

### THE DIVINING ROD

I HAVE been much interested by Dr. C. A. Browne's article, "Observations upon the Use of the Divining Rod in Germany," appearing in *SCIENCE* for January 23. It recalls a somewhat similar experience of mine.

For many years a citizen of a neighboring town served this and other communities by using the divining rod to locate supplies of water. In order to settle a friendly argument regarding the existence of this mysterious power, a friend of mine persuaded the dowser to submit himself to a series of tests.

He used forked sticks of any kind of wood, but preferred pear or cherry. His procedure was to walk straight ahead across the chosen field holding the forked stick tilted a little forward, pointing not quite vertically upward. The forks were held in his hands as shown at A, not B, on page 84 of Dr. Browne's article. Presently the stick would bend forward and gradually point downward. Where it was vertical, there a water course existed, the dowser said. A stake was placed there. The process was repeated some distance away, the man walking along a line parallel to the first. Then the line of the water course was determined by walking from one stake to the other following the line where the divining rod continued to point downward. By the same process a second water course was located which intersected the first. The point of intersection was the place to dig the well. He performed this experiment on the college campus in the presence of my friend, myself and a few interested observers.

The usual variations were tried, such as having some one else hold one fork while the dowser held the other, with the usual success. The man was honest, and sincere in his belief that he possessed a mysterious power. He accounted for it by saying that he was very electrical.

Watching his hands during the tests, I soon saw that the bending of the rod was produced by the motion of his right hand. The forearm rotated, bringing the thumb upward and over toward the left hand. The left hand remained stationary. Apparently he was entirely unaware of the fact until it was shown him. When he allowed some one else to hold one fork of the rod, he had always retained the right-hand fork. We then had him retain the left hand fork with one of us holding the right hand one and the rod showed no tendency to bend over.

Other tests were then applied. He was blindfolded and led across the line he had established as showing the water course. Sometimes the divining rod bent over at that line. About as frequently it failed to do that, but bent over at some other place. We had him walk across and then along a blind ditch in which

we knew water was flowing. The rod paid no attention to it.

His method of finding lost articles was to put a piece of the same substance at the tip of the rod and then walk about, holding the rod in the same manner as when searching for water. My friend loaned his silver watch for the test. It was concealed in the grass. The dowser stuck a silver quarter in a slit at the end of the rod and began the search. The results were what might be expected. My friend regained his watch later on, but not by that method.

Certain inferences seem well justified. The material of the rod is of no consequence. It serves as an indicator only. The wrist motion of the dowser, apparently involuntary, perhaps even unknown to him, was wholly responsible for the motion of the rod. Can the dowser have some peculiar sensibility which causes that involuntary muscular action when he is near water? In this case, the failure to respond when directly over the ditch where water was then running casts doubt upon that supposition.

The only possibility remaining, so far as I can see, is that one would find water by digging to a sufficient depth almost anywhere. It is quite possible that the percentage of successes in finding water by this method would be quite as large as that obtained by employing a dowser.

Such frequent occurrence of two underground streams of water, intersecting at approximately right angles and continuing as separate streams after intersection, hardly accords with our knowledge of the usual behavior of water. A method which consistently discovers such streams can not fail to arouse skepticism as to the validity of the claims made for it.

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### THE USE OF THE DIVINING ROD IN GOLD PROSPECTING IN ALASKA

DR. C. A. BROWNE's interesting article in Number 1882 of *SCIENCE*, "Observations upon the Use of the Divining Rod in Germany," has brought to my recollection an experience of my own, but in this country.

In 1913 I had a chance to visit Alaska, the purpose of my trip being to familiarize myself with the methods of gold mining as used in Alaska. With introduction cards to local people, given me by my friend, the late Dr. Alfred Brooks, I was able to do more in a few days than otherwise would have been possible in so many weeks. I also enjoyed a most friendly reception by every one with whom I happened to meet during my Alaskan trip. Owing to these facts I had been also able to learn something of the use of the divining rod in Alaska, the use of