.

Lay these chemicals before you one at a time, suspend your pendulum above them and "tune in" on calcium oxalate or carbon oxalate and watch the specific reaction for each. Mark down the sort of figures the pendulum describes. These are called symbols. Your radiation perception faculty is now familiar with the two kinds of oxalic acid combinations, and you can proceed to employ your skill in the following manner.

Procure articles of food, whatever happens to be available. It makes no difference whether it is fresh, cooked, canned or dehydrated. I almost added that the test can be made when the food has been eaten and digested!

Take one food at a time and place it on the table before you on a piece of clean white paper and "tune in" on one of the

chemicals, then on the other, and see whether you get the specific reaction. If you do, mark this food down as containing oxalic acid.

In this way test all the foods you are in the habit of eating and list them as containing oxalic acid in one form or another.

You may be surprised to find that a great many favourite foods, perfectly good and wholesome foods, contain oxalic acid, some more, some less. No doubt you have eaten these foods for years and never knew or bothered about the oxalic acid or any other contents, and perhaps you will continue to eat them and enjoy them for the rest of your days.

But there are some people who are very sensitive to the effects of oxalic acid contained in the foods they eat. It acts as a poison, that is, it has a bad effect on their health. I speak from personal experiences in my observation of a great many of my patients. That is why I sound this warning.

People who are sensitive to oxalic acid may eat foods containing the acid and digest them perfectly. It causes no digestive disturbances that I know of. It passes along through all the digestive and metabolic processes the same as any other food, but, and here is where the trouble comes in, the system is not able to eliminate the acid in the various combinations it has formed. It remains in the system. It is stored away, taken out of circulation. Of course, no one becomes aware of this until certain symptoms appear, and these symptoms may be of many kinds. I can mention only a few of them.

Oxalic acid is often one of the elements found in arthritis. It has a tendency to form hardening deposits that may lodge here or there, anywhere. I have found it in the lens of the eyes—in fact, in my own—where it forms a cataract.

Oxalic acid deposits are difficult to get rid of, especially the calcium oxalates. It seems the carbon oxalates are somewhat easier to dissolve. There are times, however, when peculiar conditions arise when Nature asserts itself. It seems the human system rebels against the presence of oxalic acid and starts a "revolution" in the form of a vicarious elimination process.

Again I can speak from experiences of my own—painful ones, too. As the regular organs of elimination—bowels and kidneys—seemed not able to dispose of these foreign elements that had been retained in the system for a long time, some irresistible force drove them from their resting places in the lymphatic system and the connective tissue into the skin. Here they

seemed to have a preference for the more active parts, those that were more exposed to sun and air than the rest; in other words, hands, forearms and neck.

I became aware of their presence by experiencing a desire to rub, then scratch the part. Naturally the skin got red from the irritation caused by the scratching. This counter-irritation, however, quieted the original sensation in the skin for the time being and all seemed well until, some hours later, little lumps appeared. This was accompanied by a more decided desire to "do something."

Well, I caused a counter-irritant which overshadowed the original one by pressing into the little lump or knot with my sharp finger-nails. I had learned by experience that this was a simple way of accomplishing my purpose.

Then the itching feeling subsided, but soon afterwards the little lump would open and a thin serum ooze out. When I pressed out the contents of the lump, which now seemed to contain a core, I was generally able to extract a small bit of a hard substance. Submitting this to a Radioscopic test, I found to my surprise an oxalic acid reaction. This was the carbon oxalate type.

The next step for me to undertake was to check over the foods I had been eating, all perfectly wholesome foods, for I have been very careful in the choice of my foods. I was chagrined to find some of the most delectable ones, highly recommended for their nutritional value or for the valuable mineral elements they contain, to be rich in oxalic acid.

That was a shock to me, for I was compelled to leave them off my bill of fare. I had to sit down to a table loaded with good, delectable foods—foods that I had liked and thought desirable and wholesome—and do without them. I still do.

After discovering the nature of the trouble and where to place the blame, and the foods to avoid, I set out to find suitable agents for the purpose of a "cure." By this, I mean agents that might dissolve these oxalic combinations in my system and cause such new chemical forms that the bowels, kidneys and mucous membranes might be able to dispose of them in a less spectacular manner.

I have succeeded fairly well so far. These "breaking outs" have disappeared. No more of that annoying itch and sores, and I am happy about that, even though it has been a dear price I had to pay for my experiences. Serving as a human "guinea pig" is not so pleasant, but that seems one of the ways in which we gain knowledge to pass on to others for the good of a suffering and puzzled humanity who "don't know what it's all about."

Let me mention just one of the remedies I have found useful. It is a tea made from nice ripe, sweet apples, not those that are rich in acids themselves. I cut the apple in small pieces, skin, core and all. I measure the amount of apple and then take three times that volume of distilled water (the proportion is one part of apple to three parts of water) and bring it to a boil. I pour this boiling water over the apples and cover. I let this stand and "draw" for thirty minutes or so, then strain. The watery part which contains the remedial elements extracted from the apple is the apple tea.

The dose is about a cupful at a time, to be repeated for three to nine times a day, according to the case. This tea is effective, and has been found useful in many cases, but, as a rule, other remedies are needed at the same time. Each individual requires special treatment. There are no two cases exactly alike.

If these lines come to the attention of one who is sensitive to oxalic acid retention, he may benefit by the above experiment and suggestion. At any rate, the remedy is perfectly harmless. And it makes a good tasting tea, even at that.

If you want to know if you are sensitive to oxalic acid and whether or not your body contains oxalic acid end-products, do as follows: Place your left hand on a table before you, hold your pendulum with the right hand above it and formulate in your mind the question, "Is there any oxalic acid retention anywhere in any of my tissues?"

You will receive an answer to this question in the same manner as though you were dowsing for water and mineral elements in the earth or in food, and you should get the same kind of reaction as you receive above the elements you bought at the apothecary shop.

If this happens to come to the attention of a physician, no matter what school of healing he belongs to, let him think on this seriously. The pendulum is an excellent medium for not only detecting water, metals, minerals and such in the ground, but also in the human body. It is an excellent diagnostic instrument in the hands of one who is qualified by firstly, possessing a fair degree of radiation perception, and secondly, by learning the proper technique and attaining a fair degree of perfection by diligent practice and experimentation.

Many physicians, I dare say, make excellent human "guinea pigs" to practice on. I am one of them. I extend to these a hearty invitation to join the "League for Radioscopic Research and Practice."

SOME EXPERIMENTS

By Major STRUAN ROBERTSON, M.C.

The following are results of experiments in divining for gold, water and base metals over a period of three years in Kenya Colony.

(1) The rod invariably dips as soon as one reaches the contact line on either side of a reef, ore body or stream.

(2) If in a train or motor-car the approach to a reef is always indicated by a slight downward pull until the lode is reached, when it is forced down irresistibly.

(3) If on foot and a reef is approached, or a lode of some base metal, the rod will first go down, and then go up to the serial number, denoting what metal it is. For instance, it will go down once for gold; the diviner should then replace the rod in the horizontal position and it will then go up once. It will go down twice for water if replaced in the horizontal position, and then twice up; for chalk three times down and then three times up, only if put back to the horizontal position each time.

(4) If the water is in a pipe line and one passes under it the rod will ascend twice first and if replaced to the horizontal will dip twice.

(5) If one should enter a stream with rubber boots on or without, and there should be an alluvial gold deposit under the stream, the rod will nevertheless indicate the gold first and foremost—once down and once up.

(6) Should the rod indicate the contact on one side of a reef, cross over and approach it from the opposite side (once having determined the proper strike), and the rod will indicate the contact on the other side, so giving approximately the width of the body at that spot. To test this, stand squarely in the middle between the two contacts facing the strike one way or the other, let go of the rod with one hand, resume the hold of the rod in its horizontal position, and turn left or right immediately stepping off; should the lode be quite close to the surface, the rod will dip almost at once; proceed, and it will dip again, giving the bulk; again advance, and if the reef is rich the rod may not dip again for well over 100 feet. Even when, proceeding by this method, one should cross another lode, the rod will not indicate it, unless it is first released by one hand; if the diviner should anticipate another reef in parallel, he should release the rod and go over the new ground afresh.

(7) To test again, stand over the middle of the strike, leave go of the rod and turn in the direction of the strike, catch hold

of the rod again with both hands, and count in seconds, or, if another person be present, count the seconds by a watch before the rod dips again, and the approximate depth will be indicated, say at one foot per second, but it is necessary that each dowser should find out his or her own ratio.

(8) It does not seem to be generally known that a sensitive dowser will or can indicate water, or mineral for that matter, at great depth. To test this out one should visit a spot, say near a shaft, where water has been proved at, say, 150 feet, and it is known to be the water table. Either stand or sit on a box with both feet on the ground holding the rod in the usual manner. In about two-and-a-half minutes the rod will tremble, showing a saturated area, and then will dip twice and rise twice from the horizontal.

With running water, having found the stream (the rod will dip twice if standing facing the flow and rise twice), stand at right angles to the stream and over the centre of it, leave go of the rod and then resume it and count, when the depth will be indicated.

(9) To find Magnetic North or any of the Cardinal Points:-- Hold the rod as usual and turn very gradually in a circular direction, and when the rod dips return it to the horizontal position, when it will again dip, and continue to do so, until the serial number for the particular cardinal point is indicated. If Magnetic North, it should be twenty times, then East will be five times, South ten times and West fifteen times, *i.e.*, fifteen times down and then fifteen up, or ten down and ten up, and so on.

This is where so many beginners have gone astray when searching for reef or water, having unconsciously been facing one of the Cardinal Points, when there was nothing else there at all. If, however, a sample is held in the palm of the right hand of the particular metal or of water, the Cardinal Points will not interfere with the rod.

I will now illustrate the results of an experiment made by myself, in conjunction with a lady pupil of mine.

On a certain well-known mine in this country good gold has been found to a depth of 50 feet when the lenticel pinches and gradually widens again into a second lenticel, but the gold is of so low a grade that it would be unpayable to work. Bore holes were put down to 300 feet or more, with no better result.

With Mrs. A. I found the approximate dip, and then we took up a position over a spot where we considered the reef would be at about 500 feet. We each sat on a box with both feet on

the ground, and Mr. X., the third party, prepared to time us. At the given word we both grasped our rods in the usual manner. After eight minutes my rod dipped once; I replaced it and it then rose once, giving the goal serial; within three seconds the lady's rod dipped and rose in the same manner, and I am of the opinion that good gold would be found again from 480 feet downwards. Will it ever be proved, though?

I should have mentioned that we were both holding a gold ring in our hands and the water table which lay at about 50 feet did not affect the rods.

On one occasion I divined two reefs in parallel and only about 40 feet apart, and subsequently put in an adit and found the cap of it 60 feet under. It was low grade, about 3dwts.

On another occasion a certain mine had lost the reef and were down on the 350ft. level. I dowsed for this and, allowing for the dip, it was found exactly where I had indicated.

Now to return to our experiments, just a few words about "images."

A highly sensitive or super-sensitive dowser will not be affected by images, and if proper precautions are taken the trap-layer can almost always be defeated.

Suppose a large piece of gold or other metal be buried in the ground, and dowsers foregather to find same.

First, if the rod dips, make a mark on the ground, seeing that you are not facing one of the Cardinal Points unless you are using a sample. Go to a point exactly opposite to where you put your mark and approach from that direction. If the rod should dip before reaching the previous mark, then mark this spot also. Then go to a point at right angles on either side and carry out the same procedure. You will find that the obstacle will be in the exact centre of the four points. Have your samples ready if you do not know what the object consists of.

There is but little doubt that several metals or minerals may give the same number of dips and rises, even with the sample in the right hand, and I hope to be able to despatch to our President two such samples, so that other dowsers can experiment with them. The one sample I hope to send will be a piece of cassiterite ore, and the other garnets in gneiss.

Strange to say, whilst dowsing over some country a couple of months ago, with the sample of tin in my hand, the rod suddenly dipped and continued to do so for 17 times. This is my serial for tin. I investigated this and found this body to be of gneiss with the garnets therein. I have not had them assayed because

I cannot obtain more without a journey of several hundred miles.

A good test in order to find your ratio, especially for running water, is to stand under a water-pipe line, and test out the zones as laid down in several works on dowsing, and measure the quantity zone.

An Experiment in a Railway Train.

A number of people have heard of a book entitled *The Mancers of Tsavo*, by Lieut.-Colonel J. H. Patterson. Well, it was at this station that I boarded a goods train and travelled in the guard's van. The guard was an Indian. As soon as we had crossed the bridge over the Tsavo River, I produced my rod and sat on one of the two seats, and I asked the guard if he would be good enough to write down in my notebook the number of the telegraph post nearest to the spot when my rod should dip. We travelled thus for five miles, the train climbing a stiff gradient at about ten miles per hour. Over this distance my rod dipped eight times at various intervals, and the guard noted all the nearest posts. Near the top of the gradient the train stopped to allow me and my three natives (who were riding in a truck) to alight. I then proceeded to return to Tsavo on foot along the railway line. When we approached one of the poles indicated in my book, I grasped the rod in both hands, and in every instance I located surface indications of an ore body, and in two instances the actual bodies outcropping. I may add that I sat with my back to the window all the time I was in the train. They all appeared to be pegmatite, with traces of copper in them, and they all gave me the serial for copper, with me six; however, on testing them out in the approved manner, the results did not justify further notice, and the samples I brought back assayed very poorly.

I am perfectly certain that any good dowser would never miss either metals or water either in a train or in a motor-car, and indeed I am of the confirmed opinion that the action on the rod is much stronger under these circumstances.

I trust that some members of our Society may be in a position to try out these experiments, and I feel sure that were I going through Cornwall for instance, in a motor-car, I would be able to detect any vein or lode over which the car might pass.

There is one more subject I should like to mention before closing this paper; and that is how to deal with an ore which contains more than one metal. Although this is generally known

throughout the dowsing community, I cannot find whether our experts in doing this have used the rod or pendulum or have used samples. I am going to refer to a rod test with nothing else, which I hope dowers will try if they have not already done so.

Let us try a reef containing gold and silver, which reefs almost always do. Stand over the reef, or approach it from both sides as already described, then stand over the middle of it, and leave go of the rod. Now grasp it again, and sooner or later, according to the depth under, the rod will dip, and being replaced to the horizontal will rise once. Replace the rod, and after a while the rod will dip—with me eight times for silver—and being replaced will then rise eight times, and so on for other metals, if you have the patience. I am somewhat of the opinion that the pause between the gold serial and that of the silver represents the percentage of silver as against the gold content.

I trust the above may be of some value to our community.

One more word of warning: When experimenting with different metals in company do not forget to take off the ray of the one metal before placing another in the same place or on the same spot. After the object has been removed stand over the spot with the rod, when it will act and give the same series as if the metal were there, and after that the spot will again become neutral.

Gold Rays as a cure for Rheumatic Gout and Arteriosclerosis.

During the year 1933-34, and just prior to my visit to England (where I had the pleasure of meeting our President, and so becoming a member of the Society of Dowers), I contracted a very severe attack of rheumatic gout. It visited me in the toes, ankles and knees, and for a week or two I was unable to walk. It still affected me during my stay in England, but not so badly, but on my return to Kenya Colony I again contracted the complaint badly, and on top of this my third go of blackwater fever.

After leaving hospital I took over a gold mining proposition in the Nyanza Province. We built some huts, and my wife and I lived in them for over a year. I did not realize, however, at the time that our bed was immediately over a gold reef. During this time I was quite free from the complaint, and we then moved to our present spot, where we built a house, and once again found that we had built upon a reef. Since then for more than another year I have been free of the complaint, except for a couple of weeks when I went on a safari to look for copper in the Tsavo area,

It returned gradually and was not bad, but as soon as I returned to my gold reef the complaint vanished again. On one or two occasions I have felt it slightly in the toes, but when it was possible I have slept with a bar of gold under the mattress, close to the feet, and I was well again in the morning. At times I used to attract the rays through my system with the rod, and was always relieved. I can assure my readers, however, that the ray from copper is not good for this complaint.

It would be interesting to hear some profound medical views on the subject. My only suggestion at present is that, if radium is good for one complaint, why should not gold be good for another. One cannot imagine a clinic with numerous gold bars, but one might easily be built over a section of strong reef for very little; the price of a claim or two, which may bring relief to thousands.



TWO BOREHOLES

By C. R. WRIGHT, Wh. Ex.

NEAR EXETER.

This location was very difficult. We knew the water would be in gravel and sand which overlay the red marl, so that any indications of a supply deeper than about 25ft. would be an unsuitable water; further, a large quantity was required of about 20,000 gallons per hour continuous.

A large tract was surveyed and a number of streams located, and it took some days to finally locate the best site. The two best streams were pegged out and gave by the rod depths of 15 and 18 ft., but unfortunately they were 150 yards apart on the property. However, we pegged them out and found they crossed each other about 70ft. beyond our boundary.

A trial 12in. hole was sunk on the 15 foot stream, water being encountered at a depth of 19ft. A 72-hour test revealed that 8,500 gallons could be obtained continuously from this borehole.

An interesting point shewing how accurately the rod can be used was discovered during the pegging out of the stream. The intersection of the streams was fixed by measurements to fixed points; when it was decided to bore, about a month after our first survey, the intersection of the streams was again found by the rod, and on measuring back to our fixed points we were only 2in. away from the original position.

Whilst pumping, it was found that the other stream deviated from its original course by about 7ft., but gave about the same pull on the twig, indicating that very little was flowing back to our borehole.

The adjoining property has now been purchased, and a 40 inch diameter borehole is to be sunk at the junction of the two streams.

THINGLEY JUNCTION.

The accompanying diagram shows a section of borehole recently completed at Thingley, near Chippenham.

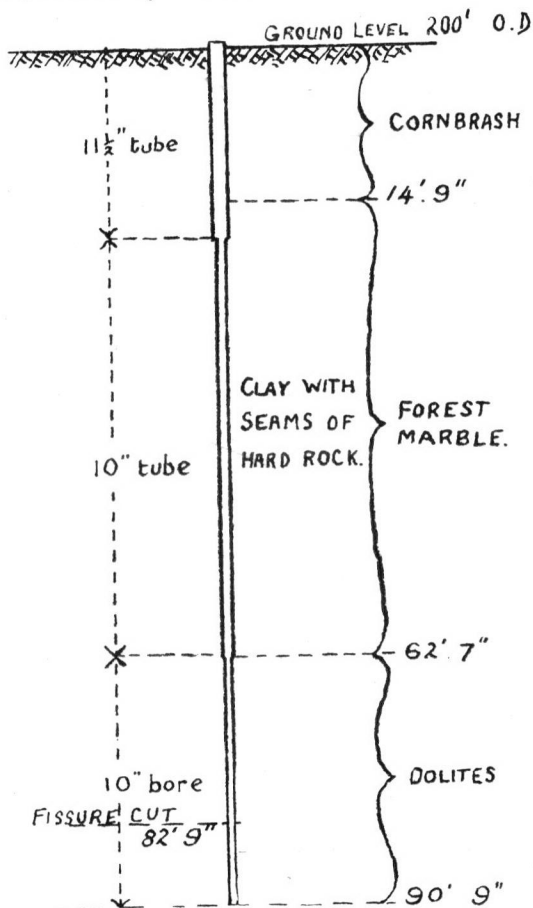
The survey was with whalebone rods and indicated a possible supply of about 4,000 gallons per hour at a depth of 35 to 40 feet.

Boring was commenced, but as soon as clay was encountered we realized our depth was probably wrong. However, we found that the average depth of "forest marble" in this district was about 60ft., so it was decided to continue the boring until the oolite was reached.

Water was encountered at 82ft. 9in. below ground, and it was known that a fissure was struck because the boring tool dropped suddenly about two or three inches.

The quantity of water required was 1,000 gallons per hour, but after a 72-hour continuous run it was obvious the amount was greatly in excess of this and is probably up to 10,000 gallons per hour.

It is interesting to note that when the thicknesses of clay are deducted from the depth it gives a figure of 39ft., which is the depth indicated by the rod.



I may say there is another borehole in the same field going to a greater depth, but no water was obtained, also other people in the district told us that several boreholes have been sunk in this area and proved unsuccessful.

A DEPTHING METHOD

By H. O. BUSBY

In the *B.S.D.J.* 16 I was interested in the articles "The Point Depth Method" and "Dowsing in the Argentine," as I have been using a depthing method which in a sense is a combination of points mentioned in each of these articles. This method combines the use of a "point" with "force" and "depth" lines.

The point I use is a copper tube with an iron point soldered in the ground end; on the top of this tube I place a straight, hard copper wire, of about 12 gauge, about 2ft. long, horizontally, attaching this bar by the centre to the upright with a spring clip. The ends of the horizontal wire are turned forwards for about an inch. I adopted this straight bar because I had been told by a "radio" expert that the straight wire gave out the best and strongest radiations, and I have found it good.

I place this point above the stream, &c., and walk out from it at right angles to the bar (almost any direction may be taken in relation to the stream), and count the "lines," *e.g.*, water has seven lines and the seventh is the 45-degree line or depth line. When I pass the seventh line the single-hand wire (angle rod) which I use turns back to this line, indicating that I have passed the depth.

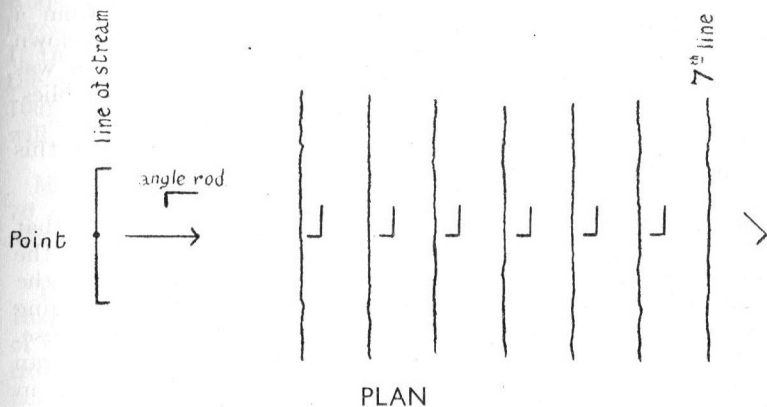
Old buried stream beds are picked up by the rod even if there is now no water in them, and furthermore they will give a 45-degree line but no intermediate lines; hence this method appears to be a safeguard against sinking on "blanks." I have seen quite a few such wells sunk uselessly.

My experience in this country does not coincide with that of Captain Boothby in the Argentine. I find that the lines for metals and minerals are not constant but vary with the depth, also my list of "lines" does not altogether tally with his.

My list is:—	water	...	...	...	7
	copper	...	...	...	6
	tin	...	...	...	8
	silver	...	...	...	11
	gold	...	...	...	13
	iron	...	...	...	16
	lead	...	...	...	21
	zinc	...	...	...	26
	salt (NaCl)	...	...	...	40
	silica	...	...	...	49
	sulphur	...	...	...	60

The use of a "sample" is advisable.

It is quite easy to mistake one of the intermediate lines for the genuine 45-degree line, as auto-suggestion can do a lot with even a small indication to start with, but if the lines are carefully counted there is not much danger of picking the wrong one.



DOWSING WITH THE ANGLE ROD

(Address given by Mr. E. P. WILSON, A.M.I.Mech.E., to the British Society of Dowsers on January 13th, 1938).

About four years ago I saw a diviner walking over some fields holding a pair of Angle Rods. Being interested in water supplies, and thinking this was a new idea of divining, I tried to obtain some information from him, but without success. Whilst observing him at work, I noticed that the rods would swing together and cross now and again, and when this happened a stake was put in the ground. This more or less confirmed my views that it was a new idea for locating water; at least, I had never seen this method used before.

I had used a twig for divining on occasions, and although this would work with me, there was always a doubt as to whether the pull was due to water or some sub-conscious thought.

The Angle Rod as used by the diviner seemed to be a better method of dowsing, and to a great extent fool-proof as compared with the twig.

I first used them myself in Gloucestershire to locate water on a very large estate where water was being carted from a distance of three miles. Several boreholes had been put down in the area, but only a few were successful, and the area was recognised as being very bad for underground water supplies.

There was a well on the estate about 175ft. deep, but this was waterless.

After walking a few yards on one of the fields, I noticed that both the rods turned about 30 degrees, both pointing in the same direction. I then changed direction and followed the points of the rods until they crossed, *i.e.*, both rods swinging towards my body. This spot was a long way from the house, so it was decided to trace the stream in the hope that this ran towards the house. This was done by using one rod only, in the right hand, and holding the palm of the left hand downwards, and following the point of the rod. It was found that the supposed stream ran to within 50 yards of the house and only a few feet from the existing well, 175ft. deep.

The proprietor was rather dubious, especially as the existing well was dry, but agreed to bore to a greater depth, and was willing to bore on the assumed line of the stream instead of from the bottom of the well.

The borehole was put down and at 95ft. below surface a supply of over 3,000 gallons per hour was struck, whereas the existing well, 175ft. deep, was dry.

My next endeavour was in Northamptonshire. A well existed about 60ft. deep, but no supply could be obtained. The strip of land was very narrow, but about one mile long. I walked the whole length, but the rods only crossed once, and this was 20ft. from the existing borehole. The people concerned were willing to speculate, and a borehole was drilled.

At 45ft. below surface a supply of 5,000 gallons per hour was obtained, whereas the well 20ft. away and 60ft. deep was dry. The water was eventually led from the borehole into the well by an adit, and pumping has been going on day and night since.

At this period I was unable to give any idea of the quantity or depth, but since have kept a record of some of the sites divined with the angle rods and the results obtained.

So far I have not been able to obtain the depth with the Angle Rods, but still do this with a twig, *i.e.*, by holding this on the level with the top of my head and bringing it down until it turns. If the twig turns when on the level with the top of the head, the water is just below the surface, if on the level of the eyes, 100ft. below surface, or the chin, 200ft. deep, and so on. This will probably vary with individuals.

My forecasts for depth made with the twig have been about 70 per cent. accurate, but at the same time I always use this method with care, taking into account the geological data.

To arrive at an indication of the quantity with the Angle Rods, the centre of the stream is marked and the assumed width of the stream obtained by walking at right angles to the stream from both directions and marking the points where the rods begin to turn. The distance between these two points is then measured, and this in several cases has given the yield fairly accurately.

The following table shows some of the results obtained, and in every case the site was divined before the borehole was drilled. In all I have made 54 locations, of which only two were failures.

TABLE I.

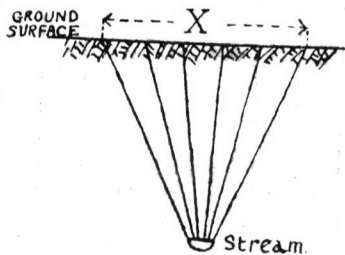
	Site.	Strata in Feet.	Depth of Borehole in feet.	Width of influence in yards.	Yield in gallons per hour.	Remarks.
1	West London...	London Clay ... 188 Woolwich and Reading Beds 69 Chalk ... 243	500	4	6,000	
2	Middlesex ...	London Clay ... 110 Woolwich & Reading Beds 57 Chalk ... 283	450	5	3,600	Water not lowered. Could have obtained 10,000.
3	Watford ...	Gravel ... 15 Chalk ... 185	200	4	6,000	Could have pumped more.
4	East London ...	London Clay ... 86 Woolwich & Reading Beds 83 Chalk ... 281	450	3	6,000	
5	South Sussex...	Folkestone Beds ... 100	100	8	38,000	
6	South Essex ...	London Clay ... 86 Woolwich & Reading Beds 138 Chalk ... 126	350	6	8,000	Could have pumped more.
7	South Wales ...	Sand and Gravel Red Marl and Stone ... 30 7	37	5	2,600	Could probably have pumped 7,000.
8	Bucks....	Oxford Clay ... 30 Blue Clay ... 30	60	2	1,600	
9	Berks. ...	Sand and Rock ... 29	29	2	1,000	
10	Mid Kent ...	Sands ... 140	140	8	66,000	

11	North Herts. ...	Chalk ...	...	100	100	4	6,400	
12	South Herts. ...	Clay ... Woolwich & Reading Beds Chalk ...	... ... ...	40 60 200	300	8	22,000	Could have pumped more.
13	Beds. ...	Chalk ...	... ...	150	150	6	15,000	
14	Norfolk ...	Chalk ...	... ...	400	400	8	5,000	Overestimated.
15	Kent ...	Chalk ...	... ...	200	200	10	60,000	Could have pumped more.
16	Bucks. ...	Clay and Stone	... ...	100	100	1	250	Other wells in area all dry.
17	Cambridge ...	Chalk and Marl	... ...	100	100	4	3,160	Overestimated.
18	South London ...	London Clay ... Woolwich & Reading Beds Chalk ...	... ... ...	180 80 340	600	8	40,000	
19	Herts. ...	London Clay ... Woolwich & Reading Beds Chalk ...	... ... ...	220 80 500	800	6	200	Total failure.
20	East Kent ...	Chalk ...	... ...	250	250	12	60,000	Could have pumped much more.
21	Sussex ...	Wealden Clay ...	... ...	400	400	2	Almost Nil.	Failure.
22	Norfolk ...	Chalk ...	... ...	200	200	7	20,000	
23	Middlesex ...	London Clay ... Woolwich & Reading Beds	... ...	230 58	288	4	3,500	
24	East Essex ...	London Clay ... Woolwich & Reading Beds Chalk ...	... ... ...	158 59 233	450	4	6,000	

From the above results the following table has been compiled, which has been found satisfactory in several cases in determining the yield.

TABLE II.

Grade of Stream.	Approx. width of Influence.	Approx. Yield expected.
A1	over 8 yards	over 25,000 gallons per hour.
A	6 to 8 "	15,000 to 25,000 gallons per hour.
B	5 to 6 "	10,000 to 15,000 "
C	4 to 5 "	6,000 to 10,000 "
D	3 to 4 "	4,000 to 6,000 "
E	2 to 3 "	2,000 to 4,000 "
F	2 "	1,000 to 2,000 "
G	1 "	below 1,000 "



X = width of influence

MY DIVINING EXPERIENCES

By WALTER HAWKER

Some of my fellow diviners may be interested in my work, so I am sending you an account of my experiences, though I am only an amateur in this science, and so it is rather like a blind man groping his way along an unknown street.

Divining was brought to my notice twenty-nine years ago, and after testing out a diviner, I came to the conclusion there was something in it. I first started to work with a forked stick, but finding it very difficult to obtain such a stick with both arms equal in strength, I tried a piece of No. 6 gauge galvanised steel wire, about 40in. long, bent to a V shape. This I found most satisfactory for locating water, but not for following a stream. To do this I use an L-shaped piece of wire.

When approaching a stream the short arm of the L always starts to move; on reaching the edge of the stream it moves up against the current, till, at the centre, it becomes parallel with the stream. As soon as the centre of the stream is passed, the short arm moves towards the centre. When this happens I walk out 30 or 40 yards and back to the centre of the stream, and where the short arm starts to turn is the other side of the stream. After finding the centre the short arm gives the direction for following the stream, and if I move even one yard to the side the rod swings a little to the centre. I have followed streams over ten miles, and bored on them with success.

To go back to the V-shaped rod. When approaching underground water up to about 3oz. of salt, Epsom, or glauber salts the rod moves upwards; but for all minerals and heavily mineralized water the rod pulls down.

It has never been difficult to find water in Australia, but so far the real trouble lies in determining the quality of it. To do this I hold a test tube in my mouth while crossing a stream. I have tubes containing from $\frac{1}{4}$ oz. salt and a few grains of Epsom salts up to 3oz. or more of salt and about $\frac{1}{2}$ oz. of Epsom salts to the gallon of water. I go on trying tubes with different amounts of minerals till one is found to neutralize the action of the rod. I then conclude that the water underground and in the tube are about the same quality. This method works

perfectly in some districts, including my home station, but is useless in the dry, arid country 300 miles north-east of Adelaide.

It is also difficult to find the correct depth. To do this I take the centre of the stream, walk out at right angles to it for about 100 yards, turn, and walk back slowly towards the centre, holding the V-shaped rod firmly till it begins to rise. I then measure from this point to the centre of the stream, and that gives me the depth. This method works like a charm in my own home country, but as soon as I go away into another district I find it useless.

I have since worked on a method mentioned in your Journal, and proved it successful. I stretch a wire at right angles to the stream on pegs, and move the V-shaped rod over the wire until it ceases to rise. From that point to the centre of the stream gives the depth. My estimate, working on this system, has never varied a foot from the depth at which water has been found.

My rod will only work for moving water, not stagnant. It moves for water running in a pipe, and this movement is apparent for two or three hours after the tap on this pipe has been turned off.

When I am working metals and wish to find out which one it is I start with gold and put some on my head. If this stops the rod working I conclude gold is below, but if gold has no effect I try other metals till I find the one which neutralizes the working of the rod.

For the first sixteen years of divining my results included over 300 successful wells and bores, and after that I did not trouble to count them. On my northern property, where the average rainfall for the last eleven years has been under five inches, out of 70 bores put down, in only seven is the water usable for stock. In the rest the water is abundant, but too salt to use, so if some method to determine the quality accurately in "dry" country can be devised it will effect a great saving.

The personal equation counts largely in divining; methods with which one man has success will not work with another. Each of us has to work on lines that give the best results in his own case, and always try to learn from other people's methods and successes.

At present I am working on Henri Mager's methods, and later hope to give you the results of my investigations.

SOME FACTS ABOUT DOWSING

By T. MURARI, B.Sc. (Oxon.), F.L.S., F.R.S.A.

My introduction to dowsing is recent and my thanks are due to our President, Colonel Bell, and Mr. Timms, of Oxford. As I had read M. Mager's book, I wished to interview the author because I wished to know more about the subject. I therefore approached Colonel Bell in the latter part of 1933 and requested him not only to put me on to someone who could demonstrate the action of the rod and pendulum but also to give me an introduction to M. Mager. He very kindly asked me to see Mr. Timms, who was at Oxford, where I was also staying, though alas! no longer as an undergraduate. At the same time, I became a member of the British Dowsers' Society.

I soon met Mr. Timms, who very kindly showed me the working of the rod and told me several things which seemed incredible, despite the fact that the authority of Professor Church was quoted. Mr. Timms tried me as a dowser several times, and even charged extremely large voltage of his electricity into me and came to the conclusion that I was a "dud," and appreciated my enthusiasm, but asked me to forget about dowsing, as I had no hope of acquiring the art. Ever since my interview I began to think out the problem, and made an effort with a hazel fork on the Isis and Charwell. There were no results, and I wondered if Mr. Timms was correct.

I was, however, positive that I should acquire the art, as it has varied uses. One of the things that struck me was that in the history of dowsing some lost their art when they were away from their area and probably had become prosperous. I also felt that health was an important factor, reasoning further that a healthy mind was also essential. From the study of Eastern Philosophy there is only one way of acquiring a balanced body and mind, and that was by Yoga. By this method of controlling my mind, I felt it would be possible to do something in the way of dowsing. So I tried to get some elementary idea of controlling my mind, in the scientific way as practised in the East and by a few people in the West like Major Yeats-Brown, who know India.

In addition to the art of controlling mind, &c., I worked hard at dowsing. Though I am not anywhere near being a Yogi, I began to realise the benefit of the practice. In time, I suddenly

discovered that the rod could turn, even in my hands. As I began to get results, dowsing became more interesting. I shall mention a few of my experiences for the benefit of the readers.

With the rod, it seems quite easy to find underground streams and underground chambers. A few wells were dug at my instance, and others I verified satisfactorily. Exact depth I am not quite sure of yet, but hope to use the Mumetal stick and watch results.

By the use of Bouly's method with the rod and various methods of the pendulum I had some positive results for finding hidden treasure—often hidden by my gardener. Rather a curious thing about treasure trove is that I have not come across anyone who has actually found one. From what I have seen, it is likely that the treasure is either not there or one is looking at the reflection away from it. The very common Indian idea is that the treasure trove is usually guarded by spirits and it can be only found by one who is destined to find it. This is rather interesting, as some of the Yogis I have met say this is true. If dowsing and spiritualism are true, cannot this be true as well? I am afraid that this cannot be answered for a long time to come. With the pendulum I was able to state sex of twins in X-ray photographs. From group photography, it was possible to say whether a person is dead, alive, or in the case of sick people their vitality. It is also possible to say what medicine or food suits the patient; these I have tested on myself.

The other day I tested the jewelry of a temple kept in boxes, and was able to give its composition, such as gold, diamonds, rubies, &c., successfully.

Proper sexing of eggs and disease in animals have not been possible yet.

I find weather affects dowsing. On a cloudy or rainy day the results are not satisfactory. I found that it was possible to say the direction from which the rain clouds were coming with the help of the rod, though shut up in a room. It is therefore evident that these clouds do affect one.

What I feel at present is that dowsing is not so difficult, but that the most important and very difficult thing is to interpret the results.

Summing up my experiences, I feel that only a few can be really perfect dowsers and they should also become good Yogis in the broadest sense of the word; else they would not retain their art long. Some of my readers may contradict me, but time will bear out my statement.

AN EXPERIMENTAL INVESTIGATION OF THE PHENOMENA OF RADIO-PERCEPTION BY MEANS OF PENDULUM OSCILLATIONS

By J. L. CAPES, B.Sc.

PART I.

INTRODUCTION

Having witnessed some demonstrations of the action of the rod and pendulum over water by two amateur dowers, but being myself apparently quite insensitive, I followed the instructions in De France's *The Modern Dowsler* for testing electricity and after a few trials was successful in getting some sort of reaction with a pendulum. In the course of experimenting with different types of pendulum, I soon discovered that in similar conditions, all pendulums with the same natural period of oscillation behaved exactly alike, whether a wooden or celluloid ball, or a bunch of keys on a chain. At first the least movement of the head or arms, or even the eyes, stopped any tendency to gyration, but after this "awkward" stage has been passed it became clear that certain muscular movements were intimately connected with the movement of the pendulum.

The string of the pendulum being gripped between the thumb and fore-finger, it was found that interposing a metal screen between them and the battery under test immediately stopped gyration, but that screening the bob of the pendulum only, had no effect, showing that the influence of the battery was received by the thumb and finger, but not by the bob. The string was fitted in a small wooden handle, which destroyed the action altogether, but contact of the thumb with the string restored it, though contact of the finger alone did not, showing that the influence passed through the thumb only. Clenching the fingers of the free hand or crooking the thumb only, has an immediate effect on the pendulum if it is being influenced by any external source, and by doing this at the proper moments, the movements of the pendulum can be "switched" on and off as desired. It will be seen from the details given later that "*clenching*" is an essential part of the whole of the phenomena, and it will be used as a technical term throughout the discussion.

As muscular strain on the thumbs appeared to be the controlling influence, it was decided to imitate the muscle by strained indiarubber, and a length of thin tubing was stretched over a

stick about 10 cm. long, and suspended. It gyrated a little, but when the same tube was mounted unstretched, action ceased. This sort of pendulum was, of course, very clumsy, and the tube was then tried twisted into a small ball or disc, suspended on the usual string. This turned out to be the solution of the problem, as the twisted rubber is extremely sensitive to any kind of influence causing gyration. Thus, though I had been unable previously to get any indication over water, it immediately appeared with the rubber oscillator and also with various metals. Apart from its sensitiveness, its great advantage is that an insulating handle can be used, as most of the influence is absorbed directly by the rubber, thus removing any disturbing influences due to the heat and moisture of the hand. The clenching effect is transmitted without diminution, showing that the thumb contact is not necessary except for the non-rubber pendulum. Most of the following observations would scarcely have been possible without the rubber oscillator, which can be very small for accurate tests or as large as desired for rough demonstration purposes. To avoid confusion, I shall call the rubber pendulum the "oscillator," and any other substance the "ordinary pendulum."

In describing the phenomena of oscillations the order in which the experiments were originally made will not be followed, as starting with complete ignorance of the effects to be expected, and of the possible disturbing influences, as well as lack of practice in the correct manipulation, prevented many of the effects being noticed at all in the earlier stages.

OBSERVATIONS IN DIRECT OR DIFFUSED SUNLIGHT

In this case various oscillators of different frequencies, *i.e.*, pieces of strained rubber attached to strings of lengths varying from a few cm. to 150 cm., are used in the open air at a distance from any objects likely to cause disturbance. The only influence is therefore that of the body; and experiment shows that provided the clothes contain no large patches of white or green and have a dull surface, their effect may be neglected. Glasses must on no account be worn, as the reflections from their surfaces are most disturbing, while all metal objects, such as money, keys, watches and rings should be removed to a distance.

The body is supposed to be divided into two halves by a vertical plane at right angles to the vertical plane passing through the head and shoulders, to be called the "median" plane, and the oscillator is moved about slowly in any direction up to as far as the arm can reach. It will be found that if the oscillator is held in the right hand, it will perform clockwise gyrations con-

tinually at any point to the right of the median plane, while to the left of the median plane it will be inactive. If the left hand is used, counter-clockwise gyrations will occur to the left of the median plane, while the right side is inactive. These effects are the same whether facing the sun or not, and a complete turn should be made to test this assuming that the sky is clear in all directions. The free hand with the fingers open may be moved about on the inactive side of the body without influencing the effects, but if the fingers (not necessarily the thumb) are clenched the gyrations are immediately changed into vibrations in the plane passing through the sun, so that as the body is turned with the hand clenched, the oscillator "follows" the sun's direction. With a little practice, the free fingers of the occupied hand can be used equally well for clenching, while clenching both hands together is equivalent to no clenching at all. Also with practice, the oscillator handle need not be held in the hand directly, but may be attached to a long stick held in the hand. If the sky is completely overcast, all action may cease, but the condition of the intensity of the solar radiation required to produce the effects probably depends on the sensitivity of the operator and of the oscillator, e.g., an ordinary pendulum is practically inactive with me in this test.

The division of the body into two halves, active and inactive respectively, is most important to remember, as it is a *fundamental principle* in all oscillation phenomena. If the effects do not occur as described, there must be some local disturbing influence, and it might well be that the proximity of vegetation, with its disturbing green colour, had been overlooked.

The same effects can be obtained indoors, with a clear or partially clear sky, provided the walls and furniture have dull surfaces and there are no bright reflections from mirrors or pictures.

OBSERVATIONS BY ARTIFICIAL LIGHT

Similar results are obtained with any artificial light, whether electric or oil lamp or candle, and the sensitivity of the operator can well be tested with a single candle at a distance of two or three metres.

The above experiment illustrates the behaviour of an oscillator in presence of light and the body, and for convenience, the influence which causes movement of the oscillator, will be said to be due to the combined action of two "*fields*," the basic luminous field and body field respectively, without any implication as to the nature of the fields. Scientifically, the term "field" is only used for electric, magnetic and gravitational fields, in which

the inverse-square law of force holds, but here the term is merely used to describe the space throughout which the influences causing oscillations are active, without making any assumptions as to the nature of the forces in them.

As experiment shows that the proximity of any object to the body modifies the movements of the oscillator in a manner which is distinct according to the nature of the object or to its surface condition, it will be assumed that every different object or surface condition has its own "field," through which the influence is radiated in straight lines in unobstructed space: but without any implication that the forces are electromagnetic or radio-active or something so far quite unknown.

I therefore define "radio-perception" as the observation of the radiations of a particular substance or surface condition by means of its reactions with the basic luminous and body fields as indicated by the movements of the oscillator.

OBSERVATIONS IN PRESENCE OF A WHITE SURFACE

If a sheet of white paper or cloth is brought near the body, the simple distribution of gyration described above is changed completely, and to facilitate description of the results certain terms must be defined, as they will be used throughout the whole discussion.

Neutral point.—A point in the field where there is no tendency to movement of the oscillator; or no resistance to movement if the oscillator is deliberately displaced in any direction.

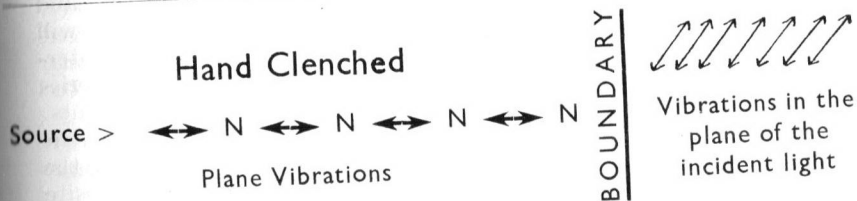
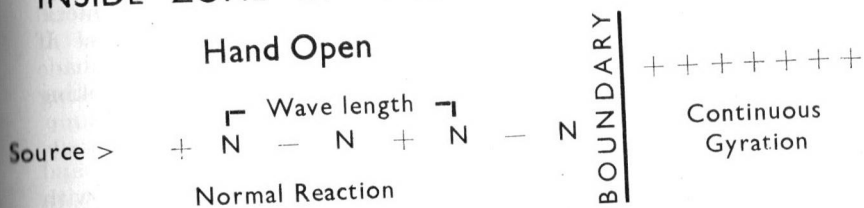
Neutral Zone.—A region composed of neutral points, e.g., the inactive side of the body.

Modes of Gyration.—A counter-clockwise gyration will be called (+) and a clockwise gyration (−), according to the usual rule of signs, but it is necessary to distinguish between two possible modes of gyration, either as a continuous + or − gyration or as an alternating gyration, when the direction changes sign after regular intervals of time.

The simplest way of demonstrating the influence of a white surface is by pinning a sheet of unglazed notepaper on the active side of the body, at a convenient height. Moving the oscillator about slowly it will be at once seen that there are a number of neutral points and between them either + or − gyrations, while clenching (except as the neutral points) sets up plane vibrations at right angles to the plane of the paper. If the same sheet of paper is set up vertically at a convenient distance from the body (say 1m.) and the oscillator moved about in a horizontal plane, points may usually be found where the distribution of gyration changes from that for the body field alone

to that just observed for the paper attached to the body. A line joining these points marks the boundary of the "zone of influence" of the paper for that particular level. In such a case the influence of the paper is weak, but with a stronger effect, the zone of influence may pass beyond the body and the body field effects will not appear.

INSIDE ZONE OF INFLUENCE



CONDITIONS NEAR BOUNDARY OF ZONE OF INFLUENCE

+ and - denote regions of gyration
 ↔ plane vibrations N neutral points

If the same paper is laid flat on a table and the oscillator moved upwards or downwards over it, a similar series of + and - gyrations occurs, and continues with clenching, as the force causing plane vibrations is ineffective in a vertical direction. Similar effects are obtained with other oscillators of different frequencies, except that the neutral points are clearly further apart for lower frequencies. In my opinion the easiest way for a beginner to get some notion of the effects is by this simple experiment of holding an oscillator over a sheet of paper, as in many cases gyrations may be obtained at once, without any previous experience.

PRECISE EXPERIMENTS ON THE DISTRIBUTION OF GYRATION

The apparatus used is an optical bench made entirely of unvarnished wood, with sliding carriages to support the objects tested and to fix their positions accurately by a metre scale. One of the carriages is provided with a pointer which enables the point of suspension of the oscillator to be held steadily within a mm. and the hand holding it can be supported on the carriage, if required. Due precautions must be taken to remove all metal objects, and particularly any bright reflecting surfaces. If working by electric light, it must be diffused and the shade used have no green in it—a dull yellow being suitable. Smoking is inadvisable.

The oscillator first tested is quick-moving (88 per min.) and the surface is a white card about 20 cm. square, standing with its plane vertical and at right angles to the axis of the bench. The oscillator is held at the level of the centre of the card and moved along the axis in the shortest possible steps. It will be found that every 8 mm. there is a neutral point and at intermediate points + gyration or - gyration, forming a series reversing in sign between every two consecutive neutral points. This distribution will be called the "normal reaction" of the surface, and extends from the surface to the boundary of the zone of influence. If, say, ten consecutive sets of opposite gyrations are counted, the total distance traversed by the oscillator is nearly 160 mm., whence the "wave length" is calculated to be 16 mm., *i.e.*, a neutral point occurs every half wave length, or 8 mm. With clenching, there are neutral points in the same positions and at intermediate points, plane vibrations parallel to the axis. A similar test was made with another oscillator of frequency 55 and similar results obtained, except that the wave length becomes nearly 25 mm., *i.e.*, the ratio of the wave lengths is nearly equal to the inverse ratio of the frequencies. After testing other frequencies from 25 to 120 p.m. it may be said that the wave length is approximately inversely proportional to the frequency.

NATURE OF THE FORCES ACTING ON THE OSCILLATOR

It must be noted that the influence causing gyration is not such as to make the oscillator spin round its axis, but is communicated to its whole substance according to its dimensions, in the direction of the forces acting. Thus if the oscillator is a

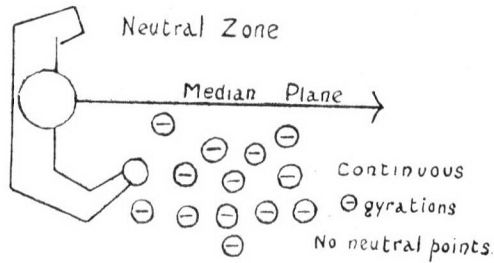
sphere of diameter less than half a wave-length, with its centre at a neutral point, each half is subject to an equal contrary influence and the resultant is zero, but away from a neutral point, the resultant is either + or -, with a maximum half-way between two neutral points. If the diameter of the sphere is one wave length, the resultant is zero for any position of its centre and the oscillator cannot move. Thus in the above experiment, a sphere of diam. 16 mm. will be found to be "dead" at any point along the axis of the bench, and if forcibly moved to start gyration, will quickly come to rest if left to itself. For a large oscillator, the + gyrotory effect on one part will be neutralised by the - effect on another part, but usually there will be a + or - resultant, unless its dimensions are exact multiples of a wave-length. A small oscillator may therefore be more effective than a large one, as its smaller inertia enables it to respond more quickly to changes in the forces acting on it. For rough demonstration out of doors a large oscillator is better, as being less affected by the wind.

Using an ordinary pendulum of the same frequency, similar normal reactions occur if the end of the thumb in contact with the string occupies the same positions as the centre of the oscillator, but the dimensions of the bob have no effect, unless it is made of sensitive material or with a white or green or reflecting surface, which will probably introduce serious disturbance and prevent the occurrence of normal reactions.

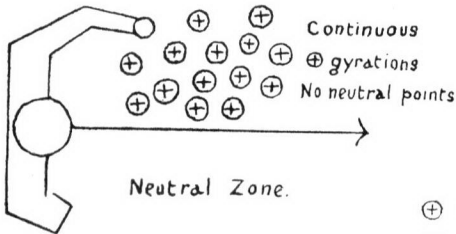
COMBINED ACTION OF TWO SIMILAR SURFACES

A second card of the same material and size is set up vertically on a sliding carriage on the bench with its plane parallel to that of the first card, so that the distance between the two cards can be accurately measured. Starting with any convenient distance at random (say 50 cm.) and exploring along the axis as before between the cards, neutral points at the same distance apart as before will occur; but at intermediate points, instead of continuous + or - gyrations, there will be alternating gyrations, changing periodically from + to - and back again, the duration of the period depending on the distance from the neutral point. There is, then, a time distribution of the reactions as well as a space distribution, while with one card there is only a space distribution, as the gyrations may continue indefinitely (250 have been counted with the 88 frequency oscillator). The movable card is then displaced along the axis in mm. steps, and it will be found that for certain distances a neutral zone appears along the axis and if the distance is changed by half a wave-length from the neutral position, the normal reaction for the

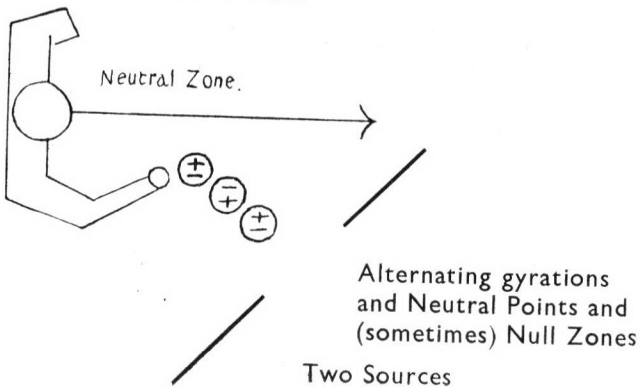
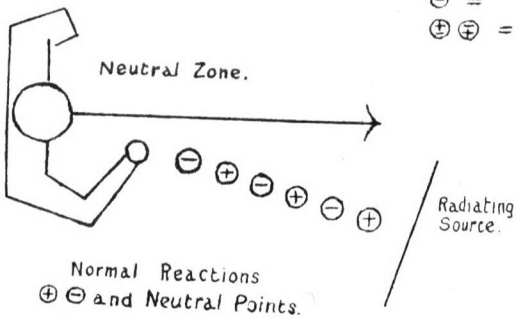
PLANS SHOWING POSITION OF BODY IN RELATION TO DISTRIBUTION OF GYRATIONS



Diffused Light
from any direction



⊕ = Continuous + gyration.
⊖ = " - gyration
⊕⊖ = Alternating gyrations



single card reappears usually with increased amplitude of gyration.

These results are exactly analagous to that of the interference of two waves of the same frequency either reinforcing or destroying each other's effects according to their phase displacements being a whole or half wave length respectively.

This experiment is extremely important for the practical applications of the subject, as regards the production of the neutral zone, which will be called a "null" zone to distinguish it from a true neutral zone, as defined previously. At any point in a null zone, the oscillator is in unstable equilibrium under the influence of two equal and opposite forces and a very small change in the conditions of the field round it will cause it to move erratically in any direction or gyrate irregularly, whatever may be its frequency. If the precaution of working at a distance from metal objects and reflecting surfaces is not taken, it will be understood from the above test that null zones may be produced which will absolutely prevent the appearance of the normal reactions for any particular frequency. For this reason, the reactions obtained by beginners, or whenever proper care is not taken to eliminate sources of disturbance, may be quite misleading.

Any other substances or surface conditions which react to an oscillator of a particular frequency, will produce the same effects as those described for a white surface, and this was chosen as the first subject for experiment in order to stress the fact that surfaces play a very important part in the study of radio-perception.

In the course of the experiments which have led up to these results, the frequencies of oscillators reacting in presence of a large number of different materials and surface conditions have been determined and some of these are given in the following Table, the method of determining these frequencies being described later.

<i>Frequencies</i>		<i>Substances</i>
79	—	Sulphur
76	—	Silicon (in sand)
69	—	Aluminium
57	—	Tin
56	—	Zinc
55	—	Water
52	—	Iron
50	—	Copper
38	—	Silver
25	—	Gold
24	—	Platinum

SURFACE CONDITIONS

White surface—All frequencies, with few exceptions.
 Black surface—All frequencies, with few exceptions.
 Green surfaces—Many frequencies, including Water.

Frequencies

105	—	Heat (Temperature-difference)
88	—	Electric Charge
86	—	Magnetic Polarity
83	—	Blue Colour

<i>Frequency</i>	—	<i>Surface Condition</i>
74	—	Red Colour
72	—	Rough Surface
46	—	Closed Cavities—Pipes—Tunnels
44	—	Transparent Surfaces—Glass—Water
42	—	Projecting Surfaces—Open Cavities
33	—	Yellow Surface—Colour of Gold
30	—	Lustrous Surface—Platinum—Gold—Silver

N.B.—The above values are provisional and subject to revision.

SURFACE CONDITIONS

The most important surface condition is that of electric charge, as there is evidence, not yet confirmed, that its presence in the body is essential for the appearance of the phenomena and also that the known laws of Electrostatics can be logically applied to the interpretation of the results. As has been previously mentioned, my first experiments were on the influence of a flash-lamp battery, whose effect was so powerful that, although completely ignorant of the existence of disturbing effects, I obtained the normal reactions with a single battery and the null zone with two batteries.

ELECTRIC CHARGE AND MAGNETIC POLARITY

An ordinary 4-volt flash-lamp battery (out of its case) is put on the optical bench, with its broad face at right angles to the axis, and the wave length determined by the method of normal reactions for points not too near the battery, so that the distance of each pole from any point on the axis is practically the same. This wave length is very nearly 16 mm. and the frequency of the oscillator nearly 88 p.m. This value has been obtained as the result of a large number of tests, taking all precautions to avoid interference and using an oscillator of less than half a

wave length diameter. With a large oscillator, not very carefully held, response is easily obtained with frequencies between 86 and 90, and the zone of influence being very broad, beginners can obtain normal reactions with little practice from the batteries of motor-cars. It must be noted that the reactions are *not* due to electric current, which is detected by its magnetic and thermal effects.

If the small oscillator is brought close to the battery, say within 10 cm., the effects will be erratic, and approaching either pole as closely as possible without contact, it will be found that there is - gyration at the - pole, and + gyration at the + pole, using the right hand, and opposite signs with the left hand.

Returning to a distance along the axis and turning the battery round into various positions, the normal reactions will be unchanged, because the distance between the poles is negligible compared to their distance from the oscillator, but at a short distance the actual position of the poles influences the effects considerably. The results show that the two poles may be regarded as two separate radiating sources of the same frequency but relatively displaced a quarter of a period, *i.e.*, a neutral point for one pole corresponds with a maximum amplitude of gyration for the other pole, the resultant effect at a distance being the normal reactions with the neutral points displaced an eighth of a wave length along the axis. If the distance from any point to each pole is different, there is a further phase displacement, and if this happens to be a quarter wave length, the total displacement is half a wave length and a null zone appears.

By bending the brass strips forming the poles of the battery, it can therefore be arranged that in a certain direction the battery is "dead" and it will be understood that in a test of any electric circuit, the actual distance apart of the poles, which may often be very indefinite, has a great influence on the results. Thus if the flash-lamp battery is put into its iron case, the poles are transferred to the extremities of the switch-contacts inside the case, which will screen their influence considerably, and when the lamp is lighted, the poles will be again moved to the ends of the filament and their external effect will depend on the dimensions of the filament. The light from the lamp is quite likely to influence the oscillator and cause disturbance. Careful tests made with 100 and 200 volt lamps on the A.C. mains supply with currents increasing from zero, show that the current strength

has no effect on the normal reactions and that a change in voltage (potential difference) only changes the breadth of the zone of influence, which is in any case very large—a 6-volt car battery can be detected at 150 m. and a power station at 1,500 m. in open country. Two separate batteries give similar results to those described for two white surfaces, *i.e.*, their mutual interference will reinforce each other for certain positions of the oscillator and produce null zones with the consequent disturbances from that condition, at other positions of the oscillator.

The particular interest of the electrical effects lies in their application to the known laws of electrostatics, which can be demonstrated without the high potentials and very good insulation usually required, as dry wood is a good insulator for potentials of not more than a few volts. It is for this particular reason that I consider the electrical normal reactions to be dependent on charge, or possibly surface-density of charge.

Space does not permit more than a passing reference to the reactions of magnetism, whose frequency (86 p.m.) is not quite the same as that of electric charge, and can be easily confounded with it. From the fact that a bar magnet produces similar reactions to that of a battery, taking account of the distance between its poles and also that the laws of magnetic induction can be demonstrated with the same results as by a compass-needle, I assume that the magnetic reactions depend on the pole-strength, according to the usual definition of that unit.

REACTIONS OF METALS AND ALLOYS

The frequency given in the Table for an oscillator reacting to a certain metal will be called the "specific" frequency for that metal, defined as that frequency which identifies it when either visible or invisible, regardless of its size or shape or whether its surface is rough, smooth or coloured. Thus experiment shows that an oscillator of a particular frequency reacts equally to polished surfaces of gold, silver, brass and other metals and alloys. Also another frequency reacts equally to gold and sulphur, turpentine and yellow paper, in virtue of their common yellow colour. These and other surface effects due to the action of light must disappear when the substance is screened by another opaque substance, so that the specific frequency (say) of gold, is that of the oscillator which reacts when outside boxes of (say) silver and brass containing pieces of gold. Assuming that the influence of the gold is transmitted unchanged through the

silver or brass, it is evident that the surface effects on the boxes must be previously known as well as the specific frequencies of their materials, *i.e.*, silver, copper and zinc; and also the relative strengths of the various effects at the position of the oscillator. If it is assumed, for the sake of argument, that gold *can* be identified by its specific frequency at a distance of one metre, it does not in the least follow that it is possible at 100 or 1,000 metres, without experimental evidence for those distances.

If a small piece of any metal, whose dimensions are negligible compared to its distance from the oscillator, is set up on the optical bench, an oscillator of the specific frequency will give normal reactions of a certain wave length. Thus for copper, a cylinder of diam. 4 mm. and length 5 mm. gives normal reactions with an oscillator of frequency 50 p.m. and the wave length measured is nearly 28 mm. If, however, the length of the cylinder is much greater, so that it becomes a wire or rod, the normal reactions at the same distances as before disappear; and the new effects, which will be called the "dimensional" reactions, require careful study, as they occur in all oscillation phenomena.

EXPERIMENT TO DEMONSTRATE DIMENSIONAL REACTIONS

A copper wire about 15 cm. long and of 4 mm. diam. is supported upright on the bench and the field explored in the horizontal plane bisecting the wire. It will be found that gyration is *entirely absent*, except momentarily while the oscillator is changing from vibration in one plane to another. As the oscillator moves radially to and from the wire there is a series of neutral points with vibrations at intermediate points in the plane at right angles to the ray and with clenching the vibrations turn into the plane parallel to the ray. Thus the field shows circular neutral lines about the wire as centre, whose distance apart is half a wave length (14 mm.) and at intermediate points plane vibrations tangential to the circles. With clenching, the vibrations are parallel to the ray, so that if the vertical is concealed at a short distance its position could be found by taking cross bearings. If the same wire is laid horizontally, moving at right angles to it in the same horizontal plane, there will be a similar sequence of plane vibrations, but with the conditions

reversed, *i.e.*, with open hand in the radial plane, and with clenching in the tangential plane. Vertically above or below the wire, the vibrations are parallel to the wire with open hand and at right angles to the wire with clenching.

It is evident, then, that an operator searching for an object buried underground using an oscillator of the correct frequency must be prepared both for normal and dimensional reactions, according to the size, shape and distance of the object.

The effect is strikingly shown by drawing lines on white paper when any oscillator held immediately over them will vibrate along the lines. Various geometrical patterns produce other reactions, and special mention must be made of a V shape. If a copper wire is bent into a V shape, it will be found that close to the apex of the V an oscillator of a particular frequency, and no other, will gyrate; the value of the frequency depending on the angle of the V. If this angle is between about 35° - 50° , the frequency will be nearly that reacting to water, and attention must be drawn to the fact that the divining rod is V-shaped, and that this V effect is independent of the material of the V or of its dimensions.

NOTE ON CONSTRUCTION AND USE OF OSCILLATORS

I should recommend all oscillators for any frequency to be made of strained rubber, as, apart from its great sensitivity, its material is not likely to cause interference with most of the frequencies tested. For rough experiment, open twists or coils are convenient, made of thin tubing of about 5 mm. diam. and about 10 cm. long for higher frequencies and longer for lower frequencies, tied up with thread and attached by thin string or thread (not green coloured) to wooden handles, which are conveniently in the form of cubes of about 1.5 cm. side.

For accurate work indoors (or out of doors with no wind), the oscillators are small pieces (approximately cubes or spheres), cut from dense sponge rubber to the appropriate dimensions, *i.e.*, less than half a wave length, and attached to the handle by fine cotton thread. The "hard" balls sold in toy-shops provide suitable material. To construct an oscillator reacting accurately to a given substance I have found the best way is to fix the thread to the handle first and then to draw it through the rubber with a needle; the contracting rubber grips the

thread firmly so that the oscillator can be slid along the thread to get the frequency desired and then fixed with a spot of seccotine. For out-of-door work in a wind, whole balls may be used (say of 5 cm. diam.) whose behaviour has been previously tested indoors.

The frequency is determined by stop-watch, keeping the amplitude of oscillation as small as possible, by taking the mean of the durations of several sets of (say) 100 swings for the higher frequencies or fewer for the lower frequencies, so that the duration of a set is at least a minute. I have purposely refrained from mentioning the lengths of pendulums, which depend on the dimensions of the oscillators as well as on the length of the strings; as by observation of the frequencies alone, different operators can compare their results regardless of the size, shape and weight of the oscillators.

N.B.—It has sometimes been recommended to beginners to start swinging the pendulum in order to get reactions, but with experience this practice should be dropped, as it is liable to cause misleading deductions. I have received the impression from the accounts of some observers that they suppose the pendulum must always gyrate, whereas a condition of rest or of plane vibration is very frequent; it is therefore essential to leave the oscillator to itself and not to “assist” its movement.

ADDENDUM

The writer would be much obliged if any experienced dowers would supply information on the following points:—

- (1) What is the exact colour of their eyes?
- (2) If they wear glasses when dowsing, either with rod or pendulum; and what happens, if anything, when the glasses are removed?
- (3) Have they noticed any regular pauses in activity, and, if so, what is the average length of the pause in minutes?

NOTES AND NEWS

Mr. E. H. C. Ridder (B.S.D.), of Christchurch, New Zealand, writes: The boys of Christ's College, Christchurch (I am Buildings Superintendent and Handicrafts Instructor there), recently lost their 16lb. shot for weight-putting in the river by the school. They asked me to locate it with the pendulum; so that within a few minutes—and in the presence of a few senior boys—they were soon playing with it again. It was down in the mud. I located it instantly, and a boy stripped off, followed his hand down the feeler rod and hooked it straight out from the end of it.

Another case of "seeing is believing," and, incidentally too, it settled all the scoffers on one point at all events.

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The *New Zealand Farmer Weekly* on November 3rd contained an article on Water Divining based mainly on Sir J. J. Thomson's remarks on the subject in *Recollections and Reflections*.

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The *Christchurch Star-Sun* of November 10th contained an article on the late Abbé Mermet.

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A recent number of the *Macklay Daily Mercury* (Queensland) had a long article on the Divining Rod by Mr. A. A. Cook (B.S.D.).

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There was an interesting article in *Country Life* (Canada) for November by Mr. R. G. Stewart on his own experiences as a water diviner and on his trip to England two years ago when he met several members of the Society.

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According to the *Western Morning News* of December 2nd, Bertram Edward Bond was plaintiff in a case in which he claimed twelve guineas for his services as a water diviner from a builder and decorator of Hartland. In the course of his evidence the plaintiff stated that he had been a water diviner for nearly 30 years and had found hundreds of wells.

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The *Norfolk Chronicle* of December 3rd contained an article on Mr. M. H. Chipperfield (B.S.D.), of Foulsham, and an illustration showing him in the act of dowsing with a rod.

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In the *Outspan* (South Africa) of December 3rd there was an article entitled "Some Strange Stories of the Water Diviner," by Napier Devitt, in which mention was made of the Society.

According to the *Sunday Express* of December 6th a syndicate seeking hidden treasure said to be worth £1,300,000, at Queens-cliff, a little town at the entrance to Port Phillip Bay, Victoria, Australia, has discovered a mysterious cave with the assistance of a dowser. The treasure is supposed to be that obtained from Lima in the XVIII century by the pirate Benito Bonito.

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As reported in the *Norfolk News and Weekly Press* of December 11th a diviner is to be employed by the Wainwood R.D.C. to find water for houses near Spexhall Church.

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In *Country Life* of December 4th there was a letter signed C.H. and two photographs showing the usual grip on a hazel twig whilst a reaction is being obtained.

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In *The Times* of December 12th there was a short article describing how a Dutch lady water diviner, at the invitation of the municipality of Breda, North Brabant, discovered several waterways under the town, crossing below the Princess Chapel in the great Church. She also discovered a stone staircase in the Church leading to a large vault in which were found several coffins, two of which were opened.

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The *News Chronicle* of December 15th contained an illustration of a dowser searching for victims of Eugene Wiedman outside the St. Cloud Villa.

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A summary of Captain Boothby's article in the December issue of our Journal was included in the *Petroleum Times* of January 1st.

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In *La Prospection à Distance* for January, 1938, there is a letter from Lieut.-Colonel L. Fr. Moreau relating that when he was lately in Southern Rhodesia he traced on a plan a reef in the Tebekwe mine, which had been lost, at a distance of 464 feet from a certain point in one of the galleries.

After he had arrived in England he received a letter from the Director of the mine saying that a horizontal drill had been made through hard rock in accordance with Colonel Moreau's indications and that at a distance of exactly 464 feet the bore had encountered a very rich vein (84 dwt. to the ton).

The Director sent the congratulations of the whole staff of the mine, who had watched his methods of prospection on the plan, and added that the vein had been called "Colonel Moreau's reef." In a large photograph of the plan which accompanied the letter the reef is shown under this name.

In the *Dartmouth Chronicle* of January 7th it was reported that the Totnes R.D.C. promised to employ a water diviner to search for water in Dittesham Hill. The Brixham Council, which had been asked for information on the matter, engaged a water diviner who was accurate in his location.

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The *Oxford Mail* of January 10th contained an article with illustration describing how Mr. Timms indicated the course of an underground stream under Messrs. J. Lyons and Co.'s premises in Cornmarket Street, Oxford.

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The supplement to *The Farmer and Stockbreeder* of January 11th had an article by Mr. A. S. Jenkinson mentioning that wolfram was being dowsed for near St. Columb in Cornwall.

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In the *Daily Mail* of January 13th, 1932, there was a short article describing how two diviners had been searching for the stained glass which was removed from Salisbury Cathedral by Wyatt in 1789 and thrown away.

The sequel to this article was provided by the Rev. Dr. Stanley Baker in a lecture at Winchester on July 15th, 1937. There was reason to suppose that the glass had been thrown into a ditch behind the Swan Inn at Harnham just across the River Avon. Strong reactions were obtained by a diviner over a certain area at Harnham, but when digging was carried out "a beautiful bed of sand" was found. Five diviners were employed, but without success.

A certain amount of glass was eventually discovered in the spring of 1933 on the site of a filled-in ditch in the Liberty, enough to glaze perhaps 300 square feet of window space.

It should be noted that the reaction of sand to a glass sample carried by the dowser was to be expected, as sand and glass are chemically similar.

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Mr. Thos. Flynn writes: Some considerable time ago, using the pendulum as directed in *The Modern Dowser*, I discovered a deposit on my property at Lawley in the Transvaal which gave a series of 44 gyrations. This series I found related to aluminium.

Later I confirmed this by the method of the late Abbé Mermet, published in his *Comment J'Opère*.

An assay of the deposit revealed 30.4 per cent. alumina, equivalent approximately to 15 per cent. aluminium metal of a commercial value of £12 10s. per ton of clay, whilst the clay itself, being an aluminium silicate very free from iron, is invaluable as a fireclay of a base for the manufacture of electrical insulators, &c.

CORRESPONDENCE

Colonel A. H. Bell, D.S.O., O.B.E., 18 Cromwell Road,
York House,
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Hove 3.

17th February, 1938.

DEAR SIR,

I read with much interest Mr. Maby's account of the Meeting at Quex Park. In regard to the experiment carried out on the arable field I fear I happened to be the Member whose estimates of yields and depths were greater than my fellow Dowers, and as it is suggested by Mr. Maby that I might have been allowing for some factor which others failed to take into account, it appears to be incumbent upon me that I should explain one factor which may have been overlooked.

The survey had a practical basis, *i.e.*, the location of a supply for the nurseries, and on enquiry I ascertained this was about 20,000 gallons per diem. As a result of my observations I formed the conclusion that the field was situated over a small synclinal fold in the Chalk, judging by the apparent much fractured condition as evidenced by the multiplicity of small fissure supplies running in all directions and the apparent state of general semi-saturation. Conditions from a dowsing point of view were characteristic of such structure in the Chalk. If such is the case, water of some quantity will be struck practically anywhere on the western part of the field at a common depth dependent on the local water table, but in a freer condition of course in the actual fissures and more particularly so in the master joints, which are probably larger than the others and follow the general dip. The saturation and fissures under these conditions continue downwards as far as the folding has ruptured the strata, and when a bore hole is sunk into this, the deeper it is, the greater will be the discharge obtainable until the bed of the syncline is reached. A supply of 400 gallons per hour may be obtainable if a bore hole is sunk to a certain depth on one of the fissures, but this discharge would not satisfy requirements of the project; hence it would be necessary to drill down further into the fissure.

It is possible that the factor overlooked was the depth necessary to drill to in order to obtain the maximum discharge of the site in an effort to comply with the practical aspect of the case.

Yours faithfully,

C. A. POGSON.

REVIEWS

THE NATION'S WATER SUPPLY.

By R. C. S. Walters. *Nicholson and Watson, 1938.*

This excellent book of 233 pages gives a general and concise description under eight parts of the nation's water supply. As the author says in his preface, "though in no sense a popular work the book may be considered primarily for the layman who has to deal with or is otherwise interested in problems of water supply."

Parts I and II deal respectively with rainfall and geology in relation to water supply; Part III with quality of water; Parts IV, V and VI with upland, underground and river resources respectively; Part VII with legislation and water supply; Part VIII with engineering and water supply. The book is admirably illustrated with 78 diagrams, plans and photographs.

The short reference to water divining is disappointing, and might have been written twenty years ago for all the modern information it provides. There are the usual references to the pamphlet published by the United States Geological Survey Department in 1917, a paper unworthy of any serious attention owing to the obvious prejudice with which it is inspired, and to the futile tests at Guildford in 1913. There is no mention, however, of the tests in France in 1913 and 1923, nor to the tests carried out at Guy's Hospital in 1933. The wonderful records of the best water diviners, such as John Mullins, Benjamin Tompkins and John Timms, are not referred to. In fact, the information given on this head is more liable to mislead than to enlighten.

A.H.B.

LA VÉRITÉ SUR LA RADIESTHÉSIE.

Ses Bases Scientifiques—Ses Méthodes—Ses Possibilités.

By Paul Serres, Ingénieur des Ponts et Chaussées. *Dunod, Paris, 1937.*

This book, which attempts a reasoned discussion of Divining from a scientific angle, is extremely interesting, but for English readers does not always keep sufficiently to the point. It begins with the very timely warning that "the best allies of the enemies of dowsing are those too enthusiastic partisans, who, from the

moment they hold a pendulum in their hands, believe themselves capable of discovering everything, and who tend to mix up the science of dowsing with that of the occult . . . and who press the confusion between physics and mere speculation to an unlikely degree." The author protests at the very start against that false science which talks so freely of "waves." "I have met," he says, "brave people who, quite ignorant of the most elementary science, declare with an air of authority that they have measured the length of the human wave!" He gives at once his view that the causes which make the rod or pendulum move can be recognised and localised by the ordinary means of physical science, and when the pendulum turns it is possible by appropriate means to verify the existence of a perturbation in the surrounding fields of force. In short, the phenomena of dowsing are due to the action of ordinary natural forces acting on the human body and not due to a special set of forces only now discovered, while the sensibility of the human body to these effects is a normal faculty which can be developed by practice.

The book begins with a chapter on fields of force, a field of force being a part of space at every point of which some particular force acts, *e.g.*, the field of gravitational force in which we live, at every point of which the force of gravity acts. But there are many other fields of force around us due to the presence of matter, such as electric or magnetic fields, and so on, and the dowser may be affected by all or any of them.

In a very interesting chapter the author goes on to describe certain automatic apparatuses, which produce effects which may be exactly those which act on the dowsers. There is one school of thought which believes that all the effects the dowser feels are due to slight variations of the force of gravity due to uneven distribution of metals, &c. Very delicate apparatus has been devised which will actually detect a buried lump of metal, or a pocket of oil. Other apparatus will measure slight changes in the ionisation of the air above small veins of metal or streams of water. De Vita claims by an exceedingly delicate instrument to establish the fact that over underground currents the electric conductivity of the atmosphere is above the normal, and hence that his machine will discover such currents. The radiobiometer of Leprince is also described, a machine which shows electrically what organs of the body are not functioning normally. The explanations of these various machines would, however, be much simpler to follow if diagrams were given.

The object of this important chapter is to show that mechanical contrivances can give results similar to those of the simpler apparatus of the dowser.

But the author wisely observes that all these machines only detect action at a short distance and here the dowser wins.

Some of the scientific explanations and analogies in the next chapter on the Mechanism of Perception are not always so clearly to the point as they might be, but the main argument is again that dowsing phenomena are practically a result of a mixture of many causes, and it is pointed out that the failure of blind-folded people is not necessarily a conclusive argument against dowsing, as sight may be a necessary factor in the business, and, in fact, some dowsers claim to see a sort of reflected image of the water they seek on the ground.

Part II. of the book is entitled *Methods of Dowsing*. The relative merits of rods and pendulums are discussed at length, and the author definitely inclines to the latter, partly because the rod works from a position of unstable equilibrium, and the pendulum from a stable one, while it also needs only one hand to hold it, so that the other may be used as an antenna to point with, and is, moreover, handier for plans or photographs. He insists also that a dowser should stick to one instrument of one type.

The methods of selection by the dowser which allow him to find the one thing he is looking for, and no other, give rise to some criticism from the scoffer, or used to do so, until wireless telegraphy produced a most useful analogy in the matter of selectivity. Clearly one can argue that since one gets one wave length, and one only, in wireless, the dowser may be granted the power of picking up just what influence he wants in some confessedly unknown way. The analogy is a sound one, but it gives the author an opportunity of going off on one of his periodical tangential journeys, and he holds forth at length on resonance in various branches of physics, all very interesting in their way but needlessly lengthy. It is in this multiplication of analogies that the book is weakest throughout.

The writer's main thesis is always that though scientific analogies are convenient in talking about dowsing, care must be taken not to take them too literally, and that too free use of the word "waves" particularly tends to make the enemies of the art regard its practitioners as charlatans or worse. Especially

does he condemn what he calls "that barbarous term the fundamental ray." It is handy to say that such and such an effect is *as though* rays were filtered, but it is quite wrong to go on to say later on that rays *are* filtered. It is fairly certain that our bodies are pervaded by small electric effects, static or otherwise, and that their equilibrium is affected both by the brain and by matter, but there is still insufficient knowledge as to how these things come into dowsing, so that we are far from justified in talking too freely of an exact theory such as is implied in waves and rays, refractions, condensations and the like.

A good chapter on dowsing instruments tells us that there are no less than 3,000 of these, many of them quite absurdly pseudo-scientific, based on "re-inforcement of captured rays," and so on ad nauseam. Some are no doubt improvements on the usual simple instruments, and often particularly efficacious in the hands of their practised inventors alone, but on the whole the simple ones do the job best. There does, however, seem to be clear evidence that the matter of colour is important, and also that a neutral substance is best, *i.e.*, a substance which is not in itself a "sample."

There are useful chapters on dowsing from photographs and dowsing at a distance, the evidence for which is satisfactory to the writer, and there is an excellent discussion of the possibilities of dowsing or of the difficulties that arise when, having found, for example, water, the important matter of depth arises. Here he emphasises the doubt caused by the intrusion of beds of clay, which so often throw calculations out that one can only decide that the depth is "so many metres plus the clay." Speed and direction of flow are also difficult, but often satisfactorily solved by personal skill based on practice rather than any satisfactory theory.

The book can be recommended for its caution, and is thoroughly readable, though marred at times, as is pointed out above, by a tendency to over-illustration and prolixity.

W.M.R.

ZEITSCHRIFT FÜR WÜNSCHELRUTENFORSCHUNG.

(September/October, 1937).

From the 18th to the 25th September, 1937, the Reichsverband für das Wünschelrutenwesen held its congress at Amberg. This number gives a general account of the proceedings, by Dr. Paul Beyer (who has once more been elected President) and publishes some of the papers which were read at that congress.

Dr. Beyer observes that the choice of Amberg as a meeting place was a happy one, as it is a fine old mining town with varied types of stratified rocks, with valuable minerals, and with underground water in its neighbourhood. Those zealous workers, Dr. Osswald and Dr. Wetzel, were largely responsible for the success of the organisation.

The congress seems to have been large and representative, bringing in about 160 members and guests from all over Germany, and also from Switzerland, Holland and Austria. An imposing list is given of government departments which were officially represented.

Numerous excursions were made during the congress to places of geological interest in the neighbourhood.

Dr. Franz Wetzel publishes a paper, read by himself at Amberg, and entitled "The diviner's rod as a scientific problem." The author naturally takes as granted the actual facts of the dowsing phenomenon, which he thinks is as real as that of the passing of an electric current from pole to pole of a battery; although he admits that the problem is a much more complicated one, dealing as it does with a conscious subject. He brings together in his lecture the different theories which have been brought forward to explain the facts of dowsing.

Dr. Heinrich Kraft contributes a paper on "The biological foundations of the problem of the diviner's rod." He leans towards the explanation advanced by Wüst and Wimmer, of an emanation of a magnetic nature. These rays which were designated "W-rays" by Wüst and Wimmer, were assumed by them to be akin to magnetism, although they could not be found to have any effect on the magnet. Dr. Kraft points out the great similarity of this theory to the original "Od" theory of Reichenbach.

The author also gives, in the course of his paper, an account of certain known muscular rhythms on stimulation, and of certain rates of sensation transmission among warm-blooded animals.

Dr. Kurt Osswald publishes a paper on the use of the diviner's rod in the determination of underground conditions ("Wünschelrute und Untergrund"). In this paper he deals with the matter from a practical and geological standpoint. The underground problem is first described as one of the finding of useful materials,

secondly of the detection of hurtful factors in one's neighbourhood, next of the investigation for technical reasons of what is underground, and finally of investigation from the purely scientific standpoint.

The author refers to geophysics, and the great strides which it has made during the last fifteen years; but remarks that it requires the use of complicated and expensive instruments which cannot be used for a hasty survey, nor for small matters. Herein, as he says, lie the opportunities for the dowser. In his opinion, however, the dowser should not be considered as a rival of the geologist, nor of geophysical apparatus. He can, however, when he is suitably gifted, usefully supplement the geological and hydrological work, and—if I may use the expression—give a geobiological assistance, as an auxiliary to the geophysical, to the elucidation of the question of subterranean water, in cases in which, for reasons given above, a purely geological or geophysical examination is out of the question."

Dr. Osswald is well aware of the necessity for caution, and issues a grave warning against too hasty generalisation. He points out the necessity for experience as well as ability in all dowsing work. He is convinced that the dowser can be of great help in the determination of deep-lying faults. Again, however, the observer must be of great experience, so that, for instance, he may recognise that his reaction is actually caused by a fault, and by no other agent.

Dr. Osswald summarises the results obtained in the prospecting for petroleum. He shows clearly the great probability of error, and advises that great caution should be used owing to the great cost of boring. In all prospecting with the rod for oil there should be intelligent co-operation between the geologist, the geophysicist and the dowser.

A very clear short account is given of the ways in which water can occur in the rocks. The author says that errors frequently occur in dowsing for water in known stratified formations, and he warns dowsers against taking up work in such formations. Their work, on the other hand, is likely to be of more use where the water occurs not in sheets, but in underground clefts or chasms which cannot be recognised by surface signs. The geologist does not know of the existence of these waterways, and the use of geophysical apparatus is too costly. He thinks that these "water veins" are the proper province of the dowser's work.

C.S.T.

SOME BOOKS ON DOWSING AND HUMAN RADIATION

- The Divining Rod*, by Sir William Barrett and Theodore Besterman : Methuen, 7/6.
- Water Diviners and their Methods*, by H. Mager (translation) : Bell, 16/-.
- The Modern Dowsers*, by Le Vicomte Henry de France (translation) : 2nd Edition, Bell, 4/6.
- The Art of Water Finding*, by M. E. Pogson : obtainable from the President, B.S.D., post free, 1/8.
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