

AN EXPERIENCE AND A DIFFICULTY

By EVELYN M. PENROSE

In the December number (1938) of the *Journal* of the B.S.D. was an account of a most interesting talk given by Mr. W. W. Hawker of his experiences in Australia, and amongst other things he mentioned a man he knew there who could "stop underground water from running."

When the *Journal* reached me here in Johannesburg, I asked the leading water diviner of the Transvaal and two amateur diviners, a father and son (both successful water diviners), to accompany me and make the experiment for ourselves. They were all very amused and sceptical, but they consented to do so. We went on to the property of the father, about ten miles out of Johannesburg.

Unfortunately, the property was all on solid granite, and we reckoned that the stream we selected must have been at least 500 feet down (but the problem of ascertaining the depth of water in South African granite is one I shall touch on further on).

I will now quote from Mr. Hawker's article in case anyone reading this does not remember the details. Mr. Hawker says: "The man who first brought divining to my notice had a peculiar gift. After I had found I had the power to divine moving water I met him on Yorke Peninsula, where we were divining for oil. He said: 'I will show you how I can stop underground water from running.' He found out a stream and asked me to mark it out, which I did. He then got a flat stone and put it in the middle of the stream. He then took the hammer with which I had driven the pegs in and knelt down, putting his left hand palm down on the ground. Then he began smartly striking the stone. After he had done this for about ten minutes, he asked me to map out the stream below him. I found I could not feel the water for quite 20 feet, but beyond this point I felt the water as before. He kept on tapping the stone and again feeling for the water. I found it had receded another 10 feet. I then tried the stream above him, and felt it right up to where he was tapping."

We all traced our selected stream, and marked it out very carefully on the ground, and tested the ground all round it to be sure there were no other streams near it.

The professional and I estimated the yield as 600 gallons per hour.

I placed a flat stone over the stream and started smartly striking the stone. After ten minutes the stream was tested, and all three diviners reported no change! This was disappointing, but I continued for one hour and ten minutes. Then the results were these. Under the stone no water could be felt at all. In front of me for about $1\frac{1}{2}$ feet the water was barely

perceptible. Behind me for about 6 feet there was a trickle of water about 10 gallons per hour. But an extraordinary thing had happened. The stream was deflected into a semi-circle, the greatest width of the arc being about 9 feet from the original stream; and, more extraordinary still, the water had risen 70 feet in height.

In granite! Was the diverted water driven up into a higher crack, or was the actual water not diverted at all and only the emanations or waves (which I believe are said to be electromagnetic) given off by the water, diverted?

There is little doubt in my own mind that the sharp concussion or vibration caused by hitting the stone, and, still more, the vibration from a drill, and, above all, a jumper drill, does affect the water, and I think it explains why in many cases a well which is abandoned as a dry hole will be found full of water after a short time, and will continue from that time on to be a satisfactory yielding well.

The same professional dislikes being called in on a consultation about a well if it is a drilled well, or to work in the proximity of a drill in divining a new well, as he says he has noticed for many years that "there is something queer about the water," and he says he can never be sure of his predictions.

Probably the depth of the stream accounted for the length of time it took to make any impression on it by hammering.

I am hoping that the accounts of this will lead other people to make this experiment too, or that if they have already done so I may read of their experiences through the *Journal*, and that they may be able to explain mine. I think the only way to actually *prove* whether it is a phenomenon of water or emanations would be to find a stream issuing from a bank or cliff and try the experiment on that. If the water was actually stopped by being driven back, or even considerably lessened, it would prove that it was the water. If the water was displaced, it should be traceable near by. I hope someone living in the country will be able to find a suitable spot and make the test.

I should now like to return to the question of the great difficulty of ascertaining the depth of water in granite in South Africa, or rather in the Transvaal, in hopes that this *Journal* will fall into the hands of someone who can throw some light on the subject.

I had done a lot of work on granite in Canada, and I must frankly admit that I thought I was quite good at the job! I never before had any trouble with the depth, but by way of precaution I always allowed 10 feet on every 100 feet over and above the depth I got. I was asked to go on a very large tract of land where the need of water was very great, and although it was a solid granite area (pink and grey granite) I did not hesitate to do so.

I found several locations, and two in particular, which I reckoned would yield 800 gallons per hour and 1,000 gallons per hour respectively. I reckoned the depth of the 800-gallon location (which was the best location for the Committee's needs) at about 300 feet and said 350 feet for safety.

As a rule, I worry a lot over any water predictions I do, far more than over mineral predictions (which is obviously absurd, as the latter involves far more money than the former to develop). However, I was so confident about this prediction that I never gave it a second thought. Imagine my dismay when I got a long-distance call from the secretary to say they had gone 350 feet and got a dry hole!

I immediately got into touch with all the amateur diviners I know out here, and they were unanimous in saying that they could none of them tell the depth in granite and they believed it to be impossible.

I then took this leading diviner of the Transvaal down to this property (which was some 300 miles away) at my own expense. As he was at the time very prejudiced against me (although he hadn't met me!), I knew his verdict would not be biased in my favour! He admitted to having had great trouble with granite himself in the old days and had specialised in it in consequence, and now had a great number of successes to his credit.

He confirmed my two findings to an inch (both were originally found on an aerial photo as no scale map was obtainable), and without any previous knowledge gave the same figures for the yield. He also gave the depth of the first stream as "around 350ft.," but he said that in dealing with granite he always *doubled the depth*. We spent two days working on this big area, and found one location which we estimated would give between two and three thousand gallons per hour. We doubled the original depth, and the Company pulled up the drill from the first hole and started on this, but, alas! at double our depth they have not struck the water and have a dry hole.

I don't know which is the most sick about it, the Company (which is indirectly the Government) or the diviners!

We (the diviners) are absolutely confident still that the water *is* there, and in very large quantities, and the Company is, of course, equally confident that it is *not* there!

I always feel that one diviner might make a mistake (one of the most amazing things about divining to my mind is that one may use the same method and take the same care as one always does, when one is successful, and then for no apparent rhyme or reason one has a failure), but for two diviners working at different times and with two entirely different methods to be mistaken seems to me impossible.

Is there anything in granite that could be affected by the great heat of the South African sun? If any geologist, scientist or experienced diviner can offer any suggestion that may lead to a solution of this very baffling problem we should be most grateful.

This experience makes me feel more than ever how very unwise it is of any of us to say (and still more to put in writing) that we have "found" this or that—water, oil, diamonds, hidden treasure, &c.—until it is actually *proved*. I know from experience how very much it prejudices outsiders, Governments, mine managers, property owners and sceptical individuals against divining. One makes these announcements in all good faith, but the only way to prove anything is to bore or dig for it.

As I have always been one of the chief offenders in this, I write this criticism for myself in future as much as for my co-workers!

MY EXPERIENCES AS A WATER DIVINER

[NOTES OF A LECTURE BY MR. NOEL SPONG TO THE BRITISH SOCIETY OF DOWSERS ON MARCH 16TH, 1939]

The following are some of the points in Mr. Spong's lecture and in his answers to questions afterwards.

He uses a hazel twig, preferably fresh cut. He does not find a whalebone rod satisfactory. The rod turns up for water and down for minerals such as iron and Sussex marble.

To counteract the effect of iron, which is very common in the Weald, he always carries an iron nut in the hand.

He finds the pendulum useless for locating water, and for other purposes only a black pendulum or a pendulum of white ivory is effective.

He estimates depth by doubling the distance between the edges of the stream, found by approaching it from opposite directions, but this method only works for comparatively shallow depths, *i.e.*, up to about 60 feet. He prefers to work in the morning, when his estimates of depth are more accurate.

He does not attempt to estimate quantity in gallons per minute, but can tell the comparative extent of yield roughly by the physical sensation experienced.

Most of his divining he has done is in the Weald, where the depth is fairly constant according to the geological formation of the locality. North of Horsham he makes an extra allowance of 30 feet in the depth.