

JOURNAL
OF THE
BRITISH SOCIETY OF
DOWSERS



VOLUME III

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JOURNAL OF THE BRITISH SOCIETY OF DOWSERS

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NOTICES

Members are reminded that subscriptions for the year July 1st, 1936, to June 30th, 1937, are now due, and should be sent to the Honorary Secretary and Treasurer, Lieut.-Colonel H. M. Edwards, D.S.O., 56 Oxhey Road, Watford, Herts.

* * * * *

We much regret to record the death of Mr. Ernest Christie, who passed away in a nursing home at Horsham a few weeks ago. He was a keen experimenter with the divining rod, and was frequently successful in locating water for his friends and neighbours. The formation of this Society was helped considerably by his efforts in attracting members.

* * * * *

The Editor would be glad to receive information regarding the efficiency of the Mansfield "Patent Automatic Water Finder" from members who have used it themselves and not merely watched it being used by Mansfield's experts.

* * * * *

Members who are using the mumetal rod for estimating depth are invited to send an account of their experiences regarding its value to the Editor.

* * * * *

The Editor would be glad to hear from any member who has located a metalliferous lode and given an accurate estimate of its content and depth when the lode *does not outcrop at the surface* but is at a considerable depth below, say at least 100 feet.

* * * * *

This number of the Journal is the first in Volume III. A title page and list of contents for Volume II. has been printed, and will be forwarded on request.

* * * * *

The Editor would be glad to receive copies of old Journals, especially of the first number.

* * * * *

Mumetal rods can be obtained from The Telegraph and Construction Company Ltd., through the Editor, at the price of £1 10s.

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

* * * * *

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

They also supply whalebone for rods cut to size.

* * * * *

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

* * * * *

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

THE SUMMER MEETING, 1937

This year we were fortunate in our weather, as the afternoon of Saturday, June 12th, was, at Hazelhurst, as pleasant as could have been hoped for—warm and sunny with a cool breeze.

Hazelhurst is a private school of long standing; it was started by a certain Mrs. Adams, at The Limes, opposite Frant Green, in the first half of last century, but was transferred to Hazelhurst in 1888.

It was owing to the kindness of Mr. and Mrs. Darlington, who now keep the school, that we were able to hold the meeting in such pleasant surroundings, for Hazelhurst is situated in one of the still unspoilt and most beautiful parts of northern Sussex.

Each member was invited to bring a friend, and about 140 people arrived at or soon after the appointed hour of 2.30.

The tests were arranged much as in previous years, and the results were, as usual, disappointing from the purely dowsing point of view, but to a certain extent instructive.

The first test was to locate the position and depth of an underground stream. A large area of the field to the north of the house had been mown so that dowsers had a considerable choice of ground. Most of them searched the south end of the field, where several small flows were located, but missed a much larger flow which traversed the northern part at a depth of about 85

feet. This stream, which feeds the well from which water is pumped to the house, was located by Mr. A. M. Goodall, a water diviner of much experience, four weeks beforehand and was verified by Major Pogson at the meeting.

Only one member, Mr. Cuddon, located it correctly.

The second test was to select one vessel containing brine out of six, five of which contained water. The vessels, glass accumulator jars, were numbered, that containing brine being No. 4. Samples were supplied in the shape of brine in small bottles. Out of 32 recorded trials only three were correct, those of Miss Oules, Dr. Wright and Major Pogson. The sequence of numbers selected is interesting: 2, 2, 5, 3, 3, 1, 6, 3, 2, 1, 3, 3, 3, 3, 3, 6, 6, 5, 2, 4, 5, 1, 1, 3, 2, 3, 3, 3, 6, 1, 4, 4, as it would appear that suggestion might have come into play in some cases. Is it a coincidence that 3 predominates, the card with this number under the vessel with brine having been replaced by that numbered 4 a few minutes before the tests began?

The third test was the selection out of six cardboard boxes containing wooden shavings of the box which also contained copper scraps. Out of 30 competitors, five were correct in selecting No. 3: Mrs. Higgon, Mr. Hay-Currie, Mr. McEuen, Mr. Homan and Mrs. Yates. Here again the sequence of numbers was interesting, being: 5, 5, 1, 5, 1, 4, 6, 2, 3, 6, 6, 2, 4, 4, 4, 2, 6, 3, 4, 3, 3, 4, 3, 4, 4, 4, 1, 6, 6, 4.

A further test was the location of an iron water pipe, part of the rising main from the pumping station to the house. Though there was a slight depression in the grass this did not serve as an indication, as only one dowser, Miss Cuppage, got one peg correctly on the line of the main.

The fifth test was the location of an electric cable on the south side of the house. The limits within which the cable lay were unfortunately misunderstood by the majority of the competitors, Mrs. Yates alone giving a correct location.

The last test was the location of a dead hen, which, packed in a cardboard box, had been placed in a hedge. Feathers from the hen were available in a bag for use as "samples." The starting point was so chosen that competitors were faced with a long line of hedge with a return at each end, the nearest point in the long hedge to the starting point being about 130 yards. It should have been possible to pick up the line at once and walk straight for the spot in the hedge indicated by the rod.

One competitor only, Mr. Hay-Currie, took an undeviating course for the correct point. Others took courses equally undeviating for spots one side or other of the correct one, which

was nine yards to the west of the iron wicket gate in the long hedge.

We had already learnt from previous meetings that the results of tests carried out under the conditions of a social gathering are never satisfactory, owing presumably to the power of suggestion, and to some subtle form of interference which one dowser has on another. But this in no way detracts from the advantages which members experience in meeting one another and exchanging information under pleasant and friendly circumstances.

Our thanks are due to Mr. and Mrs. Darlington for holding the meeting at Hazelhurst, and for so hospitably entertaining us to tea. We also offer our thanks to Master Wilson and Barkley, who kindly lent us their services in making preliminary arrangements.

CANCER IN THE LIGHT OF GEOPHYSICAL RADIATION

By H. TH. WINZER and W. MELZER.

[*First published in CANCER, New York, 1927.*]

This treatise is founded on empirical facts established in the relations between geophysical radiation and disease. (1,—See references at end).

We know of many individuals who strongly react to atmospheric conditions and especially to radiations from the soil.

The following is merely an abstract of our unpublished work dealing with the manifold aspects and ramifications of this complicated subject.

Sensitiveness toward local radiations from the soil has long been known to science as the "Problem of the Divining Rod," which is now admittedly a subject of exact scientific research (1a, 4-7). It is now no longer doubtful that rod-sensibility is closely connected with radiation, especially with radioactivity of the soil. We assume that the human body reacts in varying degree to sundry geophysical causes such as :

(1) The relation between geological structure and anomalies of the magnetic field or magnetic permeability of rocks (7) ;

(2) Electric and electrochemical processes in the soil such as resistance and dielectrical constants of the rocks (8-10);

(3) The field of gravitation and the temperature of the soil;

(4) The influence of cosmic rays as a possible cause of transformed or secondary rays formed in the soil (9-11).

Here our main object will be soil-sensibility, more especially the extreme sensibility of certain people to radiation from the soil as the cause or contributory cause of various diseases.

According to Kolhoerster (11, p. 97) the radioactivity of rocks varies considerably. Acid volcanic rock shows an activity of

3.1 times 10^{-12} g Ra/per gramme,

Clay 1.5 times 10^{-12} g Ra/per gramme, and

Lime (dolomite) only 0.9 times 10^{-12} g Ra/per gramme.

There is a probable connection between these conditions and the local frequency of diseases of obscure etiology such as cancer (13-14).

According to Kolb (13, p. 199) and Prinzing (12) it has not yet been definitely proved (1914) that cancer has anything to do with climate or with the amount of radium in water and soil (13, p. 218). Both investigators, however, insist upon the fact that cancer still claims the greatest number of victims in the same localities as formerly. This has also been shown in Switzerland, Austria and South Germany.

Werner (15) confirms that statistics and observations in Baden, some of them extending over forty years, show a very unequal distribution of cancer within individual villages. Some houses and groups of houses suffer more than others.

While Kolb, Prinzing and Werner agree that local conditions connected with house or soil play some part in the causation of cancer, their opinions vary as to the ultimate cause. While Kolb and Werner reserve judgment as to parasitic infection, Prinzing and Haymann (16) do not wish to give up infection as an ultimate cause, which at the same time explains geographical distribution.

Werner states that cancer is more frequent in communities over diluvial and miocene strata than over gneiss. He says: "Some geological formations show a higher average of cancer than others, but the differences within each are so great that the prevalence of one kind of rock does not furnish a sufficient explanation." He asks for a systematic investigation of the soil in certain places and affirms his belief in some external agency attached to the locality (13, 14).

The relation of cancer to locality is still obscure because the relations of pathology with geology and radiophysics have not yet been sufficiently studied.

That the geological maps do not exactly agree with those of cancer mortality may simply mean that the law of cancer distribution is not expressed by the large stratigraphical features alone, but also by their local modifications. Kolb takes the connection for granted (southern Black forest, clay, argillaceous marl, argillaceous sandstone; Alps of Salzburg and North Tyrol, Rhaetic, Triassic clays and marls). Commenting on Bertillon (17) he refers to the far reaching coincidence of cancer density with cretaceous and tertiary formations. Years ago Kolb drew attention to the frequency of cancer in the tertiary regions of Parma, Florence and Siena (13, p. 232).

On the other hand, it is not quite clear why Kolb says (13, p. 218) that so far no clue points to the radioactivity of water or soil. He may have been guided by the fact that very radioactive rocks such as gneiss, granite and volcanic formations show a low density of cancer mortality. The association of tertiary deposits with cancer leads Kolb to suspect the influence of underground water (13, pp. 278, 279).

He thereby approaches our view according to which structural differences of the underlying strata have something to do with the distribution of cancer. And we furthermore believe that subterranean differences express themselves on the surface through radioactivity.

The decomposition of uranium and thorium results in gaseous or solid products of varying stability and different radioactive energy. Their unequal absorption by, or solution in, various liquids or solids determines their distribution among the irregularities below our feet. Hence the features hidden underground should reveal themselves in different effects upon creatures or apparatus sensitive to radiation.

Thus the solubility of the gaseous emanation of radium in water of 10 C. is 0.391 (1, p. 92), in petroleum 10.000.

This probably explains the strong action of oil and of underground currents on the emanation-electrometer over soils of weak radioactivity. In an oil-shaft near Celle, Ambronn found exceptionally strong radioactivity in the sandy clay below each oil-horizon (1, p. 98). This tallies with the reports of sensitive people (dowsers). In 1925-26 I (Winzer) was invited several times to a new house in the garden city on the Tempelhofer Feld near Berlin. As I was unable to sleep over a certain spot which I

called "uncanny," and as I suffered from sciatica, which disappeared when I left, I had the house examined by a dowser, an engineer, who reacted to the same spot in a manner indicating petroleum. This place was examined by Dr. Beyer, leader of our Society of Dowsers in Germany.

In 1912 near Celle-Wietze (Hannover) Frau von Tüköry, an Austrian dowser, found the continuation of oil-bearing strata, thereby enabling the works to resume exploitation contrary to expert advice (2, p. 151).

Dr. P. Beyer, President of the "Reichsbund für das Wünschelrutenwesen," is one of the most successful oil prospectors. In a spot indicated by him near the Alsatian frontier, twelve miles west of Karlsruhe, oil and gas were found at a depth of 2,000 feet; also near Bremen the richest oil shaft in Germany.

Underground currents traversing radioactive rocks or faults carry along radioactive substance in solution, which explains their strong effect upon sensitive people. Observations extending over many years have shown that long and continued exposure to underground influences has a bad effect upon people not ordinarily rod-sensitive.

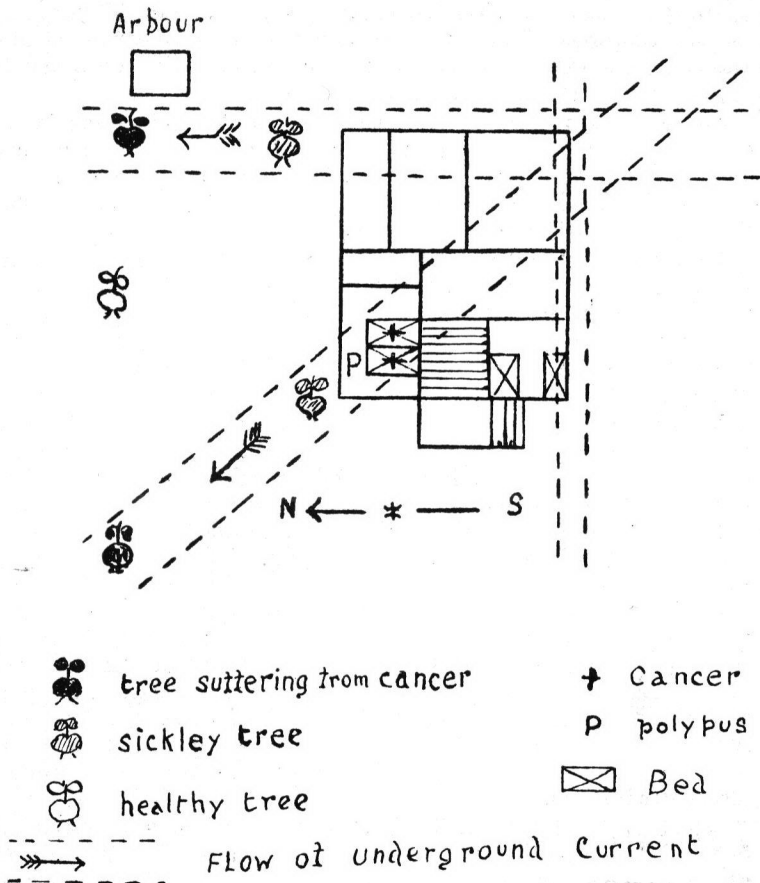
We shall give examples establishing this general fact. Furthermore, we maintain that proneness to certain diseases, especially cancer, may with a high degree of probability be ascribed to radiation from the soil. Many cases prove a direct connection between cancer and domicile. Houses on radioactive soil showed a prevalence of cancer and tumors, especially after prolonged residence.

(1) House in Lo. (near Dresden); on high ground along a steep road. Under the house two underground currents traced by Winzer. On the first floor one death through cancer of the kidneys. This woman was 65 years old and had been sleeping straight over one of the currents for the last seventeen years. A woman on the ground floor who sleeps within the same sphere of influence has for years been suffering from an obscure kidney disease (tumor?).

(2) House in Lg., near Dr.; close to the Elbe and about six feet above the level of the river. Winzer finds three intersecting underground currents. At the point of intersection their action on the dowser is particularly strong. The occupiers of the ground floor have been in for the last nine years. Husband died of cancer of the stomach, aged 72; his wife, aged 68, died of a disease of the bladder (supposed polypus, probably cancer). The son, aged 26, has been suffering from the stomach for the last three years and is now being treated in hospital (cancer suspected).

In the garden the trees over the subterranean watercourses are either dead or sickly (see sketch I).

(3) House in Dr., W. Street. One death from cancer of the rectum. Deceased, aged 54, slept 16 years over an underground current.



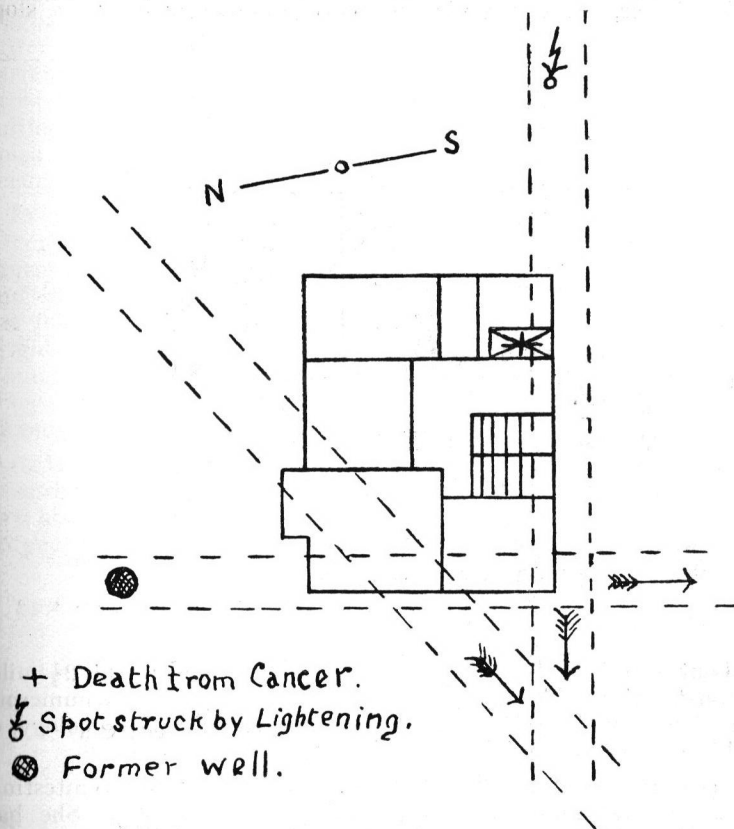
Sketch I.

(4 and 5). House in Dr. The married couple died, both of cancer, after residence of 16 years, the husband of cancer of the lungs, the wife of cancer of the breast. Water runs under the house.

Their daughter, about 40, lived for 17 years in a suburban

villa and now suffers from cancer. Winzer found a subterranean spring under the bedroom. In the garden sickly cherry and pear trees had already pointed to underground currents. Next door a lady died of abdominal tumors (myoma?).

(6) House in Bl., near Dr. Three currents and one crossing. Close to the house a spot for which lightning showed a preference, as it has been struck several times. A lady who died of cancer of the breast at the age of 56 was the only one of the household to sleep over water running underground (see sketch II).

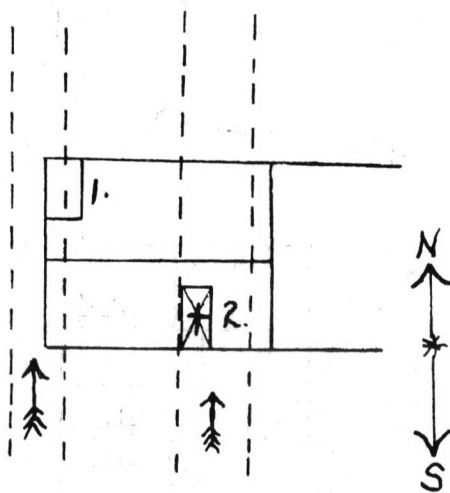


Sketch II.

(7) House in Lf. near B. Here also three underground water courses. The lady who died of intestinal cancer, aged 56, had been living there for at least 15 years.

(8) House in M. Street in Dr. Two water currents. One case of cancer of the stomach. The woman, aged 74, had for 10 years been sleeping over water and died six months after moving to another house.

(9) A girl of 17 at first slept in bed 1 (sketch III), and then lay sick in bed 2, where she died. She had developed cancer after a fall on the hip joint while ski-running. There were no external contusions. It was a rare case of cancer with metastases (sarcoma behind the eye). The linking up with the fall was only tentative. The house, a modern villa for two families, stands on a slope



+ Death from Cancer

Sketch III.

about 100 feet above the level of the Elbe and about $2\frac{1}{2}$ miles from the river. The grounds look dry and sunny, but the numerous hidden runnels here descend into the valley. The geology of the country around Dresden is very complicated.

(10) House at J. Street in Dr. The lady died of intestinal cancer after removal of appendix (aged about 42). She had been living in this modern villa for about seven years. An underground brook 10 to 13 feet wide passes underneath. The surface slopes. Water appeared when the foundations were sunk.

Our belief in cancer houses or local endemic cancer makes the theory of infection unnecessary. Although Prinzing (12) does

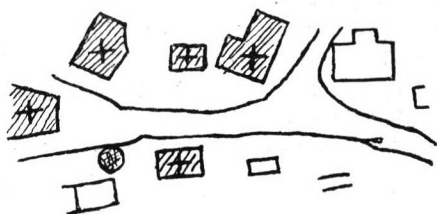
not wish to exclude infection, his views and observations seem to confirm our opinion that the outbreak of cancer is finally determined by exogenous physical causes.

After examining the records of the Württemberg Committee on Cancer, dealing with four districts of low cancer frequency and four of high frequency, Prinzing arrives at the following conclusion (12, p. 460):


“On the whole we may accept that the frequency of cancer is connected with the frequency of marshes and running or stagnant waters. Adjacent tracts of country, although dry, also suffer from a high mortality.” According to Prinzing the recurrence and multiplicity of cancer in the same house has not been satisfactorily proven, although he admits the statistical difficulties. Weinberg and Gastpar (19) have located several cancer houses in Stuttgart. Cancer in adjoining houses is a frequent occurrence (Wolf, 15, pp. 5-15).

In thirteen parishes of the four districts mentioned above (Oberämter of Württemberg Unterland) neighbouring cases of cancer are reported, once or twice in each parish. In Schorndorf and Backnang there is multiple cancer in the same street. In the four districts of the Oberland we often hear of cancer in neighbouring houses. At Riedlingen a death from cancer on the stomach, in 1910, was preceded by death from cancer in the two houses immediately on the right and left. Another death was surrounded by cancer cases in three adjoining houses.

In the village of Pflummern, with 429 inhabitants, according to a sketch map by Dr. Missmahl, of Riedlingen (Prinzing, 12), five houses are grouped around a flowing well (artesian). Here six deaths from cancer occurred from 1886 to 1908 (see sketch IV).



 Cancer house

 Running Fountain

Sketch IV.

In this connection we may mention the English cancer village of Pickering, which derives its water supply from artesian wells.

Prinzing admits the fact of local cancer density and also draws attention to an increase in the course of time as noticed in various places.

We attribute these facts to the physiological effect of radiation, modified by the formations of the subsoil (impinging and secondary rays) and of emanations from underground water courses. The emanations from this water vary with the changes due to rainfall, drought and other geophysical factors. According to Ambronn (1, p. 102), Ramsay, Loisel, Ludewig and Witte have found that periods of drought and moisture show a considerable influence upon the radioactivity of underground water currents.

Furthermore, the cancer of the lungs in the Erzgebirge, known as the Schneeberg mine-sickness (Schneeberger Bergkrankheit) tends to show that irritation from dust only predisposes to cancer when it runs concurrently with permanent radioactive irritation. Weise (22) even says that the miners consider certain parts of the mines particularly dangerous. The strongest radioactive springs of Germany (about 5600 Mache units) flow through the mines of Schneeberg and Oberschlema. In other mines of the same kind there is far less cancer of the lungs, but at the same time radiation is weaker or even entirely absent (Swedish cobalt and arsenic mines).

During the Dowsers' Congress at Aue (Erzgebirge) in 1924 a perfectly healthy lady who had never handled a rod in her life took part in the experiment of tracing the subterranean course of the radium spring at Bad Oberschlema. She swooned and fell ill, which seems to show the strong influence of these emanations upon the human organism.

One is led to assume that the vegetable organism suffers in a like manner. Indeed, our observations in nurseries allow us to suspect a connection between radiations from the soil and cancer or other diseases of trees.

Winzer found that out of the 11,000 fruit trees of a nursery practically all the diseased ones stood over water running underground. Curiously enough apple trees suffer mostly from genuine cancer, cherry trees from resin-flux and plum trees from gangrene, while pear trees simply wither and die.

At another time the ranger in charge showed me some stately beech trees standing over a barite mine in the district of Eisenach. Many of these beeches were ailing or dying, but only those which stood over abandoned and waterlogged galleries 400 feet below

the surface. A tree standing over the intersection of two galleries had been struck by lightning. Characteristic fluctuations of radiations over the cross-galleries of uranium mines have been observed by v.d. Borne (23, p. 98).

The open water of rivers and the sea is less active than that running underground. This agrees with Henry's law according to which the quantity of emanation in a liquid is proportional to the partial pressure of the emanation in the contiguous gas. Elster and Geitel (1, p. 101) have shown that emanations enter the atmosphere through diffusion and soil-respiration.

Sanderson, Joly, Knoche and others (1) have demonstrated that the emanation contents of the air over wide areas conform with the mean distribution of radioactive matter in the underlying rocks. According to Runge (1) sea water and sea air are almost free from emanations.

We recall the beneficial effect of sea voyages on certain nervous states, such as vasomotoric troubles, neurasthenia, &c. Heymann states that cancer mortality is least in the naval services and highest in domestic occupations.

All this tends to show that the air in houses is subject to emanations depending upon the condition of the subsoil.

No wonder that the health of people living permanently over "uncanny spots" fluctuated with the periods of dry and wet weather. This agrees with the observations, already mentioned, of Ludewig and others concerning the influence of dryness and moisture upon the radioactivity of underground currents.

Winzer has personal experience of vasomotoric troubles coinciding with the rise of underground water. The symptoms ebbed away with the return to more stable conditions in the subsoil. This observation was confirmed by other invalids, especially during the floods of last January.

According to Ambronn alpha radiation increases over faults which may be due to the facilitated circulation of gases charged with emanations. Dowsers are very sensitive to fault planes in the rocks. The radiation causes changes in the frequency of the pulse and in blood pressure.

When dowsing for a spring on January 16th, 1927, I (Winzer) struck a fault traversed by water in the granite about 150 feet underground. "When I had remained in this spot for a while my pulse rose to 130 and 140. A medical man who accompanied me was able to confirm these physiological effects. My normal blood pressure of 100 to 120 after three-quarters of an hour

showed 160-180 R-R with a normal pulse of 72. "Simply by this effect upon my heart I had already noticed the fault before using the rod."

Similar symptoms under medical control occurred over a barite mine of the Richelsdorfer Hütte (near Gerstungen, Thuringia) and over the deposits of potassium salts at Dietlas, near Salzungen (18). The spot over which I showed vasomotoric symptoms corresponded to basaltic intrusions at a depth of 1,000 feet. Gases (carbonic acid) circulate in the fissures of this rock. I was told later that the dowser Herr von Graeve swooned in this spot ten years ago.

Compare the above with the map of Weinberg and Gastpar (19) which shows Stuttgart divided into districts of cancer mortality. The authors state that the stratigraphical conditions (keuper, rubble, marl, sandstone) cannot be made responsible for differences in cancer mortality.

But we may account for them by tectonic conditions. Dowsers report that Stuttgart is traversed by five fault planes. Three of them which lie close together, forming parallel cracks, touch the areas of highest cancer mortality. Let us remember that faults usually serve as channels to underground water. Hence the situation of cancer houses with regard to these faults should be thoroughly investigated (cf. Ambronn 1a).

The physiological effects of earth radiations mentioned above are similar to the symptoms of minesickness as described by Knoche. He has an interesting explanation of the cause of minesickness (24). Owing to the negative electric charge of his skin-surface the patient absorbs from the air the products from the decomposition of emanations. The intensified radiation of skin, hair and clothes reacts upon the vasomotoric system, thus impeding secretion. The final result is that feeling of dryness with which dowsers are also familiar.

From personal experience Winzer can vouch for symptoms such as dryness of the mucous membranes, suppressed secretion, tendency to catarrh, dryness of skin and nails, brittleness of the teeth.

So far the physiological and toxic effects of earth radiation are practically unexplored. One can hardly draw conclusions from pure emanations or from the properties of pure preparations of radium or mesothorium. The shape and composition of radiating soils modify the alpha, beta and gamma rays resulting from emanations or their derivatives. The original rays are transformed into softer or harder secondary rays, according to the atomic weight of the radiating and irradiated bodies.

We should remember that alpha radiation emits very penetrating neutronic rays which go through thick walls of stone and metal. The neutronic rays develop when alpha radiation (or radium emanation) acts on substances such as earth and clay containing aluminium, beryllium, lithium and other components of the soil. We may assume that a new kind of secondary rays will also cause new physiological effects according to the frequency and wave-length of the transformed rays (10).

The penetrating rays between the wave-lengths of 200 millionths and 0.01 millionths of a millimetre, together with the visible rays of the spectrum, obey Stokes' law (25, p. 28), which says that a body emits secondary rays only when hit by light of shorter wave-length than its own. Röntgen rays entering a substance cause emission of dispersed Röntgen rays which consist of secondary cathode rays and transformed secondary X-rays, which are always softer (of greater wave-length) than the incoming rays whenever the atomic weight of the irradiated substance is not higher than that of the radiator. According to the theory of light quanta the transformed secondary rays of irradiated substances may show chronological retardation, as in the case of the so-called earth-alkaline phosphoruses (25, 26), and many fluorescent organic substances (Kowalski's progressive phosphorescence). Hence this specific radiation varies with the qualities of radiating and irradiated bodies. It can extend beyond the visible spectrum to ultra-red and ultra-violet (26, 27).

We believe that toxic secondary rays may result from transformation in the manifold substances composing human surroundings (soil, house). To this must be added the effect of chronic exposure. The alpha and gamma rays found by Ambronn and others over faults, currents, &c., are capable of causing secondary rays. Here we may mention other influences due to the morphological formation of the subsoil.

It has been shown that the distribution of the terrestrial magnetic field, of underground electric currents and areas of high frequency (10) depends upon the features of the subsoil (1). All this is very complicated. Hence, owing to as yet insufficient experimental research upon highly sensitive organisms, we must step warily where we suspect an underground influence (10). Some investigators have ascribed the action of underground water courses on dowsers to the formation of electric potentials (9). But for the sake of clear thinking it will be advisable to leave aside complications and to restrict ourselves to the simplest probabilities supported by the greatest number of proofs.

According to v. Ries (28) belated Röntgen symptoms are due to secondary radiation from the blood cells which acquire ultra-violet luminescence through irradiation with soft Röntgen rays. Owing to the absence of a protective integument absorbing ultra-violet rays, these cells cause injury to cells, tissues and vessels which they pass. Experiments by v. Ries seem to confirm this theory.

X-rayed rice acts upon photographic plates after a week's interval. If subjected to red light immediately after the X-ray treatment the rice acts less vigorously. This must be attributed to compensation by the long waves of red and infra-red. Phosphorescence, visible as well as ultra-violet, is damped by waves longer than its own and stimulated by shorter ones. Injections of phenosafranin cured cocks, whose combs had been strongly X-rayed (according to Behny, 28). Without this remedy the animals died of heavy intoxication.

Starting from these facts we may suspect a damping influence of Hertzian waves—which are waves of high frequency beyond ultra-red—upon the short-waved ultra-violet and Röntgen rays. That would follow from the laws of interference. Should the predisposition to cancer be acquired through exogenous radiation we are led to expect a favourable effect upon Hertzian waves such as sometimes accompany high frequency treatment.

Statistics by R. Desplats (20) seem to show good results from high frequency treatment according to Keating-Hart. Koch of Stendal likewise reports exceptionally good results in the high frequency treatment of cancer. Further experiments in this direction should prove fruitful.

Undoubtedly the toxic quality of short-waved radiation can be counteracted by the chemical composition of the tissues and vascular system. This is complemented by actual experiments showing the fluctuations of the ionic concentration of various salts in the blood under radiation (29, 30). Pincussen (30) has demonstrated the mineralogical changes in animal organs (heart, brain, liver) after radiation.

Pincussen describes the effects of quartz light upon water animals in the simultaneous presence of different anions and kations. Different ions showed marked differences in their sensibilizing and desensibilizing effects. Potassium raises the toxic effect of artificial sunlight (Höhensonne) on daphnias and tadpoles. The ion of sodium is indifferent. The ion of calcium reduces the toxicity of radiation. Among anions that of iodine is very toxic, while ion of chlorine remains indifferent.

Thus one cannot deny that the katalytic effects of ions modifies the effect of radiation upon metabolism. We also know that ultra-violet light influences the metabolism of albumen, purins and carbohydrates (30).

Otto Warburg's theory says that the local predisposition to malignant tumors is due to want of oxygen coupled with increased glycolytic potency of a cell complex. According to Auler (31) the general predisposition to cancer is caused by the insufficient metabolism of carbohydrates, owing to changes in the regulative apparatus. Irregularities of the secretory system through age, injury, &c., lead to hyperfunction of the adrenals and thereby to changes in the metabolism of carbohydrates.

On the other hand, diseases causing hypofunction of the regulating apparatus (tabes) or diseases which interfere with the diffusion of gases (heart, asthma) rarely lead to malignant tumors. Cancer due to irritation from tar, soot, aniline, pitch comes under Warburg's category. But we may be permitted to add that more attention should be paid to simultaneous radiation from the soil if we are to make statistics clearer. The importance of chronic irritation from hidden sources cannot be over-rated. Werner shows (15) that recent cancer statistics in Baden cannot be reduced to any sort of system by the theories of infection or heredity. He thinks that cumulative cancer in the course of forty years cannot be explained in that way.

Let us add a few words on cancer in animals. As established statistically by v. Wasielewsky (32) cancer of animals like that of man is more frequent in the south of Baden than in the north and centre (20). Wild animals are more immune than domestic breeds. Among domestic animals the dog takes first rank, the horse coming next. According to Michel (20) wild animals are more exposed to cancer when kept in captivity. M. Plenn (20) reports endemic cancer of the thyroid of salmonidae in breeding ponds. The animals recovered when placed in other ponds.

Thus the theory of geophysical radiation should prove helpful in tracing the causes of cancer. Inherited predisposition may give way to chronic irritation by radiation which penetrates to the embryo. There is some elementary relationship between our views and Haviland's water theory. But we do not consider parasitic infection a necessary adjunct (1), although it may occasionally play a secondary role.

The subsoil contains emanations of varying concentration. The decomposition of an emanation results in radioactive elements and inactive lead (Ra G). Ra B and Ra D, typical beta and gamma radiators, are lead isotopes produced alongside

with isotopes of bismuth, thallium, &c. They occur wherever there are emanations.

Wietfeld (33) advances an interesting hypothesis connecting cancer with the presence of lead in water. In other words, he assumes chronic lead poisoning. He draws attention to the radioactivity of impure lead such as is often used for pipes. The good effect of lead upon tumors he explains by the opposite effect of large doses as compared with homoeopathic doses. We, on the other hand, ascribe the effect of lead on cancerous growths (Blair Bell) to its absorption of its radioactive isotope which must necessarily occur in every organism, which inhales emanations.

Thus we hold that radiations from the subsoil have a very bad biological effect upon men, animals and plants. Their further exploration may lead to the discovery of the proper measures against cancer. Hence it goes without saying that the most urgent treatment of cancer consists in the removal of the patient from his house. This may account for the spontaneous recovery from chronic diseases often observed after a complete change of domicile. Spontaneous healing of cancer after a change of location has been observed in domestic animals by a veterinary surgeon, Franke of Gottleuba). We have already mentioned the salmonidae transferred to other ponds.

The discovery and elimination of the causes of cancer are one of the most urgent tasks of medical science. All we can do at present is to suggest probable lines of future therapeutics.

The general principle would consist in overcoming the allergy of the organism toward unknown geophysical influences. The first and simplest step is removal from the locality of radiation whenever there are reasons to suspect the oncoming of cancer. This would correspond to the methods by which one fights the dangers of an anaphylactic complex of symptoms (*e.g.*, interruption of injection of foreign albumen).

In advanced cases, and where removal is impossible (allergy persisting), we must think of physical and chemical therapeutics such as :

1. The neutralization of (secondary) irritation by interference or absorption of the rays outside or inside of the human body.
2. The absorption of radioactive isotopes of lead (radium D) by the internal application of sulphur during a long period.
3. The immunisation of the endangered organism by the application of frequent weak irritation (Much's theory of nonspecific irritation).

The purpose of the above essay is that of pointing the way to lines of research hitherto neglected in a very difficult problem. We hope to have contributed our modest share towards the elucidation of the causes of one of the scourges of mankind.

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[Although this article was written ten years ago, more recent experience has only served to confirm previous observations, namely, that cases of cancer frequently occur at places where certain dowsers obtain reactions. As Herr Melzer informs me, the cause is probably a complex one due to a variety of influences such as radioactive emanations and chemical exhalations. The result of these influences is a penetrating neutronic radiation at the locality of increased emanation, and it is here that certain dowsers experience reactions.—EDITOR.]

DOWSING EXPERIMENTS

By SIDONIE KLEIN

Count Olivier Seldern-Rességuier was the best-known investigator of the phenomena of the divining rod and sidereal pendulum in Vienna. He was a distinguished geologist, but not a dowser. He called himself a rod-technologist.

Shortly before his death on August 19th, 1936, he carried out experiments with a view to training me in the location of gold, oil and water.

First of all he determined my polarisation by means of the pendulum which, in Vienna, is commonly made of a small brass bob.

As a result of many years of investigation the Count had established that all non-sensitives have the same polarisation; that is to say, the pendulum gyrates clockwise or positively over the right half of the body and counter-clockwise or negatively over the left half. The more sensitive a person is, the more irregular is his polarisation.


It appeared that both my hands and feet, and especially my solar plexus, are strongly positive, the back and back of my head negative. The rest of the body is neutral; that is to say, it provokes no movement of the pendulum.

It is perhaps not uninteresting to record that dowsing with the pendulum over the negative parts caused severe pains, whilst I experienced pleasant sensations when dowsing was carried out over the positive parts.

The Count attached the greatest importance to polarisation. On the strength of this experiment and without any further test he asserted that I was a particularly sensitive dowser. For, whilst differing in polarisation from the usual, I am strongly clairvoyant, and escape the usual sources of failure owing to the similarity of the polarisation of my hands and of my feet.

As my fingers are irregularly polarised he advised me to hold the left hand breast high in front of me above the right when engaged in prospection over writing or photographs, using the straight rod or pendulum to obtain movements implying "yes" or "no," "male" or "female." In this way the effect of the irregular polarisation was neutralised, and better results were obtained than had previously been the case.

Everyone has to adopt a manner of grip in accordance with his individual polarisation.

At first, during these experiments, I used a wire rod shaped like this : , and later a stout hazel rod. Though the shape of the rod is important the actual part it plays in divining is small. As the Count clearly proved to me by exhaustive experiments, the rod is in no sense the receiver of the current. It enters the body of the dowser and is discharged by the turning of the rod.

"The dowser," said Count Seldern, "is charged up something like an accumulator." When he resisted the turning of the rod the current was more strongly felt. By "current" is meant the emanations perceptible by the sensitive which come from out the kosmos and penetrate all matter. As they penetrate and render perceptible those bodies which are being examined with the rod or pendulum, they are mistakenly called emanations from those bodies. Were this so there would be a gradual decrease in the weight and volume of gold, water &c.

The current can be experienced by any non-sensitive if he holds the left branch of the rod with the left hand and grips the free hand of the dowser with his right hand. This experiment clearly shows that there is a current passing into the body of the dowser.

Count Seldern invented a small apparatus consisting of a leather strap in which long pointed nails were fastened. He tied these strips on to my heels with the nails projecting out-

wards, iron points being strong "receivers." So equipped, I found the current considerably stronger over water, but over oil I had to fasten the "amplifiers" to my arms to get a similar result.

With nearly all dowsers the current from water enters through the feet, that from oil through the elbows, and from gold through the knees. Every substance produces a different physical sensation. The Count considered the particular sensation of great importance, as we judged thereby the nature of the substance which I had located.

I never concentrated on the presence of an object when I was working. The Count declared that concentration was unreliable, as it was exhausting and affected by the physical condition.

I usually talked about some irrelevant subject, holding the rod loosely in one hand by my side and preserving a state of mental detachment or abstraction. When I came over an influence the rod would start swinging. At once I stood still and gripped the rod in both hands, the thumbs pressing firmly on the twig. After some practice the varying sensations caused by the current and the different ways in which the rod turned enabled me to distinguish clearly between water, oil, fissures, &c.

Whoever tries this method will rarely be mistaken and will enjoy the advantage of never passing by anything of value whilst in this state of abstraction.

The depth of water is easily found, as water radiates sideways, and a depth reaction occurs at a corresponding distance in a horizontal direction.

For purposes of check I employ two methods. I lower myself in imagination until I get a reaction of the rod; or I estimate the depth with a pendulum and a diagram of depths, concentrating the while. The successful use of both methods is a matter of practice.

I was often able to visualise the subsoil studied by means of concentration, and to describe the nature and colour of the strata and stones.

Later we made experiments with stones from an unknown locality. I held them against the solar plexus and was then able to state the place from which they had come.

We made interesting experiments with colours which cause reactions in the rod as also in the pendulum.

A large part of our work dealt with the diagnosis of disease. At first I worked with the pendulum, but later with the right

hand held up about six inches from the patient's body. In this way I could clearly trace the diseased area as well as the nature of the disease.

With severe concentration I was often able to see the interior of the body. In this way I once observed a small swelling on the kidney of an old woman. She had obvious bladder trouble and an X-ray photo proved that I was right.

Count Seldern taught me the method of aura massage invented by Baroness Eisenstein of Vienna, which gives immediate relief from pain. It consists of movements of the hands near the affected spot, but without touching it, whereby the auric emanations are equalised over that area.

"Nothing," Count Seldern used to say, "is more important for the dowser than training. Every job increases his sensitiveness. Once he has made his body truly receptive, he will, working with a geologist, infallibly obtain true results and reduce to silence opponents of the divining rod."

WATER DIVINING EXPERIENCES

By C. P. GARUDACHALA MUDALIYAR

It was in the year 1922 when a water diviner from Bangalore was invited by the Forest Department to Mount Stuart, Coimbatore, Madras Presidency, to locate a few places suitable for digging wells, that some of us officers began to try water-divining. Only four of us found we possessed the gift.

I was transferred to Pollachi Depot, one of the biggest timber depots in Madras, where a number of country carts drawn by bullocks resort. There was no well in the compound. Men and cattle had to go a long way to find water. Many officers recorded that it was not possible to dig a well, as the subsoil was too rocky. I tested the power of water-divining in me, and with a V-shaped tamarind twig went round the depot. A few yards to the south-east of the depot shed a place good for sinking a well was traced.

Mr. W. G. Dyson, I.F.S., tested me by blinding my eyes, and he was satisfied that I had the power of water-divining, and sanctioned funds for digging a well. A satisfactory well was dug and it supplied a good quantity of water, not only for men

and cattle resorting there, but also for a sawing plant installed in the depot for sawing the logs of wood into scantlings and planks.

This successful result spread my reputation throughout the countryside, and many were the calls from that time onwards. My spare time was employed in that way, and many were benefited by the advice given by me in the extremely arid plains.

I took leave preparatory to retirement in 1924 and settled at Thyagarayanagar, Madras, where a town-planning scheme is under operation. In this area, which is a garden city, each house is separate and requires a well. More than 75 per cent. of the wells dug were at my selection. My reputation spread far and wide. The Government of Madras, coming to know of this, appointed me as their Water Diviner in the subsoil water survey at Bellary in 1926. I worked there nine months, and the Government recorded that my work was successful and satisfactory.

After the termination of my work with the Government I had several private engagements, and no less personages than the Hon. Mr. Justice Wadsworth, of the High Court of Judicature, Madras, Messrs. Couram Smith, Commissioner of the Corporation of Madras, T. Clear, M.A., Conservator of Forests, Bellary, M. K. Nayar, I.F.S., Deputy Conservator of Forests, Kurnool, and many non-officials of position have testified that I am a reliable Water-Diviner in Madras.

I used a forked twig of either tamarind or neem. Later, I tried with copper, aluminium, or brass rods, and found them useful. I am now continuing to divine with metal rods. I hold my rod horizontal and at waist level. When I approach near to an underground stream the rod begins to move and rises perpendicularly at mid-stream. I pass on and there is a straight pull down soon after. I then proceed parallel to the current crossed. After some distance I find another stream which cuts the original one. I mark the point of intersection either with a peg or a pit. Then I go round the peg or pit to discover any more between the two already found.

I have always found that very good results have been obtained when wells have been dug at sites where there are anthills. I can unhesitatingly say that it was so in three places. One in Salem, where Mr. M. S. Thayapra Pillai, B.A., Secretary to the District Board, wanted me to locate suitable sites. Another Mirasdar took me to a village by name Third Kattlai, near Poonamattee, where also I showed an anthill to be the best site. Thirdly, a

military pensioner took me to Jambarampet, near Saidapet, for selection of a site. In all these three places anthills were preferred, and the results show that the wells dug are yielding a supply of water more satisfactory than others adjoining. These are clear indications that the presence of anthills is a good sign and that wells dug at such spots will not fail to provide a good supply of water.

DOWSING IN CZECHOSLOVAKIA

We have been informed that a German society for promoting the study of the divining rod and for the investigation of earth rays (Verband zur Förderung der Wünschelrutenkunde und Erdstrahlungsforschung, or, shortly, Würu) has been formed recently in Czechoslovakia.

Its investigations are to be carried out on strictly scientific lines, and amongst its members are many German University Professors and other technical experts.

The influence of the Society is already such that the divining rod is now regarded as an object of serious study in the Technical High School of Prague, and the atmosphere of prejudice, formerly so widespread, has now been completely dispelled.

There is a special committee for investigation consisting entirely of experts, of which the President is Hofrat Dr. Engineer Birk and his deputies Engineer Denk and Engineer Volker Fritsch, the Experimental Officer being Engineer Waraus.

Würu concerns itself with all subjects which contribute to the study of the divining rod and investigation of earth rays, especially geology, geophysics and biology. The dowsing effect being regarded as a physico-biological border problem, investigations in physics, especially electro-physics, are also carried out, and the study of the allied subjects of radio-prospection, radio-biology and of lightning has been included.

During the summer of 1936 experiments were carried out in the Winagritzer Berg district near Kladno with a view to testing Her Volker Fritsch's electro-physical theory, which is, briefly, to the effect that the dowsing reactions take place mainly where a high frequency Hertzian field undergoes a change through a variation in the conductivity of the subsoil.

Four baselines were marked out, being named "Maria," "Eva," "Herta" and "Grete," and so chosen that they traversed vertical planes of contact between basalt and tufa.

Samples of both kinds of rock were tested for their electrical properties in the Electro-Technical Institute of the German Technical College in Prague.

It was found that in a dry state both basalt and tufa are very bad conductors, their resistance amounting to from 1 to 5 megohms per cubic centimetre. With increasing dampness the resistance rapidly declines, being reduced 50 per cent. by an addition of 3 per cent. of water. In dry weather the natural humidity of the stone may be so great that the resistance is less than when the stone has been dried artificially. Tests were therefore carried out on samples in a normally damp state, and it then appeared that the conductivity of basalt is much less than that of tufa, the comparative resistivity under normal meteorological conditions being as between 5 and 2 to 1.

Experiments were made with a wireless apparatus to examine the conditions which obtained under a high frequency current, and it appeared that over the planes of contact there were distinct jumps in the high frequency conductivity. Nevertheless, it was found that there were some planes of contact where no electrical discontinuity was perceptible, but this was probably owing to special conditions such as multiple stratification. At such places no dowsing reactions could be expected.

Five dowsers took part in the tests; two were engineers with some knowledge of geology; one a man of leisure; one a bookseller; and one a retired priest. Each was tested singly, out of view of the others, all chance of suggestion being thus eliminated. Points of reaction were marked with little flags and immediately entered on a map, the flags being removed before the next dowser started.

On the base line "Maria," indications differed, being distributed irregularly over the whole line. This was probably due to the fact that the subsoil was much disturbed and there were no clear points of electrical discontinuity.

The same conditions obtained along the line "Eva," part of which traversed a heap of rubble. Unfortunately, reactions along this line were so numerous that it was impossible to say whether those reactions which coincided with planes of contact were accidental or not.

Results along the line "Herta" were more decisive. On the first section of this line, which was 58.5 metres long, reactions

agreed within small limits, so that reaction zones were clearly distinguishable. At the first zone the maximum deviation was 2 metres, at the second 2.5 metres and at the third 1 metre. Near the end of the first section there was another plane of contact on which there was no agreement.

In the second section of "Herta," about 55.8 metres long, two zones of reaction were clearly distinguished at points to be expected in accordance with the hypothesis mentioned above. Deviations amounted to 2.5 and 1.5 metres. Some dowzers indicated other points of reaction, but only those were considered about which there was unanimity.

On the line "Grete" agreement was still closer. In the first section, 30.9 metres long, two planes of contact were clearly indicated, the maximum deviation being only 1 metre. As only 12 per cent. of this length was covered by reactions, accidental coincidence was plainly out of the question. In the second section, 29.1 metres long, two planes of contact were determined; deviations amounted to 2 to 3 metres, about 33 per cent. of the length being covered by reactions. In the third section, 42.5 metres long, three planes were located; deviations amounted to 1.5, 2.75 and 2.25 metres, 30 per cent. of the length being covered by reactions.

In every case positions of electrical discontinuity as observed by radio-physical methods coincided with places where dowsing reactions were obtained.

A further series of experiments was carried out in April, 1937, in the grounds of the Agricultural Faculty of the German Technical College of Prague in Tetschen-Liebwerd, again under the management of Herr Volker Fritsch.

The ground had been thoroughly examined from a geological point of view. The upper strata consist of loam (diluvial) with layers of basalt-tufa and nephelintephrit. In some places fragments remained exposed, in others they were covered. There was, moreover, a clearly defined fault, the fissure being filled with alluvium approximately 15 cm. loamy sand, 20 cm. boulders with sand, 100cm. brown quartz sand, and beneath that rough boulders.

The object of the experiments was to test the afore-mentioned theory of Herr Volker Fritsch. To this end the subsoil was first examined electrically and the places of interruption caused by electrical discontinuity determined. Dowzers were then laid on and their reactions noted.

Tests had been made of the resistances of the various kinds of rock which would be encountered during the experiments. The results which had the most bearing on the experiments were in connection with basalt-tufa, nephelintephrit and loam, and for these rocks the resistance in megohms per cubic centimetre was found to be :—

		In dry weather	In wet weather
Basalt-tufa	...	100-500	10-50
Nephelintephrit	...	1	1
Loam	0.1	0.0001

The resistance of the filling in the fault was in both wet and dry weather considerably less than that of the adjacent rock. The resistance of the surface layer of humus was very slight during wet weather.

During rain the effect of the damp humus was dominant in the open country. Near the University buildings and in the streets the electrical differences were very clear in wet weather, and in dry weather still more so.

Four dowzers of many years' experience took part in the experiments; they worked with simple spirals or forked rods and did not use "samples."

According to the radio-physical theory, dowzers should have been able to indicate the following reaction zones :—

- (a) The fault in any weather;
- (b) The limits of basalt and tephrit, areas such as rubbish heaps, in dry weather. (In wet weather these boundaries disappeared).

The fault was the easiest to fix as it was crossed in many places by streets. The dowser was conducted by the Experimental Officer over the whole area and was given the opportunity of examining it for several hours, his results being entered on a map. The dowzers did not know the ground and were laid on singly on different days so that there was no interference. The Experimental Officer did not intervene in any way.

The results of the experiments was, briefly, as follows (shown in two diagrams) :

The fault was indicated by all four dowzers with a remarkable degree of concurrence. This showed, what has long been known, that the indication of faults and fissures forms the best test for such experiments. It is noteworthy that they could be determined with equal accuracy in dry weather as well as in wet. This is easily understandable on the electrical basis. It must, however, be observed that where these influences were felt there

was no surface of damp humus. Location was much more successful on the sanded and less frequented paths, on an asphalted street and especially on a field path on sloping ground. At such places the electrical difference between the loam and the alluvium filling the fissure was very obvious.

In the second experiment the differences due to weather were clearly brought out. Two dowzers Ka and Hl worked in comparatively fine weather with rain at intervals on both days. the other two dowzers had to work in continuous rain, and it is interesting to record that they both remarked that they had difficulty in locating the zones in very wet weather. On the electrical hypothesis this is understandable.

The four records show variations, but agree in certain important features, especially the records of Ka and Hl. There was less concurrence in the records of the other two dowzers, and the areas indicated by them were smaller in extent, which in view of the unfavourable weather was only natural.

(The original reports and diagrams can be seen on application to the Editor).

RALPH CREYKE

By A BROTHER OFFICER

The untimely death of Major Ralph Creyke at the age of 53 is a great loss to dowsing generally and the Society of British Dowzers in particular. He joined the Army as my subaltern some thirty-five years ago. He was a man of fine physique, very well read, with a special knowledge of chemistry and geology. He was also gifted with a very merry wit. Soon after joining he took up jujitsu and somehow managed to strain himself internally. He never really got over this strain and his natural inclination for the more manly of outdoor sports became limited to fishing and golf.

When war came he was rejected by the doctors for active service. But to remain embusqué was not his way, and within the first month of war he found himself as chauffeur to a distinguished fighting general, and he saw a good deal of the hard fighting which took place during his first six months.

After the war he became interested in dowsing. He read every available book on this subject, and became an enthusiastic adventurer into many of the side branches of dowsing, such as map reading, the detection of some of the organic diseases, and so on. A few years ago he discarded all these side branches and concentrated on water divining alone. He was certainly one of the most reliable water finders of modern times. The reason for abandoning these side branches was probably that he wanted to convince the scientific world that his successful dowsing for water was an actual fact beyond all dispute. Once established as a fact he probably hoped that the scientific world would bring their great knowledge to bear on the subject and explain to us the why and wherefore of our art, an explanation which we dowsers are as yet unable to discover for ourselves.

His end came as a great shock to his many friends. He lunched and dined out as usual and went back to his flat near by. So far as we know he never woke again in this world. Beyond the fact that this happened seventeen years before he had reached the allotted span, who can find fault with such a passing? His loss will be felt by many, especially by those who had the luck to know him well.

NOTES AND NEWS

Mr. Timms writes to us as follows:—

During 1920-21, in collaboration with the late A. H. Church, M.A., D.Sc., F.R.S., a big area with Oxford as the central point was successfully mapped, showing all natural underground streams in the area.

I thought it would be of interest to fellow members to know that at the present time no less than four of these streams have been cut by excavations for works now in progress.

The extensions to the Bodleian Library in Broad Street, where Queen Mary laid the foundation stone last month, have touched two streams.

The new Police Station in St. Aldates has cut one, and work connected with a new sewer in Meadow Lane, near Iffley, has cut another. When Iffley Lock on the Thames was undergoing reconstruction a few years ago, another mapped stream was cut below the Lock, and the water was used for drinking purposes by the staff carrying out the work.

In North Oxford, a brickworks cut one stream and shaved another, with the result that the pit had to be abandoned. The site is now occupied by Morris Radiators works, the old pit being now a lake.

When the last big gasometer was built at Oxford a few years ago a mapped stream was also cut, entailing continuous pumping during the whole progress of the work. Scores of sites given professionally on the mapped streams have proved approximately correct in depth and quantity.

There are many other places I could mention, but these are the outstanding instances. My professional work is already well known, but this section of my work should prove of interest to all members of the Society.

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As reported in the *Yorkshire Observer* of June 18th, 21st and 22nd, the *Yorkshire Post* of June 21st, and the *Leeds Mercury* of June 21st and 22nd, Mr. H. E. Scott (B.S.D.) has again been successful in tracing a dead body, that of an unfortunate boy who was drowned in the River Calder at Dewsbury on Saturday, June 12th.

At about 8.30 p.m. on that day Jeffrey Senior, aged six, and his elder brother Clifford, aged eight, were being carried on a bicycle which was being ridden by an older boy along the tow path of the Calder. The bicycle appears to have skidded after striking a stone, as all three boys fell off, Jeffrey being precipitated down the steep bank into the river. Clifford was also thrown down the bank, and made a gallant but unsuccessful attempt to rescue his brother.

Dragging operations were carried out by the Dewsbury Borough Police from shortly after the accident, but without result.

About 3.40 p.m. on Sunday, June 20th, Mr. Scott, who had been assisting the Police since the previous Thursday, discovered the boy's body lodged against the buttress of the railway bridge at Healy, near Ossett.

Mr. Scott writes: "After walking down the river bank about four miles I arrived by the bridge. At the first buttress my stick violently went down. I tried again, with the same strong pull on my rod. It was very dark under the bridge, and difficult to see across the river. No one was present when I first arrived. Now when I was on the job a cyclist came down. Two young men also then stopped and watched me searching, and they also joined in. Suddenly one shouted out: "I can see a boot or

something sticking up there, Mr. Scott, where your stick points to." The cyclist also saw it, and we both walked into the river, and it was the boy's body laid in between the rocks right enough."

According to the *Yorkshire Observer* of July 17th and the *Telegraph and Argus* of July 16th, the body of Sam Robertshaw, aged 22, of Bradford Moor, was recovered from the Ravenscliff Reservoir at a spot indicated by Mr. Scott.

Mr. Robertshaw had been missing since the evening of Tuesday, 13th. Dragging operations were carried out by the Farsley police on Wednesday and Thursday. On Friday, 16th, Mr. Scott, after a quarter-of-an-hour's search, pointed out the place where he thought the body was, and soon after it was recovered at this spot.

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The *Ripon Gazette and Observer* of June 3rd contained a long article about Mr. J. Lambert, Sanitary Inspector and Water Engineer of Masham and Bedale Councils. It was stated, *inter alia*, that he discovered that he was a water diviner three years ago and finds his ability to dowse very useful professionally.

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The *Eastern Evening News* of May 7th contained an account of an interview with Mr. E. P. Wilson (B.S.D.), of Messrs. Le Grand Sutcliff and Gell Ltd., about the use of water divining.

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The *Cornish Guardian* of May 6th contained a short article about Mr. Albert Maunder, the well-known Callington water diviner.

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The *Sunday Pictorial* of May 30th had a note about the search by Captain Bramble (B.S.D.) for underground passages at The White House, Eastergate, near Bognor.

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The *Cornish Times* of May 28th contained a long article about Mr. James Renfree, who emigrated to Australia 30 years ago and has acquired a considerable reputation as a diviner for water and gold in Western Australia.

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According to the *Liverpool Daily Post* of June 11th an ample supply of water has been found by Mr. Alexander Jenkinson, a Dugannon water diviner, on behalf of the Dugannon Rural Council for the Village of Drummuck.

According to the *Sunday Referee* of June 13th, Mr. J. Caesar, a chemist and geologist, and Mr. William Craven, a water diviner, are collaborating to discover a hoard of gold supposed to have been buried by the monks of Cerne Abbey at the Reformation.

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According to the *Morning Post* of July 2nd, the Abbé Lambert, a well-known water diviner, Mayor of Oran, has been shot and dangerously wounded by a political agitator named Ferrando.

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According to the *Western Times* of June 18th, the Okehampton Rural Council have employed a water diviner to find a water supply for Broadwoodkelly.

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The *Free Press* of July 9th contained an article about Mr. John Waite, the 85-year-old water diviner of Talywain.

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In the *Abwick County Gazette and Guardian* of July 30th there is a picture of Mr. T. Carston, of Glanton, dowsing with a very large wooden forked rod.

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In an article about the exhibits in the Imperial Institute which appeared in *The Times* of June 17th, it is mentioned that among the exhibits in the Falkland Islands Court in connection with the products of the whaling industry are whalebone divining rods.

REVIEWS

DIE WAHRHEIT ÜBER DAS PENDEL.

By Christoff Dietrich. *Jos. C. Hubers Verlag*, Diessen vor München.

At the centenary festival held at Nürnberg during Whitsuntide, 1936, under the patronage of Herr Julius Streicher, there was formed a new society for the investigation of work with the pendulum. Under the auspices of the society this book publishes the papers which were read at its first meeting.

After the usual patriotic sentiments appropriate to such an occasion, and interspersed between praises of Frederich Kallenberg, the veteran journalist, traveller, and diviner, and declarations of the author's belief in the efficacy of the pendulum for the solution of all problems, are a few accounts of actual experiments done. As a case of the latter may be mentioned an article by Ernst Schradin, in which he claims to have proved his powers of correct diagnosis by conducting his observations in partnership with a doctor (pp. 63-69). As an example of what seems almost incredible prejudice and auto-suggestion may be given the short article by Walter Schmitz, in which he claims that he can determine race by means of the pendulum (Aryan blood gives the gold-platinum reaction, and Jewish gives the tin-lead!).

The book contains some good matter, the best being the quotations from Paracelsus, Schopenhauer, Goethe, and other great German philosophers.

C.S.T.

*BULLETIN DE L'ASSOCIATION DES AMIS
DE LA RADIESTHESIE.*

(Nos. 41, 42 and 43, February to July, 1937).

The Association des Amis de las Radiesthésie has passed through some difficult times, and this explains why the *Bulletin* has not been published as regularly as in former days. It explains also why a great part of the *Bulletin* in its new form is taken up by a lengthy controversy on the management of the Association.

Two German physicists have named "W rays" the rays emitted by all products. These are not electro-magnetic, but a magnetoid vibration connected with the magnetism of the earth. For these two scientists these rays are carried by the oxygen atoms of the atmosphere. To these physical forces must be added psychic forces, both of which influence the dowser.

Mr. Paul Serres gives in the *Bulletin* for June an interesting article on writing as a mirror of bodies and souls. He thinks that probably through numerous contacts between the writer, the paper, the pen and the ink, one has in the handwriting of a person an excellent way of discovering the state of health and ways of the writer through the pendulum. He gives several examples of his results, but as it is often the case he does not say a word of the method used by him.

Two French scientists, having for some time carried out various experiments in their endeavour to eliminate the human element in dowsing phenomena, have come to the very interesting conclusion that the human factor is necessary. The dowser emits and receives waves due to the human factor; the power to do this may be amplified by some mechanical contrivance, but nothing can take place of the human element. This is very interesting, specially for those who use the pendulum for medical purposes, as it shows the uselessness of all the intricate machinery advocated by some inventors.

Mr. Mellin in the July number gives a first contribution on the Aura. He divides the human aura into three classes—the physical, the mental for sensations, and the mental for externalisations. He considers that the aura as seen by spiritualists is similar to the rays of metals. Mellin divides auras into two classes, one the phosphorescent, and the other the fluorescent. He will conclude this article in the next *Bulletin*.

F.B.

ZEITSCHRIFT FÜR
WÜNSCHELRUTENFORSCHUNG.

(April, 1937).

This number gives rules for the constitution of a professional faculty of dowsers. The President (Fachschaftsleiter) is Dr. W. Brauch, of Hanover.

A paper entitled "Observations and thoughts on the phenomenon of the diviner's rod" is contributed by A. de Vita. In his paper he refers to those who he considers "overstep the mark of probability in their beliefs in the possibilities of the diviner's rod." He then briefly mentions the physical quantities which were observed by him, and states the methods by which they were measured; for instance, the changes of intensity of penetrating rays of unknown origin were detected by a photoelectric gas cell, acting as an ionisation chamber (counter). The paper is of interest, as it gives the views of one who wishes to deal with the matter purely from a physical standpoint.

Dr. Raoul Braun-Fernwald contributes an obituary notice of the distinguished dowser Colonel Karl Beichl, who, among other successes, was able to detect hostile mines in the Save.

Dr. Franz Wetzel has written some observations on the cosmic rays, and has made some suggestions as to the connection of

the latest observations with the dowsing phenomenon, *e.g.*, "It seems more and more clear, with the progress of exact research in the complete range of radiant energy, that the energy that is useful to divining is to be found in the area of the neutral rays, which appear to be active both on the physical side and also on that of physiology and biology."

Otto Muck gives an account of some observations on the connection between residential position and the incidence of goitre.

The southern provincial group of the association held a conference at Munich, in course of which Dr. Osswald read an interesting paper entitled "German petroleum, its origin, occurrence, detection, and winning."

The author gave a synopsis of his views on the utility of the diviner's rod in the detection of petroleum as follows:—

(1) All determinations at a distance, from maps and plans, are purely fantastic, and therefore useless: successful examples which are obtained in this way can always be traced back to thought transference.

(2) Work with the rod on petroleum needs great experience, much caution, and actual careful practice with known objects.

(3) Individual opinions, especially in depth determinations, have seldom coincided among experienced dowers, and have seldom been practically confirmed.

(4) All depth determinations of petroleum known to the lecturer had proved of no use.

(5) The influence of tectonic disturbances appears to be particularly strong during a search for petroleum and acts very differently on various dowers.

(6) For the determination and limitation of oil fields, and for the separation of oil-free from oil-bearing regions, the diviner's rod is entirely useful, and has proved itself by test.

Dr. Franz Wetzel complains, in a note at the end of this number, that there seems to be a press campaign against dowsing, and that while papers insert all that is against dowsing no reply is tolerated from the supporters of the art, "they look on us as outlaws . . . without doubt we cannot shut our eyes to the fact that we must sift the wheat from the chaff."

C.S.T.