JOURNAL
OF THE
BRITISH SOCIETY OF DOWSERS

Vol. II. No. 14 December, 1936

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BRITISH SOCIETY OF DOWSERS

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OBJECTS OF THE SOCIETY

(*a*) To encourage the study of all matters connected with the perception of radiation by the human organism with or without an instrument.

(*b*) To spread information amongst members, by means of a journal, lectures and other means, about the use of dowsing for geophysical, medical and agricultural and other purposes and for tracing objects animate or inanimate.

(*c*) To keep a register of dowsers for water, minerals, oil, and for other purposes.

RULES OF THE SOCIETY

I.—Membership.

The Society is open to all persons interested in radiation-perception.

The Council has power to appoint honorary members.

II.—Subscription.

The subscription is five shillings per annum, or three guineas for a life member.

III.—Management.

The Society will be managed by a Council consisting of a President, who will act as Chairman, and five members, one of whom will act as Treasurer and Secretary.

The President and members will be replaced as necessary by the Council, appointments being confirmed at a General Meeting.

All questions regarding the publication of the journal, lectures, meetings, etc., will be settled by the Council.

Decisions of the Council will be arrived at by correspondence if necessary, the facts being recorded in the Minute Book.

Decisions will be decided by a majority vote, the Chairman having a casting vote.

The Council has power to co-opt other members for special purposes.

IV.—Accounts.

The financial year will be from July 1st to June 30th.

Accounts will be published annually within two months after the end of the financial year.

Accounts will be audited privately.

V.—General Meeting.

A General Meeting will be held annually, and other meetings when considered necessary by the Council.

JOURNAL OF THE

BRITISH SOCIETY OF DOWSERS

Vol. II. No. 14. December, 1936

NOTICES

Members are reminded that subscriptions for the year 1936-37 are due.

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The Annual General Meeting was held on October 15th, and was followed by a lecture by Mr. H. Langelaan which is printed below.

* * * * *

A copy of the new and enlarged edition of Abbé Mermet's well-known book, "Comment j'opère" has been received and will be reviewed in the next Journal.

* * * * *

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.

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.

MEETING OF
THE NORTH-EAST OF SCOTLAND GROUP

By the kindness of Sir Ian and Lady Forbes-Leith, the meeting was held at Fyvie Castle on the afternoon of August 1st.

There were about a hundred people present, including many well known as amateur or professional water diviners, such as the Earl of Caithness, Sir George Abercromby, Colonel Hugh Rose, of Kilravock, Captain W. H. Trinder, Mr. Charles Grieg of Cruden Bay, Mr. Kemp, and others.

The existence of the Group is mainly due to the initiative of Miss M. E. Macqueen, who, thanks to the keenness and interest displayed by many residents in the north-eastern counties of Scotland, was able last year to form this local branch of enthusiasts.

Membership of the Group is open to residents of Aberdeenshire, Banffshire and Kincardineshire.

The President is Sir George Abercromby, and the Chairman Mr. C. T. Cox, of Inchmarlo, while Miss M. E. Macqueen, of Frandie, West Cults, Aberdeenshire, is the Honorary Secretary. The annual subscription is 2s. 6d., and the Journals of the British Society of Dowsers, to which the Group is affiliated, are to be issued to the Group in bulk.

Sir Ian opened the meeting in the squash court, where his guests assembled about 2.30, by explaining the arrangements for the meeting and by introducing Dr. G. A. Cumming, lecturer in Geology at St. Andrew's University, and Colonel A. H. Bell, the President of the British Society of Dowsers.

The latter then explained the origin and activities of the B.S.D., after which Dr. Cumming gave an interesting and apposite lecture on the geology of the three counties. Questions were asked after the lecture, which produced answers of an illuminating nature.

Many of the practical dowsers present, including two of a very youthful age, then proceeded to attempt the tests, which had been arranged in the neighbourhood of the Castle.

The nature and results of these tests are as follows :—

(1) To locate and estimate the depth of an underground stream.

There were 13 entries, but no one succeeded in locating the stream. This test was somewhat difficult, owing to the saturated condition of the ground and to the fact that part of the course of the stream was alongside a building.

(2) To judge the depth of a well and the flow from it carried away in a stone overflow channel.

There were 13 entries, but no one located the well correctly.

(3) To find a "corpse" represented by a suit of clothes, which had been worn recently, hidden behind a bush about 100 yards from a starting point. Handkerchiefs which had been carried by the owner of the suit were available as samples.

Out of 15 entries one succeeded in getting within 30 feet of the "corpse."

(4) To locate an electric cable and a domestic water supply pipe running beneath a lawn.

Out of 29 entries, three located the cable and three the pipe correctly.

One of the three dowsers located both correctly.

(5) To indicate the bottle containing fresh water out of six, of which five contained brine. Samples of brine were provided.

There were 27 entries, of which 13 correctly located the bottle containing fresh water.

(6) Out of six matchboxes to locate those containing silver or bronze coins. Competitors were not told how many of the boxes contained coins. One contained silver coins and one bronze coins.

There were 28 entries. Most of the competitors indicated more than two boxes as containing coins. Of those who indicated two boxes only, three correctly located the box containing the bronze coins, and no one located the silver coins.

(7) To distinguish a piece of magnetised and a piece of unmagnetised steel in separate boxes. Magnets were available as samples.

Out of 29 entries, seven gave correct answers. This result is peculiar, as the chance was an even one. It looks as if the use of a sample had a negative effect.

The apparently low record of correct answers is not surprising, as most of the tests were of a kind which the ordinary water diviner seldom or never attempts.

The best result was obtained by an amateur dowser, who was correct in four of the tests.

Though the weather was not too kind, the meeting was an unqualified success. Apart from enjoying the charming hospitality of Sir Ian and Lady Forbes-Leith, dowsers, amateur and professional, had the opportunity of talking to each other and discussing each other's methods.

It is to be hoped that the Group will grow and prosper.

THE GEOLOGY OF NORTH-EAST SCOTLAND

(A Lecture delivered by G. A. Cumming, B.Sc., Ph.D., at the Meeting at Fyvie Castle)

The counties of Aberdeen and Banff, in common with the other Highland counties of Scotland, offer problems to the water-seeker that are scarcely paralleled elsewhere in the British Isles. The reasons for this are geological, and before going further with the discussion of these problems some geological explanation is perhaps necessary.

Geologists classify rocks into three main groups—igneous, sedimentary and metamorphic. Igneous rocks are those which have solidified from a molten state either on the surface as volcanic lavas or deep down in the earth's crust. They are normally compact rocks formed of innumerable crystals of various minerals. Granite, a rock familiar to all of you, is one of the best examples of an igneous rock.

At the beginning of geological time, when the Earth had cooled and continents and oceans formed, all the rocks forming the outer crust were igneous. Geologic processes then began—rain, frost and wind wore down the mountains of these primaeval continents, rivers washed the debris into the oceans, and there on the floor of the oceans that debris became consolidated again into rocks. Thus were formed the first sedimentary rocks. This process has gone on continuously since the Earth cooled, continents have risen up, have been worn away, while their debris, sorted out on the floor of the oceans, has again and again been re-formed into some type of sedimentary rock. These rocks, whether sandstone, clay, shale, or limestone, are essentially composed of fragments of pre-existing rocks.

Were this building up and wearing down of continents the whole story, there would only be these two types of rocks, but the internal heat of our planet is not quite extinguished, and periodically throughout geological history great masses of molten rock have been forced upwards into the outer rocks and there cooled. The rocks near these molten masses, whether igneous or sedimentary, suffer profound changes. Such altered rocks are metamorphic rocks. Great pressure such as accompanies all earth movements also causes metamorphism in rocks. The rock may be merely hardened, but sometimes it is recrystallised, and very often new minerals wre formed so that the resulting rock has little resemblance to that from which it originated. Sandstones become altered to quartzites by hardening or re-crystallisation, limestones become marble by recrystallisation, shales are hardened and compressed to slates, and various other rocks by the formation of new minerals, &c., become gneisses and schists.

All three types of rocks are to be found in Aberdeenshire and Banffshire, although by far the greater part of the geology is concerned with igneous and metamorphic rocks. The oldest and most widespread rocks are those known to geologists as the Highland or Dalradian rocks. These are among the oldest rocks known. Originally deposited as sands, clays, and limestones, they have been subjected to every conceivable metamorphic process and now appear as slates, schists, quartzites, and marbles. It is needless to mention all the geological divisions of these rocks; one or two will suffice.

There are the Macduff Slates, stretching from Fyvie nearly to Huntly and northward to the coast, the Durn Hill Quartzite, forming the hills north-west of Huntly, the Fyvie Schists, occupying a great belt south and east of Fyvie, and several other groups of metamorphic rocks, occupying in all more than half the two counties.

Younger than these rocks, but mainly responsible for the metamorphic changes they have undergone, are the great masses of igneous rock, so essentially a feature of the geology of Aberdeenshire. The granite of Aberdeen, of the Dee valley, of Peterhead, of the Cairngorms, of Kemnay, the norite of Huntly, are but a few of these masses. Originally formed deep down in the earth's crust, these rocks have been exposed by denudation. How largely they bulk in the geology is realised by the fact that the Peterhead mass alone covers 46 square miles.

Of purely sedimentary rocks the only representatives are of Old Red Sandstone age. They occupy a considerable strip on the coast from Aberdour to Gardenstown and run inland to Fyvie and Auchterless. These rocks, consisting of conglomerates, sandstones, flags, and marls, were originally deposited in an inter-montane lake. They have escaped the metamorphism and actually include pebbles of the older altered rocks.

These, then, are the solid rocks of which the district is composed, but no account of the geology would be complete without mention of the deposits of the Glacial Period. The glaciers and glacier streams of this period have covered the whole country with an overlying mantle of gravel and boulder clay. This boulder clay must be familiar to all who reside in the North-East of Scotland. A great cliff of it may be seen at Bay of Nigg, while the huge stone dykes composed of boulders from the clay are records of the industry of bygone farmers to make the clay land fit for cultivation.

Let us now examine these rocks in relation to underground water. Rocks are commonly classed as pervious or impervious, the perviousness of a rock being its ability to allow water to pass through freely. Important in contributing to this is the presence of pores or spaces between the mineral grains of which the rock

is composed. Sedimentary rocks, being composed of particles of older rocks, normally have such spaces developed to a greater or less degree. Igneous or metamorphic rocks are commonly close grained and cannot allow water to pass in this way. But porosity is only one factor to be considered. In fact, a rock may be highly porous and yet be virtually impervious. Chalk and clay, for example, are highly porous ; they can absorb large quantities of water, but they do not yield it easily. The pores or spaces in the rock are extremely minute, and by their capillary properties are extraordinarily retentive of water. But the Chalk of England is one of the best water-bearing rocks in the country ; this is because the rock is split up by innumerable minute joints and fissures along which water can find its way.

The presence of joint planes, cracks, and fissures in rocks is to my mind more important than porosity in determining perviousness. Thus, a granite when compact is non-porous and incapable of holding water, but when jointed, as is usual with granites, it may yield water freely. In fact, the water supplies of many towns in Devon and Cornwall are drawn entirely from wells or springs in granite.

The arbitrary classification of rocks into pervious and impervious types, seen too often in text-books, fails entirely in practice. Any rock is capable of yielding water provided it is fractured or fissured. But not all rocks are equally promising. The best water-bearing rocks are to be found among the sedimentary rocks, the coarser sandstones and some limestones, where there is large pore space available between the grains. If such a rock is present at the surface it will be entirely saturated with water below a certain level, called the water table, which varies with the seasons and is commonly highest in winter.

It may be mentioned here that porosity and, to a certain extent, perviousness varies with the age of the rock, the younger, less compact rocks being normally the best water-bearers. Water tables are fairly easy to locate in the younger rocks.

The older sedimentary rocks, the old metamorphic rocks, and igneous rocks, such as compose this area, are only pervious when they are jointed and fissured. Water tables in these rocks scarcely exist, although water may reach the same general level in fissures over a considerable area and give an approximation to a water table.

Not all underground water, of course, is obtained from solid rocks ; the unconsolidated surface accumulations, especially when sand or gravel, yield water copiously, and in these true water tables can be located.

Let us now consider the position in Aberdeenshire and Banffshire. First of all, there is the surface covering of glacial debris,

boulder clay, and gravel. The actual boulder clay is fairly impervious, but where it is covered by gravel or soil it serves to hold up the water; thus in many of the low-lying parts of the counties water may be got almost anywhere by digging. It is perhaps unnecessary to mention that such supplies may fail in dry seasons, and are also liable to pollution.

For reliable supplies in most districts it is generally found best to tap the water in the solid rocks. The supply is less likely to fail in times of drought, is less liable to pollution, and there is the possibility that the water may rise under hydrostatic pressure and give an artesian well.

Aberdeenshire and Banffshire are lacking in the type of sedimentary rock which becomes wholly saturated with water. The Old Red Sandstone sediments, the conglomerates and sandstones, are of the type which yield water only from joints and fissures. Thus it is necessary for a bore-hole to intersect a water-bearing fissure to be a success. In the conglomerates it is by no means certain that a fissure, even if accurately located, could be cut by a bore-hole. The reason lies in the composition of the conglomerate, rounded boulders, many of very hard quartzite, embedded in a softer matrix. These boulders tend to deflect the boring tool, and may result in a crooked hole in which the fissure may be missed. Nevertheless, these Old Red Sandstone rocks are not to be avoided.

The metamorphic rocks and the granites fall into the same category; they are capable of yielding water when they are jointed or fissured. The granites and the slates are probably best. The granites usually have a well-defined system of joints and fractures. The success of a bore depends on whether a good water-bearing joint is struck. Where there are good exposures of rock it is possible to determine the trend and inclination of the larger fractures and the bore-hole can be sited accordingly. In many countries water is successfully obtained from granite, and there is no reason why it should not be so in Scotland. The only snag is that the rock is hard and boring slow and costly.

The metamorphism which forms a slate imparts to the rock its peculiar cleavage, or tendency to split along certain planes. Slates have normally numerous cleavage planes along which water can find its way, and in slate areas springs are common. This is so in the area of the Macduff Slates. The Geological Survey Memoir on the Huntly area mentions a great many springs, some of them mineralised, which issue from the Macduff Slates. Some of these are dedicated to local saints, as St. Come's Well, near Tipperty. The slates appear to be the most hopeful rocks in the district, with the chance or mischance of getting a "physic well," or medicinal spring.

Of the other metamorphic rocks, the quartzites are normally well jointed and have possibilities, but boring in quartzite, one of the hardest of rocks, is not to be lightly undertaken.

The schist areas are difficult to assess. Theoretically there is no reason why they should not yield water if jointed, but water engineers in several countries have found schists and gneisses to be nearly the most discouraging of all rocks. I have no information about this area, but, on the whole, I think water seekers should avoid the schists if possible

To sum up the position, there is no lack of underground water in Aberdeenshire and Banffshire, but to tap it is not always easy. The surface accumulations, especially on low ground where gravel rests on boulder clay, will yield water almost anywhere. The only solid rocks which are discouraging are the schists. In the others the accurate location of joints and fissures is essential for success. Tapping the water will be slow and costly in most of the rocks, and only when there is no surface supply available should boring be undertaken.

TWENTY-FIVE YEARS OF WATER-FINDING

By F. E. BRAMLEY

I first discovered my water-finding powers in 1911, when as a young fellow in Southern Saskatchewan I was a member of a threshing crew. A water diviner came one day to find water on the farm, and we watched him work. Each of us held his forked twig in turn, but I was the only one to get any movement from the twig. I found the same stream he discovered and also traced the stream for a considerable distance. The diviner said my powers would be in great demand in that dry territory, and so it proved to be.

The *average* annual rainfall was only 12 inches, and in two bad years of drought fell to only two inches per annum. I found water for many farmers and ranchers, and never had a failure.

Practically all my findings resulted in sub-artesian wells, which gave large volumes of water. I had one finding where, with a 2ft. borehole, the water was struck at 80ft. depth. It roared up and flooded the well 65ft. deep in three-quarters of an hour after it was struck. The next morning it was 77ft. deep in the 80ft. hole, and remained at that level ever after. I had numerous other 2ft. bore holes where the water was struck at depths of from 90 to 110 feet. The water rose up to within 20 and 30 feet of the surface in all these wells. Previous to my being engaged, the farmers themselves had bored for water at considerable expense without finding any.

My most outstanding result was in a small Saskatchewan town. The Council had engaged a well-drilling outfit to drill for water. The driller did not believe in water-divining, so picked a spot near the centre of the town and started on the job. When the drill reached the depth of 500ft. they had to stop, as that was the greatest depth to which the outfit was capable of drilling. Much money had been spent, and all the town had to show for it was a dry hole—no water whatever.

I was sent for and engaged to find water. At a distance of about 100 yards from the dry hole I located a stream. I advised that the drill be moved over to the spot which I marked with a peg. At the depth of 300ft. the water shot up and came within 25ft. of the surface; 275ft. depth of water. This was a 6in. diameter drill.

Out West I used a willow twig, as hazel bushes did not grow in the dry parts of the province, and I had to travel several miles to a ravine to obtain my willow twigs. I have frequently had the willow rod smash into pieces in my hands, so strong has been the pull on the rod. The force of the movement of the rod has also taken the skin off my fingers at the spot where they were in contact with the rod. I am now using a light whale-bone rod, which does not tire me. I used to find I was very exhausted when I used willow rods.

I use a whale-bone rod to find the stream and discover the best spot. Then I estimate the depth and strength of flow with a pendulum. I have never been more than three or four feet out, in my estimate of the depth. On one of my recent findings in Leicestershire I estimated the water at 130ft. deep. It was struck at 127ft., and no further headway could be made, as it was flowing in so fast. This well was sunk by hand. Other recent findings of mine in Leicestershire have given 17ft. of water at 21ft. deep; 17ft. of water at 24ft. deep; 20ft. of water at 35ft. deep; and 45ft. of water at 127ft. deep.

Since I returned to England I have found I can locate gold and silver as easily as water. By using either rod or pendulum I have found gold rings or silver spoons, &c., which had been carefully hidden. I can also identify owners of hats and clothing. When I hold the hat or article of clothing in one hand and walk in front of the row of people, my rod will turn when I come into line with the owner. When I use my pendulum it will gyrate when I come into line with the owner of the article. I have laid out a row of cut flowers on a table and left the room and asked someone to pick a petal or leaf off any one of the flowers and bring it to me. When I have held the petal or leaf in one hand and pointed my rod or pendulum along the row of flowers, I have always found the flower from which the petal or leaf was taken. This, I think, proves that even flowers have their own

individuality, like human beings. I consider this a marvellous work of Creation when we think of the countless millions of flowers in the world.

I have often worn thick rubber knee-length boots during the Canadian spring time when I have been on water-finding jobs. Naturally this would insulate me from the ground, but has never put me out of commission, as my rod always indicated the correct spot. I have also demonstrated that I can tell when I am passing over underground streams even when being driven in a car at the rate of 30 miles an hour. I am insulated from the ground by the rubber tyres and tubes of the car, but if the car passes over an underground stream, my rod will immediately begin to indicate the fact. I have had the car stopped and gone back and traced the stream to prove it. I can also tell in which direction the streams are flowing.

My theory of water-finding is that the underground streams are constantly emitting electricity in certain wave-lengths. Most people are unable to detect the presence of these electrical emissions. Water-finders appear to be much more sensitive to the presence of electricity, so, like a sensitive radio set, they can "detect" and "tune in" these electrical emissions when they walk over an underground stream. I estimate the depth by raising or lowering the pendulum, which acts like the tuning variable condenser in a radio set. I point towards the stream with my other hand, which "picks up" the electrical energy in the same way as the aerial of a radio set. Also if I point my hand towards lighted electrical lamps, the pendulum starts to gyrate. When the light is switched off, the gyration of the pendulum ceases. I obtain the same action when the radio is switched on and then turned off.

I have often found super-imposed streams of water. By super-imposed streams I mean streams on the same site, but at varying depths, and the streams often are flowing in different directions. When I lower the pendulum it gyrates, thus indicating the depth of *one* stream. Lowering it further, on these particular spots, the pendulum proceeds to indicate the *lower* stream. Subsequent boring has proved this to be correct. I have worked out my own system of estimating the depth by the pendulum, and have never been more than three or four feet out.

I have also tried experiments when an aeroplane has been flying. Holding the pendulum in one hand, I have pointed my other arm towards the sky. When I circled my extended arm until it came in a direct line with the plane flying across, the pendulum commenced to gyrate, and gyration ceased when I moved my arm out of line with the aeroplane. I have stood in a room with an observer outside watching me through a window. I have been unable to see the plane myself, but the observer

outside has told me that I correctly traced the movement of the aeroplane with my extended arm.

After all the results which water-finders have obtained it is really remarkable to find the number of cynical people who refuse to believe in the water-finding profession. I have often had people say that I was twisting the rod myself. In order to convince them, I have requested them to grasp one arm of the V-shaped rod in their left hand while I held the other arm of the rod in my right hand. Then, walking across the underground stream, I have held their right hand with my left hand, and told them to prevent the rod from turning. They have been unable to do so, and have admitted that they distinctly felt a " pull " on the rod before it commenced to turn over. They said it was as if some magnetic force was pulling the rod down. This test, however, had a bad effect on me, making me feel faint, so I discontinued it. How many doctors or lawyers will offer their services like water-finders have to do, " No results, no pay " ?

Not many, I'm sure ! !

SOME NOTES ON EARTH RADIATION

By H. O. BUSBY

Upon reading certain articles on " Radiations Nocives " in the Bulletin of the *Association des Amis de la Radiesthésie*, I began to make investigations for myself on the subject, with results which have been somewhat surprising to me.

I set to work to endeavour to find if noxious radiations were present about my house—with immediate result. My house is situated on the top of a small hill where a close-grained mud stone, apparently an indurated fine silt, comes close to the surface. I had noted that while some trees were growing fairly well, the majority were stunted, and that certain cypress became gnarled, the centres dying out, while others died completely. In one row of trees which I had planted there are places where I cannot get a tree to grow at all, every replacement dying after a few months. At each of these spots I found a strong band of radiating soil, and where the trees were healthy this radiation did not exist.

I then began to observe the native eucalypts in the bush land and noticed that trees showing " birls," or tumours, twisted grain, as shown by the bark, and dying back of top branches were all on radiating ground. From this I went to the grass land and found that areas where the native perennial grasses were thin and poor, although some of these areas had been cultivated lightly and fertilized, were radiating areas ; the soil itself was, to all

appearances, similar to that on which the growth was much better.

I went on to the richer alluvial flats, which are sown down with alfalfa, or lucerne, and inspected certain areas where the growth always ceased earliest when the hot weather came on and the forage became wilted and yellow, while the stand of plants became thinner season by season on these areas ; I found them to be all radiating. I also examined any lightning-struck trees and found them to be on definite radiating lines. I remarked to one of my employees, after I had been examining one area, that the majority of the trees were showing signs of being channels for soil radiation and that possibly lightning might be uncomfortable there. He laughed, and told me that certain men who used to make their living by rabbit-trapping there some time ago had told him that if they had their traps set there and a thunderstorm was brewing they would not go back to them until the storm had gone, as something was always being struck in that area.

Having thus found the existence of this radiation and how widespread its effects were, I then began to wonder how it could be dealt with. I did not have very much detailed knowledge of these matters with which to reason, but made what might be called "a lucky shot" straight away. The reasoning was very elementary, just this : if radiation and lightning strike are related then proper earthing to allow dispersion of this radiation may be effective, so let us try.

So far as I have been able to observe the results of this earthing to date they appear definite. This earthing was done in the autumn, which was very dry, and we did not get rain until June 12th, just a month from the time of writing, while frost had been prevalent. Our Southern Hemisphere winter must be borne in mind to grasp that this is not our growing season. The lucerne fields are dormant at present, and the grass growth is kept back by the lack of sufficient warmth, but the cypress trees which have shown very little growth for several years have put out fresh growth from every point in an astonishing manner, a wattle tree, acacia, which was also growing slowly, has put out about a foot of fresh growth from every point, while another young acacia of a different variety, which had given indication of being stunted, as the growing point had yellowed and twisted, has grown up straight about a foot with healthy leafage though slightly frost tinged.

These radiating areas do not seem to be related to water streams, except incidentally perhaps, they are too wide-spread and frequent ; on trial with a rod for water I did not find much definite association. I frequently defined the radiating areas, marked the edges, then put in a metal conductor on the main radiating line. Immediately, with the rod, current movements to the conductor could be felt, as though the whole area had

become active. Within a few minutes I found that the edges of the area were contracting rapidly until, within a short time, the only part of the area giving a radiating reaction was the central line. This gave the impression that the soil absorbed this radiation as though its conduction was poor, but when a conductor was put in all the current was given off by the conductor and the excess drained out of the soil.

I have found, too, that radiation moving up a tree can be drawn from the tree by means of a metal conductor placed on the line of current; the resistance of the tree appears to be considerable and a metal conductor provides an easier path. A well-placed conductor will drain a large area. I have put an iron pipe, 20ft. long, 7ft. in the ground, the upper end being furnished with a bunch of wires, and have found that there were current movements to it from an area with a diameter of several hundred yards. It has been noted that weed-infested areas were radiating areas.

I have found, in the few cases examined, that certain people affected with rheumatism, were sleeping in rooms over radiation, and I have brought about considerable improvement in their condition by putting in conductors to draw the current way from the house. One elderly man who was becoming helpless and losing weight can now walk anywhere, and has put on twelve pounds in weight within a few weeks. The daughter of one of my employees, a robust type of girl, began to lose weight rapidly, so that her doctor recommended a change of scene. Her father asked me to look at the house. After doing so I told him that one of the rooms was situated over radiating soil. I was then told that it was only since the girl had occupied that room that she had begun to develop ill-health, also that a younger sister who slept in the same room was showing rheumatism in her knees. I put in a conductor, and the girl now complains that she is becoming too fat, while her younger sister is growing well and has had no pains in her knees since the conductor was put in.

A friend, who is also a dowser and a member of the B.S.D., has followed my instructions and has put in conductors to draw off the radiation from his fields. He has told me that since he has done this he has received substantially more rain from each fall than his neighbours, all of whom have rain gauges. One such instance does not prove anything, but opens up possibilities.

I noted on a trip out into the drier open country that most of the country tried with a rod gave a reaction showing radiation. What would be the effect on the climate if a considerable area were freed from radiation is an interesting speculation. I am looking forward to the coming spring and summer; the growing season may provide some interesting evidences, as I have put in conductors to cover an area of more than two thousand acres.

THE ROD OF MOSES

Nearly every history of water divining, however brief, contains a reference to the Old Testament story of Moses "smiting" the rock to obtain water for the children of Israel wandering in the Sinai desert (Exodus xvii., 4, 5 and 6), and cites this well-known incident as the earliest record of water divining.

Apart from the fact that dowsers do not "smite" the ground they are dowsing over with their rods, a much more plausible explanation is given in that absorbingly interesting book "*Yesterday and To-day in Sinai*," by Major C. S. Jarvis (Blackwood). Major Jarvis was for 13 years Governor of Sinai, and without doubt knows more about that desert country than any other European.

Quoting from pages 174-5 :—

"The striking of the rock at Rephidim by Moses and the gushing forth of the water sounds like a veritable miracle, but the writer has actually seen it happen. Some of the Sinai Camel Corps had halted in a wadi and were digging in the loose gravel accumulated at one of the rocky sides to obtain water that was slowly trickling through the limestone rock. The men were working slowly, and the Bash Shawish, the Colour-Sergeant, said, 'Give it to me,' and seizing a shovel from one of the men he began to dig with great vigour, which is the way with N.C.O.s the world over when they wish to show their men what they can do, and have, incidentally, no intention of carrying on for more than two minutes. One of his lusty blows hit the rock, when the polished hard face that forms on weathered limestone cracked and fell away, exposing the soft porus rock beneath, and out of the porous rock came a great gush of clear water. . . . This is a very feasible explanation of what happened when Moses struck the rock at Rephidim, and, what is more, Moses—being an extraordinarily knowledgeable man—had probably a very shrewd idea that something of the sort would happen."

It seems unnecessary to refer this incident to "dowsing" on the part of Moses when such a simple and straightforward explanation is forthcoming. Moreover, dowsing in the European fashion amongst native races seems to be entirely unknown at present, and there is no reason to suppose that it was known in bygone ages.

SOME EXPERIMENTS ON FRUIT TREES

By Lt.-Colonel A. B. CUNNINGHAM, C.B.E., D.S.O.

Note.—All gyrations are anti-clockwise unless otherwise stated.

Locality.—At a height of 7,400 feet on Mount Elgon, Kenya Colony.

Experiments have been conducted since October, 1935, and any opinions stated must be regarded as provisional till time has permitted of results being more definitely indicated.

With the forefinger of the left hand in contact with a growing tree and moving the finger from part to part on a tree, healthy portions will cause the pendulum to gyrate and unhealthy portions will cause oscillation.

With a "live" gall held as a "sample" in contact with the pendulum, gyrations were obtained at unhealthy parts, showing that many of the illnesses were either directly due to galls or related in some way to the effects produced by galls.

Ordinarily a tree is divided into two parts—the stock and the scion—but from the point of view of unhealthiness, it is like Caesar's Gaul, divided into three parts, namely (*a*) the branches, (*b*) the stem, and (*c*) the stock, including roots below the graft. Any of these portions either individually or collectively may be ill. Many cases have occurred where the stock only was ill.

In the case where one branch is ill the affliction can often be traced down one strip of the stem to one particular root. In the case of a spiral growing tree (Jordan and IXL almonds) this illness will follow a spiral course round the tree to its particular root. I have been told that this "branch to root" connection has been ascertained by means of coloured fluids injected into the tree. This was not known to me at the time of my tests, but confirms what appeared to me to be the case.

A "live" gall held in the left hand as "sample" caused gyrations when the pendulum was held over fungicides (copper sulphate, paraffin, &c.) but only oscillation when the gall had been soaked in paraffin; the gyration can be interpreted as a "request" for paraffin as a medicinal requirement to kill the disease in the gall and the oscillation as a sign that the disease had been killed. The paraffin can be either "lamp" or "power" variety.

Whereas in normal divining you set out by means of a "sample" to find its like or by other methods to ascertain what has caused your pull or indication, the above example shows a new branch of this "dowsing" science in that a living object indicates what *it wants*.

Taking round a "medicine" box containing liquid samples in small bottles of lime sulphur, iron sulphate, copper sulphate, and paraffin—unhealthy trees (other than citrus which usually want iron sulphate) generally indicated that the stem and stock "wanted" (*i.e.*, gyrated to) copper sulphate and paraffin It was at first thought that they were alternatives, but apparently both may be required. A case has occurred of an apple tree requesting at the same time copper sulphate on the stem and paraffin on the stock. Paraffin, being possibly only recognised as a spray component for coffee trees, was applied to apple trees as being very powerful and a probably new method of attack on illnesses. Its immediate success lead to experiments being extended to other genus of fruit trees.

Paraffin was applied by means of a brush in the case of apples on branches, stem and roots; in the case of almonds, plums, pears, peaches, &c., mainly on the stem and roots of those trees that indicated they wanted it.

The result on the almonds was a fair amount of exuding of gum and the appearance of new galls, some up to the size of a fist, on the roots.

The former galls had been removed as far as possible with hammer and chisel! These new galls would not re-act to the sample "live" gall, and the inference was that they were "dead" and were caused by the tree discharging diseased or unhealthy matter. The appearance would almost certainly have shocked expert fruit growers, but if these discharges are in the nature of abscesses benefit should result. Misled perhaps by the rapacity for medicine shown by the apples, it is possible I gave the almonds too frequent treatment, as a large number of them look, in June, 1936, very much dead.

The deathlike appearance of the many almonds led to them being neglected for months, but a recent (August, 1936) clean up and test suggests that many of them might make use of the statement, attributed to Mark Twain, "the report of my death is grossly exaggerated!" Apart from those that never started into growth, most of the others have died from "collar rot" owing to weeds and earth having accumulated up the stem from mulching, wash and such like causes. I doubt now if any have really died from medicinal treatment. Some may bave been uprooted prematurely, as they look no worse than others which indicate signs of life. One case of an uprooted tree may be of interest. It had been lying in the open for probably at least a week. To ordinary inspection the tree and its roots were dead, but on close examination and test there were found two inside roots that tested as alive; the tree has been cut back and replanted to see if it will revive. It would seem that where nature is unable to cure a root, new roots are thrown out while the old roots hold

the tree in position; later it is expected that the old roots will gradually rot away (they are "killed" material) and will be consumed by ants and similar scavengers.

A peculiar point is that *as soon as* the medicine has been applied the tree causes the pendulum to oscillate over the medicine sample, implying that the medicine was correct and that no more is required at the moment. Should the medicine be too weak (as may happen with solutions that can be diluted), the pendulum will gyrate until a second coating has been applied. Trees but slightly ill may be satisfied with one application, but generally they have requested further applications after an interval. An interval of a month between applications may be desirable and safer.

Apples of many varieties respond to this treatment in a truly astonishing manner, although the response diminishes after the first enthusiasm. Trees that had made little progress in growth for five or more years started new growth in an apparent endeavour to make up for lost time!

Branches that no method could induce to throw leaves other than at the tip commenced to throw spurs at every possible joint as soon as the branch was cured. This "bare branch and tip growth" is known as "delayed foliation." Experiments in South Africa are curing it by means of diluted applications of raw linseed oil, which acts as a stimulant; experiments are also being conducted there with animal oils, such as whale oil. These South African experiments also noted how apples responded more rapidly than other fruit trees to oil treatment.

Some apple varieties are much slower in deriving benefit; this may be due to the variety and to the degree of illness. The fruit grown subsequent to treatment has a definitely superior and healthy appearance. The bark of the branches gradually changes from a dirty grey or black to a yellowy-green. The apples have made a new request (August, 1936), which has not been previously noted, namely, for "iron sulphate," from the ground line upwards for a few inches up to 12 or so inches. This application is independent of the graft junction.

The existing leaves, suffering from "peach leaf curl," on a "Killiekrankie" peach became dead, and dropped off after the early applications, showing a preliminary attempt at a cure. This tree appears now (June, 1936) to be undergoing a thorough "clean-up" from the roots upwards.

After a course of paraffin treatment many types of trees indicated that they were still unwell, but did not want any more paraffin. Their request might change to copper sulphate, to iron sulphate or to lime sulphur.

After treatment the discharges of gum change from a dark brown colour to yellow and are finally colourless. An IXL almond, after discharging gum, started discharging (and is still doing so) a white and brown thick fluid on the stem. It also appears to be having a "clean-up" from the roots upwards. From the ground to the branches is about 3ft. 6in. The discharge ceased on the stem and commenced again just above the junction of one of the three main branches. It has now (August, 1936) ceased at this point and started some fifteen inches higher up the branch. This tree has a peculiar appearance, as two of the three main branches have leaves and blossom while the third remains "dead" in appearance and in test. This tree has requested frequent applications of copper sulphate on the stem, but does not appear to suffer any cessation of repair work after application. It suffered from galls both on the roots and branches.

Young trees (two years from nursery) do not appear suitable subjects for treatment, but they might respond to much weaker solutions.

When stem and roots indicate that they require no medicine it has occurred that one or more branches indicate that they are still unwell or visibly show illness. Putting medicine on that branch alone does not appear to produce the desired result, as the illness seems to be driven out of that branch and reappears in a branch that previously tested healthy. It is not known whether or not treating only the stem (whether healthy or not) may lead to the eventual cure of branches. It is possible that when the sap is on the rise this may be so. Meanwhile, it may be found satisfactory to put the medicine on both the branch and the healthy stem.

In view of the amount of material discharged in the form of gum, galls, &c., it seems now a good plan to apply to the ground around the trees some restorative foods, such as superphosphate, before treatment so as to provide "convalescent" food on which they can rebuild, and to stimulate root growth. This was not done in these earlier experiments, as it was not known what would happen under treatment, with the result that many trees are looking extremely "dead" and possibly are dead, though some of the "corpses" tend to indicate revival.

Two cherry trees notified that they were unwell, but declined all samples in the "medicine" box. As much has been written on the benefit of iodine to humans and animals, a sample was procured, offered to the two trees, approved by them and applied to their stems with beneficial effect. Some time afterwards, like Oliver Twist, they asked for more, and were given it. This second request seemed to confirm their special peculiarity, as so far no other genus of fruit tree has desired this medicine.

An interesting development is arising with three trees (a "Jordan" almond, a "Shackleford" peach and an "October Purple" plum) that look in every way as dead as dead can be. At the moment (June, 1936) there seems to be a surge of life working upwards from the roots. Gyration is obtained slightly higher from day to day. Should this recovery continue, it is evident that however hopeless a tree may look after treatment it must not be uprooted until it is certain that there is no hope of it reviving. Other "dead" trees (almonds) are throwing suckers from the roots, showing that the roots are still alive.

This surge is very noticeable in trees that have not assumed so death-like an appearance. The rising sap is cracking the bark; old, diseased bark is peeling off, and where "sour sap" was evident from the darker depression in branches these furrows are being burst open by the sap tending to join and heal underneath. This recovery action proceeds slowly and steadily upwards, but when given further medicine, as indicated by the trees, repair work by the main reconstruction party seems to cease for the time being (August, 1936). It may be that a sap reversal takes place so as to remove down to and out through the roots the unhealthy material accumulated during repairs and thus clear the way for a renewed assault upwards. The IXL almond previously mentioned is not exhibiting this hold-up, but it is discharging upwards.

Out here fruit trees may have the peculiarity of having no dormant season, flowers, small fruit and fully ripe fruit being on the tree at the same time. It looks as if this peculiarity will be diminished; some plums have very definitely been or are going dormant, much more so than before treatment.

A new phenomenon on some apple trees has been the appearance of flowers and fruit on the fresh new slender spurs.

The branches of apple trees had small white spots, smaller than a pin's head, on them. With paraffin these spots gradually die and the resulting unhealthy hole heals.

Apple trees seem to want and can absorb frequent applications with benefit and without going back.

After rain the healthy portions dry, but the unhealthy portions remain wet for a longer time.

Citrus trees mainly request iron sulphate. They may also show pimples, varying in size from half a pea to half a marble. These pimples test "unhealthy," though the tree may test "healthy." Iron sulphate seems to reduce this affliction, and diminish "yellow leaf" (Chlorosis). The pimples on the oranges have been of a small variety, which may account for the oranges being more amenable to treatment for these pimples. A request has just been noted (August, 1936) by the citrus for paraffin.

This has not previously been recorded. This request is for an application from the ground line upwards for a few inches and is independent of whether or not the tree has been grafted ; some orange trees have been grown from pips.

In view of the fact that the very large number of fruit trees tested all gave originally an " ill " reaction, it was thought that there must be some harmful factor which had been introduced by human agency and which was common to the lot, as soil fungus alone could not be so universal over the area, which gave but few points of reaction to the gall sample. One contributory and common source was traced to some grey matter in boma (cattle) manure. This raw (uncomposted) manure had been put in the holes for the trees.

This grey fungus matter was " killed " by copper sulphate or by paraffin. In its natural state the pendulum (with gall sample) gyrated over this grey matter.

The normal method of spraying trees appears from these experiments not to be entirely satisfactory, as the spray would fall mainly on the branches and the stem, leaving the stock (and roots) untouched. An unhealthy stock must have some harmful effect, however healthy the ~~scion~~ may be, and may be the reason why sprays have to be applied so often, as the whole tree has not been made healthy.

It looks as if a whole tree can be made healthy, and it remains to be seen how long it will remain in that condition. It is possible that it may be found that spraying, other than against insects, can eventually be much reduced.

. . . . .

This method of obtaining information from the trees themselves as to what they want for a cure to be effected seems to offer a rapid means of obtaining a line of attack in research work, whereby time, cost and the number of experiments might be considerably reduced.

If trees are so " intelligent " is it unreasonable to expect even more important results if " dowsing " doctors conducted experiments on these lines, working first with known antidotes, in connection with the diseases of the human ?

. . . . .

The experiments previously described have been " medical " or " curative " in character and have produced some favourable results. What now follows is a continuation of the " want " method in connection with " nourishment " or " food " supplies. The distinction made between " medicine " and " food " is that a healthy *or* unhealthy part of a tree will request " food," whereas " medicine " will only be in demand by an unhealthy portion.

It is being carried out as "requested," but to obtain comparative results extensive experiments with controls would be necessary.

The "medicine" box contains also soil and food samples. These "food" samples are: Wood ash, bone meal, boma (cattle) manure, bat manure (found in local caves), agricultural lime, humus (decomposed forest foliage found on surface), superphosphate 40 per cent., superphosphate 18 per cent., sulphate of potash, potassic super, sulphate of ammonia, flowers of sulphur, and some commercial mixtures of fertilizers.

These samples are put up in small bottles; 1oz. bottles were found to be too big.

With the left forefinger on the stem of the tree the pendulum is oscillated over each uncorked bottle in turn.

Supposing a tree indicated that it wanted wood ash, by the pendulum gyrating over the sample in the bottle, gyration will also be obtained over a very large amount (say a bucketful) of wood ash as well as over a very small amount. If the very small amount is gradually added to, an amount is reached where oscillation occurs.

As soon as this amount has been scattered on the ground around the tree the pendulum will oscillate over the wood ash sample, showing that the requirements of the tree have been supplied. The majority of requests are for natural fertilizers, wood ash, manure, humus, &c., and those for artificial fertilizers up to such small amounts as might lie in a teaspoon.

It was found desirable to take a very small amount as a sample basis and change down from 1oz. bottles to a smaller size, and in some concentrated cases only half fill this smaller size.

It has been assumed that such a small amount is the minimum necessary and the immediate requirement, and that just as a human being can exist on a very small amount of food so he can digest very heavy meals which may be taken to correspond to the 1-5lb. of fertilizers per tree as recommended by books.

Seeds and fruit have been tested for their requirements, and these have been tabulated.

Where possible, six varieties of a genus of growing trees have been tested, and it is of interest that each variety of a genus tallied in requirements with the other varieties of that genus.

The different wants of a growing tree are less than that of its fruit. This difference is attributed to some of its requirements being already in the natural soil or may already have been added to the soil by means of wood ash, humus and manure.

Supposing coffee is to be planted in a certain field. Coffee seed would first be tested against a gall to see if it was healthy

or otherwise. Its requirements, if not on the tabulated list, would be ascertained from the samples in the "medicine" box. These requirements would be boma (cattle) manure, lime and humus. Seed under test should be spread on paper and not be in a tin.

With the left forefinger on the seed the pendulum is held over the soil sample from the field; if gyration occurs the soil is suitable for the seed and if oscillation the soil is unsuitable. Unhealthy maize seed rejects a soil sample which is approved of by healthy maize seed. The fault is in the seed, not in the soil; hence the necessity of first testing the seed for healthiness.

The soil sample is then tested against the samples in the box, and gyrations indicate that it contains (say) humus and manure. The coffee seed is then placed on the soil sample and the left forefinger on the seed. Readings indicate the requirements to be (say) humus and lime. The inference is that the field will require the addition of lime and also of humus (as the existing natural supply is insufficient) and that no manure need be added.

The unhealthiness in a gall appears to be in some way connected with most, if not all, forms of illness in vegetation, such as the blights of strawberries, peas, &c., as, with a gall in contact with the pendulum, gyration is obtained when touching such illnesses.

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At the beginning of these experiments (September, ~~1936~~) there were only small requests for artificial fertilizers which were supplied. Requests since then were mainly for natural fertilizers. This may be seasonal requirement, or that happy state in convalescence when an appetite develops. All trees in their various stages of health, not excluding the "dead," have made similar claims according to genus. Peaches, almonds, plums, apples, pears asked for superphosphate (18 per cent.) and sulphate of potash. Citrus and apricot only sulphate of potash. Cherries only superphosphate (18 per cent.), and while one tree still wants iodine, the two trees have requested also copper sulphate, which is quite a new demand.

While considering "food," a new idea as regards "green manuring" has come to light (August, 1936). Castor oil trees have been used as shade trees for coffee, but opinions exist that the trees are exhausting to the soil and are therefore likely to be harmful. It is not clear how a growth can exhaust a soil if its products are not removed from the soil, but it might be harmful if it was too greedy. As my coffee trees under castor oil shade had much better foliage than those not so shaded I tested coffee trees against castor oil seed and was considerably surprised to find that the coffee tree "wanted" castor oil as a "food" (no accounting for taste!). Not merely was castor oil not harmful but actually necessary and beneficial.

This result suggested a new series of tests, which have been limited by the difficulty in obtaining samples for this purpose. Requests for "food" so far recorded are as follows :—

Coffee—Castor oil
Plums and Loquats—Linseed
Apple—Sunflower
Almonds—Canadian Wonder beans
Figs—White or yellow maize
Pears—Barley
Walnut—Black Algerian oats
Peach—White oats

These results suggest that each tree has its own distinctive "green manure." As would be expected, the tree and its "green manure" can grow under the same conditions ; a "home" tree has not asked for a purely "tropical" manure. Quite a new idea on manuring has been revealed.

Although some of these "green manures" could be applied in form of oils (and this is being tried) it may be the better plan to grow these "green manures" independently and away from the tree and then dig them in around the tree when sufficiently grown or after having been composted.

In the case of some plums undiluted raw linseed oil has been applied. The trees indicated their requirements as being a narrow band of oil about one inch wide applied at a place a few inches above ground level.

This principle of a distinctive green manure has been made use of when testing the "dead" almonds. A tree might refuse copper sulphate owing to (1) being well, (2) its requirements having recently been supplied, or (3) being dead. If, however, gyration was shown over Canadian Wonder beans, the inference was that the tree was alive and if in addition the stock wanted copper sulphate confirmation was obtained.

A test, soon after meeting these chemical demands, to check once again the distinctive "green manures" produced an unexpected result. The trees no longer wanted their particular "green manure." A few live almonds with leaves that had been given only superphosphate produced rather feeble gyrations over Canadian Wonder beans, implying that their request for food had not been fully met. From these readings it looks as if the distinctive green manure and certain chemical foods may be alternatives. Further experiments are necessary to confirm or to refute this possibility, as interchangeability has not been previously revealed.

DOWSING, DIVINING AND DIAGNOSIS

(A Lecture delivered to the British Society of Dowsers on October 15th, 1936, by Mr. H. H. Langelaan)

Mr. President, Ladies and Gentlemen,

Let me first call your attention to the statement of the primary object of our Society, which is, to encourage the study of all matters connected with the perception of radiation by the human organism with or without an instrument; also to spread information amongst members about the use of dowsing for medical and other purposes.

Some of the experiences which I propose to relate to you may appear so remote from the generally accepted idea of dowsing that I thought it better to prepare you, by calling your attention to the comprehensive nature of our study, rather than surprise you by plunging in at the deep end without warning.

In an article by Dr. Adolph Selige, published in our Journal for September, 1936, he mentions that it is now a fact accepted by science, that "Everything radiates," but apparently there is an exception to this fact, for Dr. Oscar Brunler, in his address given before you on February 18th, 1936, stated that during his researches he found that the blood of people suffering from cancer does not radiate, whilst the blood of all other men radiates, no matter what the ailment. However, to the general statement that "Everything radiates" I add another general statement, that "Everything has an Aura, or atmosphere." It is general knowledge that the Earth has an aura, or atmosphere, and its distance from the surface of the earth has been measured, but it is less well known that trees, buildings, minerals, water, animals and human beings also possess an aura of their own.

The atmosphere of the Earth is plastic, and is impressed by the radiation of energy from the Sun and Planets transmitted in waves of light and heat, and the experiment I am about to relate will illustrate the action of radiation from the stars on the aura of a pebble. Anyone can repeat this experiment without the slightest difficulty. My wife and I were sitting on the sea shore amongst a crowd of people on a summer's afternoon, when we thought we would test our ability to obtain impressions of radiations. My wife picked up a pebble from the beach and held it with her finger tips. I selected another one and held it in a similar manner. Then we closed our eyes and waited for results. A great stillness came over me, then it became chilly, with a two-o'clock-in-the-morning feeling in the air which is known to those who have slept out of doors all night. Gradually it became intensely dark, but in a little while the stars shone out in great brilliancy. It was a wonderful sight. Just then

my wife gave a little startled cry. She described to me how it seemed to her as if a wave came up to her and passed right over her head; she had noticed the transparency of the water as it passed over, and had experienced a slight sensation of fear. That was the end of our experiment. With patience, it is possible to obtain impressions from almost anything, which will give an accurate account of the experiences it has passed through.

For instance, while walking on the hills at Great Malvern, I "saw" small groups of people of a dark race, with black, lank hair. Men, women and children were dressed in animal skins, the men had spears in their hands. The name of "Iberian" seemed to fit them very well. Turning to my left, where previously I had looked down on the level plain, I saw nothing but a vast expanse of sea, glittering in the sunlight as every tiny wavelet reflected its sparkle of light, dazzling to the eye.

Turning again to continue my walk I noticed that another part of the plain had the appearance of a forest with clearly visible pathways leading in various directions through the undergrowth. A friend to whom I mentioned these experiences told me that Malvern had once been a Royal Chase, and that there was a legend of a monk, who, having to do penance by travelling from the foot of the hill to the summit, along the stony road on his bare knees, expressed the hope that the waters of the Bristol channel would once again flow over the valley. So what I had seen were probably impressions on the Earth's aura of scenes of former days.

No doubt you have read of dowsers who not only locate underground water without an instrument but also claim to "see" the water as well. I would like to tell you of one experience of mine of a similar kind.

A friend with whom I was staying in Cornwall, invited me to try to find water under his grounds. I told him that I was not a dowser, but would like to try, just for the experience. We could not find a twig, so I tried by holding out my hands before me, palms downwards, and walking about blindfold. After walking for a time without result, my friend took off the hoodwink, and explained that he had led me over the lawn, underneath which were the rainwater tanks, just to see if I felt any reaction. We tried in another part of the grounds, where I found my arms strongly affected. We mapped out the course of a supposed stream with stones, when suddenly I became aware that I could "see" a tiny stream of water, apparently about fifteen feet below the surface.

When visiting a different part of Cornwall I had another experience of "seeing" underground. Becoming tired, after walking along some field-paths, I sat down to rest on a granite step at the foot of a stile. After a while I became aware that

I was looking down into the earth, watching some queer little creatures coming out of a cleft in the rock. They were about three inches in height, and, save for the thinness of their limbs, were fashioned much like human beings. They were jovial little creatures, all smiles, and apparently just as amused at my appearance as I was at theirs, for they seemed fully conscious that I could see them as they could see me. The most peculiar thing I noticed about them was that each carried a small pick, or pick axe. It flashed across my mind from some association that perhaps they were called Pixies. I wondered if the name had originated through their being seen with picks, and the word being changed to picks's or pixies, by the use of the double plural which is commonly used in the West country. My friends tell me it is not so, and my dictionary does not help, for it simply states " etymology unknown."

If you will look up the issue of our Journal for June, 1936, you will find an interesting article on Music, Colour and Radiesthésie, by Guinevere de Beaumont, A.R.C.M., in which she quotes a saying of Louis Bertrand Castel, that " at every period light has been compared with sound." This brought to my mind some personal experiences of the interaction of light, sound, colour and form, which I trust you will find interesting.

One hot summer's day I was in the City of Exeter, and in the afternoon I visited the Cathedral. You can easily imagine the contrast between the glare of the sun outside and the " dim religious light " inside. The Service had already begun when I entered, and as I stood absorbed in the beauty of the music and the singing of the Anthem, I became aware of delicate tints of colour floating about above the heads of the choristers, slowly forming themselves into bands of colours, until they filled the whole of the space high up above the choir with a beautiful luminous mist, which, for colour, I can only compare with the rainbow.

The other experience occurred in a Devonshire church during Divine Service, where, during the singing of the Psalms I saw two forms floating above the choir, one on either side. They appeared to be formed of a material resembling grey smoke. One was shaped like a large harp, and the other like the long trumpet which is spoken of as the resurrection trumpet.

In the same church I witnessed a peculiar example of radiation from the human organism, when the Rector, the late Earl of Devon, gave the benediction. As he held up his hand, and spoke the words of the blessing, I noticed tiny tongues of flame emanating from his finger-tips. In the course of conversation with him afterwards, he told me that he had no recollection of feeling any particular sensation at the time.

As divining and divination appear to mean much about the same thing, I will tell you of an experience which will illustrate the universal method of conveying knowledge by means of symbols, and which comes within the definition of divination.

A lady friend, of some seventy summers, was spending a holiday with us. Round the fireside in the evening we used to discuss this subject, of which she had a wide experience. One evening I "saw" on her lap a tiny baby dressed in a white frock with short sleeves. The sleeves were tied up with blue ribbons. It happens that when I was a child it was the custom in London, if nowhere else, to tie up the sleeves of girl babies with blue ribbons, and boy babies with red ribbons, so I told our friend that I saw a little baby girl on her lap. To our surprise she replied, "That must be my daughter-in-law's, but do not tell me it is a girl, I did so hope it would be a boy." It is said that "coming events cast their shadows before," and so it proved on this occasion, for some months afterwards we had a letter from our friend to tell us that we were quite right, for a little grand-daughter had come to Town.

I do not pretend to know how knowledge of a future event becomes known to us; probably it is concealed in the mystery of the divisions of time, past, present and future.

Before I relate some experiences in medical diagnosis, I had better tell you what I consider a good definition of Diagnosis; the clear cognition of what is really the matter. My own experiences of clairvoyant diagnosis without an instrument have proved singularly accurate without exception. Here is an account of a very simple one. The host of a guest house where I was staying asked if I would look over him to try to discover what was the matter with him. He complained of a most distressful feeling of insecurity, one leg failed him occasionally, and he had difficulty in saving himself from falling. Before he could complete his story there flashed into my consciousness an awareness of the seat of his trouble. It is quite a simple matter, I told him. There is a pressure on the femoral artery of your left leg, which impedes the circulation of the blood. Your leg is therefore almost lifeless at times, and fails to support the weight of the body.

"I believe you are right," he replied. "I am wearing an appliance which has become uncomfortable lately and becomes misplaced." When the necessary adjustment was made the trouble ceased. I also thought it wise to tell him that I could "see" the fibres of his muscles, which appeared deficient in fat, for there was hardly a particle visible. He was not surprised, for he told me that he had been fasting in an endeavour to cure himself of what he thought might be blood pressure as the cause of his falling about.

On another occasion, a man with whom I was in conversation happened to mention that he had never had a day's illness in his life. "But your collar bone has been fractured just here, at some time" I said, touching the spot with the tip of my finger. "How did you know that?" he asked. "I can see the slight ridge where it was joined" I told him. "You are quite right," he replied, "but that was an accident, not an illness." It struck me as rather a subtle argument to prove himself in the right, but I agree that he had the best of it. Something else, though, concerned with his heart, which showed up quite clearly to me, I could not tell him, for fear that it might alarm him and make him ill. That is a difficulty which presents itself to those who "see" things in this way. During a period of several months I had an occasional opportunity of witnessing the development of a malignant growth in the breast of a woman, and watched a long fibre reach over the shoulder and partly down the arm. She was being attended to by her medical advisor all the time, and was eventually operated upon. I learned that the opening corresponded with the position of the fibre that I had seen.

It is my opinion that much of our inner knowledge is gained through the action of our aura. I once saw a woman diagnosing another. Her aura extended towards her patient, and I watched it enter the body, and with its surface search round and in the substance of all the internal organs. Perhaps I ought to mention that the human aura has the appearance of a luminous haze, which expands and contracts, and changes colour according to our mood and the influences of our environment. It is extremely sensitive, something after the manner of a magnetic field. I saw a most beautiful one belonging to a lady who was in a highly exalted mood. It was widely extended, shimmering with light, coloured like the rainbow, and radiating from the centre rays of golden light. Another one I saw, belonging to the late Bishop of Exeter, while he was taking the service in Exeter Cathedral, was also very extended, and of a deep purple colour.

A lady was about to give an address to a room full of people. Just as she was about to begin I noticed her beautifully clear amber-coloured aura rapidly withdraw into her body, where it remained all the time she was speaking. Afterwards I spoke to a friend of hers about it, and she was not surprised, for she knew that the speaker had overheard a spiteful remark spoken about her by an acquaintance.

This seems to me, in some degree, to answer the question raised in the issue of our Journal for September, 1936, that it seems to be a general rule that whenever dowsers have to work in the presence of numerous spectators their skill seems to fail them. The aura can be worked upon mentally, so as to case-harden it and render it impervious to any particular influence

desired, but unless this is done, the highly sensitive aura of the dowser is liable to be confused by the auric emanations of the spectators, particularly those of the very positive type of person who strongly desires to prove that dowsing is not a psychical process, thus rendering the results uncertain.

From what I have told you I think you will agree that there are more things in Heaven and earth than we dreamed of when we set out to study "all matters connected with the perception of radiation by the human organism."

In conclusion, it seems to me that our study, which commences with the mystery of man in search of water to supply his bodily needs, would, if continued, lead us in the end to the Quest of his Soul for God, to satisfy his spiritual needs.

RADIESTHESIE

By J. BRAUN, M.D. (Geneva)

(*Reprinted from "Progress To-day," January-March, 1936*).

Radiesthésie is the name used on the Continent for the art of water divining. In England we prefer the word Dowsing, from the verb to dowse, meaning to use the divining rod. Radiesthésie, or sensitiveness to radiations, having a more general meaning, seems better suited to its various fields of activity. If water divining was satisfactory in the ancient days, it does not explain all the possibilities that our modern times can derive from the use of the rod or the pendulum. The word divining, in itself, is incorrect, as Radiesthésie is not guess work, but the ability of establishing contact with radiations. In some of the tombs of the Pharaohs, wooden pendulums have been found, and we have reasons to believe that some of the menhirs and cromlechs were erected according to certain radiesthésic principles. Moses, leading his people towards the land of promise through the desert, was able to provide them with water by striking the rock with what must have been a divining rod. During the reign of Flavius Valens, some 370 years A.D., the pendulum was in use for delivering oracles. All through the middle ages, water divining was considered the gift of sorcerers and as such drastically condemned by the Church. We arrive thus to the modern period, when the question is studied and discussed in a broader and more scientific manner, when quite a number of possibilities are admitted such as finding water, underground cavities, metal, oil, &c. Aiding the farmers in the selection of seed, soil, and manure, and last, but not least, diagnosing disease and its treatment in mankind as well as in cattle.

Animals are very sensitive to radiations, the best example being the almost miraculous way in which a dog or a cat will find its way home from great distances over unknown ground. Another good example of this faculty is, I think, the homing pigeon. Have you ever noticed its actions on being liberated after a journey over great distances ? The birds fly round and round, in a circle, until having picked up the correct radiation they are enabled to return home in a straight line. What is magnetism if not radiations emitted from the hands of the person magnetising ?

The medical side of the use of the pendulum is the only one I will write about for the present, but before going any further into this question : What is a pendulum ? A pendulum is a small ball hanging from a piece of string. This ball can be made of wood, bone, ivory or metal, it may be light or heavy, and of various colours. Owing to the radiations, the pendulum will show various movements either in a straight line to and fro, or in a circular way clockwise or anti-clockwise. These various movements are used in medical radiesthésie for the detection of

1 the disease
2 the region affected
3 the treatment
4 the diet.

Various methods are adopted. One is in conjunction with the wave-lengths of the various illnesses. The same principle also permits the detection of the vitality of the patient. This shows at once the marked superiority of radiesthésie over the methods adopted by those of the old orthodox school, as the radiesthésist works on the radiations of each case, which means a personal treatment, good for that particular patient only. It is therefore much more individual, but it also allows the radiesthésist to follow, step by step, the way the case is progressing, by the way the vitality of the patient is going up or down.

Another method is worked on an anatomical board. Through the tuning up of the pendulum with the radiations of the patient, any organ, in a diseased condition, is soon detected. These methods are not only most accurate, but allow the detection of a pathological condition, some time before it could be recognised by older methods. It will be easily understood that an illness, discovered in this way, at an early stage, has many more chances of being, if not cured, at least arrested. The radiations are so strong and so lasting that the patient does not need to be present, a small phial of urine or a few drops of blood, on a sheet of white blotting paper, will give out all the radiations needed. In Nature, everything is radiation ; light, heat, electricity are all manifestations of the same system of vibrations, and the difference between

them is only one of length or frequency of the vibrations of what is called the Ether. It has been presumed for a long time, that matter itself means a concentration of energies, and what then is energy if not a particular form of vibration ? We know two forms of matter, the inert and the living one. In our everyday life we are surrounded by radiations, as for instance by those of wireless stations, of electric overhead lines and more recently of the numerous Neon signs. There is not the slightest doubt that all these radiations are affecting our health. This new method has not been recognised by the orthodox schools of Medicine, but no new idea has ever been accepted by them unless under the pressure of public opinion.

For years massage, hypnotism and medical electricity were left in the hands of so-called quacks until the facts became so evident that they could no longer be ignored by official science. It is said that radiesthésie has no scientific basis, but could one name any one part of Medicine which started on solid scientific ground ? Medicine is not a science ; it is an art. As such it will keep that personal touch so essential for the good understanding of the psychology of a patient. Radiesthésie is very closely linked up with homœopathy, and this is easily understood, as both work on the principles of symptoms, and symptoms are also radiations. Radiesthésie has many points in common with psychic science. This again can be explained by the word radiation. I firmly believe that it is through radiations that we establish contact with those who have passed beyond. Here again the medium acts as a transmitter which has to be tuned in so as to permit contact between emittors and receptors.

Medical radiesthésie has another very vast field of investigation open before it, *i.e.*, the question of colours. For years it has been noticed that some pathological conditions are influenced by colours. Measle cases have been placed in rooms of a certain shade. Blue radiations have been known to have a very soothing action on some excitable nervous conditions. Through the pendulum we can tell the shade suitable to each patient, in this way we can stimulate the apathetic, we can calm the over-excited ones, and tone up the weak and anæmic ones. Leaving for a while the medical side of radiesthésie, we find that it will allow us to discern the sex of the writer of a document ; the same pendulum will let us follow the movements of a person through the various parts of a country. All that is needed is to hold something belonging to the person we want to find.

When we have diagnosed an illness it is easy to see what medicine is most suitable to the case.

To describe more fully the various methods would be of little interest to the public, therefore I prefer to give a few facts that I can vouch for as genuine.

A friend of mine, for years suffering from pains in the right side of the abdomen, was compelled through the pain to stretch himself on the floor, very often for more than an hour, waiting for the pain to subside. He consulted several doctors, who never were able definitely to ascertain what could be the cause of the trouble. He was sent to various health resorts with no good results. While in Paris he was advised by friends to see a doctor radiesthésist. Taking the whole thing as a joke he nevertheless made an appointment, more to please his friends than for anything else. The radiesthésist in a few moments, by aid of a pendulum, diagnosed a chronic appendicitis and a duodenal ulcer.

My friend was not inclined to take much notice of this diagnosis, having little faith in such a new method, especially as it was against the opinion of his medical advisers. Some time later he consulted a surgeon, and an operation for appendicitis was decided on. At the operation what was found? Not an inflamed gall bladder as diagnosed by a previous doctor, but a chronic appendicitis and a duodenal ulcer in a very bad condition quite near the scars of two others that had healed. Does this case not speak for itself? The pendulum was right. One could give many similar cases. Such a result made me think. I decided to study this new method and to find out if I had the required sensitivity. Having ascertained that I had the necessary gift, I gave up my practice and started diagnosing and treating cases guided by the pendulum only. The results, so far, have been so satisfactory that I see no reason to revert to the old methods. A great advantage for patients not living in or near London is that they do not need to come to town at all. As I have said before, a small phial of urine is all that is needed. It must be well understood that the urine is not chemically analysed but is used simply as a means of conveying, through me to the pendulum, the radiations of the patient. Every week or ten days another sample is sent and by this means I can, from a distance, follow the way the case is progressing and modify if necessary the treatment and diet. In France a radiesthésist is allowed in the wards of some hospitals and helps the medical staff in diagnosing obscure cases. How soon will such collaboration be seen in England?

CORRESPONDENCE

GUYON HOUSE,
98 HEATH STREET,
LONDON, N.W.3.
13th September, 1936.

DEAR SIR,

I am preparing for early publication a new book on Dowsing, intended to bring up to date and supplement *The Divining-Rod*, by the late Sir William Barrett and myself. I propose to devote one section of this book to brief accounts of all living dowsers of whom I can obtain particulars. May I therefore appeal to such of my fellow members as are themselves dowsers, whether professional or amateur, to send me concise autobiographies for this purpose? I should like each statement to include (1) an account of how the faculty emerged or was discovered; (2) a detailed account, accompanied, if possible, by names, plans, &c., of the dowser's best performance; and (3) an account of the dowser's theory of "how it works" in his or her own case.

I should also be very glad to have mistakes in *The Divining-Rod* pointed out to me. I need hardly say that all help and information will be most gratefully received and acknowledged.

Yours faithfully,

THEODORE BESTERMAN.

REVIEWS

ZEITSCHRIFT FÜR WÜNSCHELRUTENFORSCHUNG.

(April, May and June, 1936).

April.—Joh. Mayer contributes a paper discussing the technique of dowsing.

Dr. B. publishes an account submitted to him of a positive success attained by Herr Brunnemann, a dowser who claims that he can:—

(1) determine whether subterranean minerals exist in any area;
(2) give the boundaries within which such deposits exist;
(3) give the directions of strike of the veins;
(4) determine the average depth of the bed.

Herr Brunnemann's account is verified by two witnesses, one a mine manager and the other a notary.

Dr. Braun-Fernwald writes of annoyance caused to him by wireless apparatus. It seems that he thinks that he can connect certain minor ailments from which he has suffered with the wireless activities of his neighbours. In experiments with such waves he found that they had a bad effect on him, and that waves of 3.5 metres were most harmful. He refers to a book by D. E. Ravalico (*Rätsel und Wunder der Funkwellen*, published by Rowohlt, Berlin, 1936) in which short waves are stated to have very strong physiological effects. He quotes many of these effects. He promises to publish later the results of his attempts to protect himself from such rays.

Dr. Braun-Fernwald also reviews dowsing publications in France generally, and, in particular, a review of Lieut.-Colonel Correnson's *Traité élémentaire théoretique et pratique de Radiesthésie Physique*.

This number also contains short notices by Hans Degler and Dr. Voll, the former a reply to certain criticisms by Frau Hedwig Winser, and the latter referring briefly to his theories as regards the reaction of the body.

May.—A large part of this number is taken up by an argument by Dr. Schreiber, a physician of Schönecken, against the decision by Professor Miessner, of Hanover, that no particular value can be set on regional diagnoses with the dowser's rod. This verdict was given as the result of a number of experiments carried out at the Veterinary High School in Hanover. Dr. Schreiber maintains that an analytical study of the results shows a number of incontrovertible coincidences between reaction and postmortem evidence. He gives several illustrated examples of the various investigations in which he entirely disagrees with the adverse report of Professor Miessner's committee. He is convinced that there is a future for diagnosis by dowsing.

Frau Hedwig Winser replies to Herr Degler. Frau Winser does not believe in Herr Degler's proposals to distinguish between biological and geological dowsing. As usual, she writes forcibly.

Dr. B. reviews a paper by Prof. Dr. Holzlöhner, Director of the Physiol. Univ.-Institute, Kiel, *Die Medizinische Welt*, No. 8 1936 (Nornen Verlag, Berlin, S.W.11). He quotes the author as writing " that in the peculiar attitude of the dowser the latter cannot assert with confidence that he does not himself counteract, by the changing of his hand or arm, a painful heavy force caused by the rod in tension, so that, by this means, an impulse may be received from the rod. Neither the position nor the sensitivity of the forearm to motion are sufficient to warrant such a decision." The author concludes that in dowsers the imagination of a motion of the rod alone can lead to an unconscious movement which will give the impulse.

Dr. B. welcomes the collaboration of this noted physiologist. He criticises the experiments, however, in that they were carried out with elastic rods in tension, but that nothing was done with stiff rods without tension. Dr. B. thinks, therefore, that the publication is of little worth in the clearing of the problem.

At the end of this number is published a resolution which indicates the policy of the Reichsverband with regard to the question of "reaction zones" (reizstreifen) and "insulating apparatus." The Reichsverband will only take notice officially of dowsers who work with water and other subterranean objects.

Some rules for a professional union of dowsers are also formulated. Dr. W. Brauch is the president of the union (fachschafts leiter).

June.—Dipl. Ing. M. Paul contributes some "Observations and conjectures on the causes of the 'kick' of the dowser's rod." He says that he has carried out a number of original observations with his brother-in-law, and he thinks that they have proved that this impulse is caused by quite long waves. He states that these conclusions are in accordance with those of Dr. Henrich-Hagen. He also believes that by means of a framework of wire he could collect the power which is led by a conductor to another spot, where the rod reaction is again manifested.

Dr. Kurt Osswald reviews a book entitled "The eighth elemental force of nature and its physical laws," by L. Straniak, Verlag Jos. Huber, Diessen vor Munchen). Dr. Osswald writes that the causes of pendulum or rod motion may be either purely physical, purely physiological, purely psychological, or a mixture of all three. At any rate the present standpoint is that the question is a highly complicated one. He does not seem to think that Straniak has proved his point; in fact, he strongly criticises Straniak's assumption that the motion of the pendulum is purely due to physical causes.

Dr. Raoul Braun-Fernwald contributes the promised further notes on the annoying effect of wireless apparatus. He tries various materials in the attempt to insulate himself from these effects. Iron plates were of no avail, but he got partial relief from vulcanised rubber, bakelite, and similar substances. These were only efficacious for a few hours, however, after which they had to be replaced.

Acting on a statement by Dr. Armand Viré, he tried the effect of wolframite in a complete layer under his bed. He found that this gave him good sleep from February 25th to March 4th, after which the plate seemed to lose its power. Replacement by a fresh plate gave protection from the 4th to the 10th of March. He found that the changing of the plates produced shorter and shorter periods of relief until on the 12th the insulating effect only seemed to last for two hours.

Dr. Braun-Fernwald frankly states that he could not definitely determine what kind of an apparatus produced his troubles, and that he only concluded from the circumstances that these might arise from a short-wave transmitter, since such a transmitter arouses like inconveniences in him.

Dr. Franz Wetzel contributes a first instalment of his ideas on dowsing. The paper is given in the form of a conversation with a friend.

Dr. Wendler gives an illustrated example for the prospectus of his book, *Zur Frage der objektiven Wünschelrutenkontrolle mit magnetometrischen Apparaten* (Herold Verlag, RM3). The illustration shows a photograph of the double compass, and a graph obtained by plotting angles of deviation against fifteen corresponding different positions.

F.W. (presumably Dr. Franz Wetzel) publishes four short accounts of the possible influence of unknown rays on life.

The remainder of this number is taken up with official news and reviews of four books on the mechanics of the impulse of the rod, occultism, diagnosis by pendulum, and a dynamic theory of cancer.

The official news expresses the concern felt by the staff at the meagre response to their request for submission of answers to tabulated questions. It will be remembered that the latter were framed with a view to an intensive study of the phenomenon of dowsing. Apparently only some 20 replies have been received.

C.S.T.

LA CHRONIQUE DES SOURCIERS.

November.—At the first dinner of *La Chronique*, which was attended by twenty well-known "radiesthésists" M. de France related some strange stories regarding a M. Macabiès, who was at Vichy during the summer. This gentleman who was attached as radiesthésist to a medical institute, gave demonstrations three times a week, which were strongly reminiscent of a music hall turn. On demand he would draw on a blackboard by means of his pendulum the plan of any French or Colonial town, giving exactly the position of Church, Mission, Town Hall, &c. He would draw, too, the outline of the absent husband of the wife who was present, and perform surprising feats of diagnosis.

A sceptic said, "If you will tell me what I have in my hand correct to 40 sous you can have it all." M. Macabiès with his rod counted 42F.50. The actual sum was 42F.75.

On September 20th M. de France gave a lecture on "Radiesthésie as applied to Forestry" before a large and appreciative audience of the Gay-Lussac Society.

The *Centre d'Education Agricole* of La Houssière, at Varennes (Indre et Loire) has included *Radiesthésie Agricole* in the syllabus of studies. This is the first School of Agriculture to have taken this step—one obviously of great importance.

A.H.B.