THE POINT DEPTH METHOD

By ELVAN

It seems essential for progress that successful new methods which have been sufficiently developed and tested, should be published so that other Dowsers may try them.

Nearly five years ago it appeared to the writer that two things were badly needed—a simple and accurate technique for measuring the depth of fissure streams, which did not require long experience or cumbrous apparatus—and a sound method of gauging the rate of flow in gallons per minute along the fissure. The technique developed for the latter, though reasonably reliable for flows up to a certain volume, has an unsolved pressure complication, and is not ready. But the depth method seems to have reached a satisfactory stage. Except for two improvements in the special tool employed, there has been no material development for three years. It is now giving results roughly to tape accuracy for several Dowsers, some of whom, though sound performers, have no great length of experience behind them.

That a metal rod stuck vertically into the ground acted as a " radiating point " for what might be below it was discovered at the end of 1930. This system of measuring depth has been gradually evolved from that discovery. A great deal of experimental work has been done, and quite a number of different metal " points " tried.

The well-known " insulated wire " technique, which M. Viré attributes to M. Probst, presents no difficulty to any Dowser, and is perhaps the most reliable of published methods ; but it involves the transport and setting up of much clumsy apparatus (a drum of wire alone is not very portable), sufficient space at right angles to the stream line, and is very slow. With the majority of methods normally used, considerable skill and experience are essential for any kind of accuracy ; quite a large margin is usually allowed, and the " off day " is always possible ; while a number appear to be purely psychic.

The " point " method needs space, but not necessarily at right angles to the stream line. It is very quick, and the " point " is little trouble to carry. During selection, rough pacing is good enough ; when the choice has been made and real accuracy is wanted, marking out with the rod often takes less time than measuring up with the tape.

The Point now used is a cylindrical rod of Mumetal, about half-an-inch in diameter. For convenience it can be made up as a walking stick, with a crook at one end and a slightly sharpened point at the other. Mumetal is an induction melted nickel iron alloy of extremely high permeability, as its name implies. After

it has been worked or bent it must be heat treated to restore its full magnetic properties.

The Technique.—The " point " is stuck vertically into the ground (as a rule 6in. is enough to hold it), just inside the " stream band "—*i.e.*, the band of radiation directly over the stream. The Dowser stands with the " point " immediately behind him, holding his rod and water sample. He then walks straight out from it. At a certain distance the rod will lift sharply ; a couple of feet or more beyond, the lift will fade out, and the counter pressure applied to the rod will make it flip down. The spots where these reactions occur should be carefully marked, and their distances from the " point " measured with a tape. Suppose these measurements are 57ft. and 60ft. ; the former is the depth of the top of the stream below the " point," the latter the depth of its base.

It is unnecessary to walk out at right angles to the stream line, the " depth band " lies round the " point " in a wide arc on both sides of the stream, fully 50 degrees on either side of the right angle. This is useful, as a line of sufficient length, free from obstacles or excessive slope, can usually be found within a reasonable angle to the perpendicular on at least one side of the stream.

While the point is in position, radiations from other objects will not be felt by the Dowser walking out from it. Last year I depthed two big streams of about equal size, flowing roughly parallel in the bedding at c. 150ft. down. In each case on the line taken, the " stream band " of the other stream was crossed before the " depth band " was reached; in neither case was it felt.

If the " stream band " is narrow and the " depth band " wide, the flow is along a steeply inclined fissure ; a narrow " depth band " indicates a flat flow. Examination of the two bands thus provides useful information. For example, where a small flat flow is spread out widely, the pump will not draw it well ; and where a fissure is almost vertical and really deep, it offers a narrow target for a borehole.

The inside edge of the depth band can sometimes be fixed more sharply by re-crossing the band towards the point; the drop is often cleaner than the lift ; but the best way to get the exact position of the edges is to turn sideways over them.

Occasionally there may be more than one stream below the point. I once examined a case where a minor flow at a shallower depth had been mistaken for the main stream. This minor flow had been cut by the borehole at about the depth given ; the main stream was much deeper. If there is a single flow below the point, the lifts over the stream and depth bands are roughly equal in strength. If there are two flows at different levels there will be two depth bands ; the relative importance of the

streams they represent can be judged by comparing the intensity of the reactions over them.

During the summer of 1933 I showed this technique to one of the most experienced and successful professional Dowsers, whom I will call "X." Some months later I discovered he had adopted it, having found it simpler and more accurate than any method he had used during over 30 years of professional dowsing.

At this stage a copper point was used. With copper there was a gentle lift at once; perhaps half-way out this began to increase in strength; so, though the final drop was good, it was by no means easy to judge just where the true lift came, especially if one was tired and touch had become a little dulled. In the spring of 1934 I tried a point of Low Moor soft iron. With this the preliminary lift did not occur, the true lift was sharp, and the whole action cleaner cut and stronger. This suggested that permeability might be the governing factor, so a Mumetal point was ordered.

Before it arrived, I saw "X." again and showed him the soft iron point. At first he was loath to leave it, saying he could not get his "current." Eventually he walked out protesting, he could feel nothing, and so forth; suddenly he got a strong lift and stopped dead: his expression of delighted astonishment was most eloquent. The Mumetal point was a further improvement both in sharpness and strength, but the change from copper to soft iron was the real step forward.

Examples.—In 1933 "A" asked me to test him. I found he was a very good natural Dowser, and gave him a number of lessons. During the summer of 1934 he did his first three wells. The first was in Hampshire chalk; being his initial attempt, he summoned an experienced local professional to assist. They found a good fissure stream, which the expert said was about 50ft.; using the copper point, "A" made it 45ft. The borehole cut the fissure at 45ft., the water rose up it to 13ft., and the supply proved more than ample.

The other two were in slate (Macduff group, Highland schists). The first taped 35ft., which proved correct. The second, two miles N. and 300ft. lower, was sited on a steep slope. Accurate measurement proved impossible; it was judged to be 39ft.; the fissure was cut at 36ft.

Early in 1935 "B," whom I had coached in September, was asked by an engineer friend to find a water supply for a farm and three cottages: his first independent attempt. The existing supply came from three shallow wells in boulder clay on andesite. Before their covers were removed or any information given, "B" offered to read for each well—the distance from the ground surface to the water—and the total depth. He made the former—17, 5 and 7 feet: all three proved exact. The total depths were

22, 10 and 11 feet ; in each case he over-estimated these by either 1 or 2 feet. He wrote asking if these apparent errors might not actually be due to an equivalent saturation of gravel or fissured rock below the well bottoms. The Engineer, who had never seen Dowsing before, was much impressed, but within an hour proved to be a good natural Dowser himself.

Deeper examples :—In December, 1933, " X " pegged for several wells in a Scottish county. In September, 1934, the Engineer responsible took me to see them. The first had been bored, the pumping test completed, and the borehole covered pending arrangements for a permanent pump. To try the depth of the main stream, I stuck the point in over it a few yards from the borehole (where there was a deeper cross stream), walked out with the rod, marked the edges of the depth band with match-boxes ; we taped them—138ft. and 142ft. I then asked at what depth the stream had been cut ; out came the pocket book, but it only contained " X's " original copper-point estimate, 125-145ft. —an excellent illustration of the difference between copper and mumetal. The 9in. bore cut the fissure at 138ft. ; the water rose to 60ft. from the surface. This borehole is in Old Red Sandstone.

At the second, seven miles away, the pumping test was being carried out. I found more than one flow : working from near the borehole, the base of the shallowest taped 125ft. When the pump was stopped, the water level, which had been 176ft. down, rose rapidly ; the Engineer followed its rise with the float wire. Suddenly the sound of water falling in ceased : the rising water had reached and submerged the shallow stream entry ; he nipped the wire, pulled it out and measured it—120ft. Satisfactory, if rough, confirmation. Except for the first few feet, this borehole was entirely in olivine dolerite.

More examples could be added, but these should suffice ; actually, twelve have been given. They have been chosen, firstly, to show that long apprenticeship is not essential for accuracy ; secondly, to prove the all-round precision possible ; they have not been selected from less successful ones ; the general standard seems fairly level. When I last saw him some months ago, " X " told me of a very close recent result at about 500ft., but I have no details. So far, I have not heard of a proved example with bedded clay, often considered the Dowser's *bête noire*.

The need for lateral space is an obvious disadvantage, but the system is easily applied. I know of no other which consistently gives this standard of accuracy. Only its simplest application has been described, it has also proved successful for more complex dowsing problems.

One further experience might be of interest. Last May, I went to see a very sensitive Dowser who normally uses no

instrument; he dowses with his hands. For many years he has been employed by a firm of well-borers in Exeter, who assured me that he had never made a mistake. They added a story of a local authority's refusal to allow them to bring their Dowser. The Surveyor sited the borehole; after it had failed, this prohibition was withdrawn, and a satisfactory supply obtained.

He gave me an exhibition with a stream under his cottage garden. I have never seen anyone so sensitive. After checking it with the rod—a good little stream of some eight gallons per minute total flow—I asked how deep it was; he replied that he did not profess to tell depth, but thought it about 30ft. I stuck the point in, paced out, and made a little mark—a flat flow at c. 45ft. Then I asked him to start out in the same direction from the point, holding his hands as he normally did when dowsing, and walked out a few yards to watch.

On reaching my little mark his hands lifted strongly and then dropped, just as my rod had, and at exactly the same places; he was obviously much surprised. When I paced out, the expert remained by the point; no doubt he realised that something happened when I reached a spot 15 yards from it, but as he was directly behind me he could not have seen what occurred.

DIFFERENCES OF REACTION.

By Captain W. H. TRINDER.

Although the basic principles of Dowsing must be the same, it may be of interest to beginners, and possibly to those more experienced, to consider the very different reactions which occur with different dowsers.

I wonder how many Dowsers have tested themselves with the pendulum to find out which is their most sensitive finger or, to put it in another way, through which finger the reactions are picked up. I have found that if I hold the string between the thumb and *first* finger of my right hand the pendulum will react over an object, but will not do so if held between the thumb and any other finger of the right hand.

With the left hand it is entirely different. In the first place I get a very poor reaction and, secondly, the only reaction I get is when the string is held between the thumb and second finger. I presume that the reason for this is that the particular nerves which react to the influence are reached through the first and second fingers of the right and left hands respectively.

It would be interesting to hear the experiences of other members of the B.S.D. on this subject.

Many dowsers find that the rod turns DOWN with them for water and UP for metals, or vice versa, and of course there is