TRANSACTIONS
1960-61

Vol. One **Number One**

Wade, J.C. 1961
"Divining"
Transactions, 1960-61, Vol.1 No.1, pp.12-22

Published by the

THE NORTHERN CAVERN & MINE RESEARCH SOCIETY
SKIPTON U.K.

NB
This publication was originally issued in the 10 by 8 inch format then used by the society. It has now been digitised and reformatted at A5. This has changed the original pagination of articles, which is given in square brackets.

DIVINING

Caleb Wade

The following extract is one of many descriptions to be found on Divining or Dowsing. This is a subject which often arouses the strong convictions, for and against, by all those who discuss it, and it is probable that the general opinion lies between "sorcery" and "malpractice". Nevertheless, the claims of diviners have been examined for some centuries and the extracts can be described as a summary of some of the opinions. The reproduction of the wood block is from Agricola's 'De Re Metallica'. (Book 11, p.40)

"The divining rod, still used by the dowser to discover water, was first described in 1556 in Georg Agricola's mining treatise, "De Re Metallica".

This German scientist described the rod as an instrument for finding metals, but made no mention of the search for water. The value of the method, he says, is a subject of contention between miners; the forked twig is usually cut from a hazel bush, although some use different kinds of twigs for different metals, hazel twigs to find veins of silver, ash for copper, pitch pine for lead and especially tin, and rods made of iron and steel for gold. The clenched fingers point upwards and the junction of the twig is raised, the twig beginning to twist when the holder stands over a vein. Such at least is the contention; but after examining all the claims made for their art by the diviners, Agricola rejects it as a serious method of prospecting. He points out that the twisting motion of the hazel twig is suspiciously unlike the result of direct attraction by amber or loadstone, and considers it is brought about by dexterous manipulation of the pliable bough. He concludes that this practice is a survival among superstitious miners of the belief of the ancients in the power of magic wands to change substances.

Possibly the divining rod was suggested by the common belief that metallic ores attracted certain trees, which drooped over their lurking place; and it seems that the lore of the divining rod was of German origin and was spread by German miners from the Harz Mountains and elsewhere. Thus the rod was introduced to England in the sixteenth century when German miners were brought over to various mining districts, (especially the Keswick area of Cumberland.)

In the early days various woods were used besides those mentioned by Agricola, – among them the apple, the willow, the pomegranate, which was preferred in Sicily, and the mistletoe. All trees to which magic power was ascribed, hazel, the favourite, was-another powerful tree; a tree of knowledge and fertility and a proper substance for all effective wands and rods, able to keep away snakes, elves, fairies, witches, wizards, etc. The forked hazel

Diving-rod in use for finding metals from Agricola's De Re Metallica, 1556.

stick is still the favourite divining rod of modern dowsers, although some will work with any wood and even with wire.

The efficacy of the rod was explained sometimes on the principle of "sympathy" or "attraction and repulsion" on the analogy of gravity and magnetism, and sometimes by demoniac influence acting through the rod or the operator. Consequently, to avoid suspicion of sorcery or dealings with the Evil One, the diviner often baptized his rod by laying it in bed with a newly christened Child, by whose name it was subsequently addressed, with the addition of pious formulae. But the aroma of witchcraft was not easily dispelled in the seventeenth century, and two of the most famous of the early diviners, the Baron de Beausoleil and his wife, who operated in many parts of both Europe and America, were indicted on a charge of sorcery and ended their lives in prison. The Baroness de Beausoleil was the first diviner to claim the power of discovering water as well as metals by the use of the rod and in her book of 1632 "Veritable Declaration — des riches et inestimables tresors nouvellements decouverts dans le royaume de France" she describes how she divined the waters of Chateau-Thierry.

[13]

However, an episode in the autobiography of the Spanish mystic St. Theresa suggests that water divining may have been practised in the previous century. Theresa in 1568 was offered the site for a new convent to which there was only one objection there was no water supply, happily a Friar Antonio came up with a twig in his hand, stopped at a certain spot, and appeared to be making the sign of the cross; but Theresa says, "Really, I cannot be sure if it were the sign he made, at any rate he made some movement with the twig and then he said "Dig just here"; they dug, and lo: a plentiful fount of water gushed forth excellent for drinking, copious for washing, and it never ran dry."

When the divining rod began to be used for detecting water as well as minerals it spread rapidly. It was a frequent matter of contention between churchmen, some approving of it, others, like-Jesuit priest and mathematician Kaspar Schott (c.160l-1680), denouncing it as an instrument controlled by the devil. Schott, however, later withdrew his strictures and he and the scientist Athanasius (c.l60l-1680) were the first to suggest that the movement of the rod was due to unconscious muscular action.

In 1692 the instrument was put to a new use, that of detecting criminals. In that year a peasant of Dauphiny, named Jacques Aymar, gained great notoriety by apprehending a murderer, who later confessed, with the aid of the divining rod. Aymar was later discredited by failing some rigorous experiments devised by the Prince de Conde, and after 1701, when the Inquisition issued a decree against the employment of the divining rod in criminal prosecution, it was rarely used for this purpose. In the late eighteenth century another

peasant of Dauphiny, Barthelemy Bleton, acquired fame as a “hydroscope”. Pierre Thouvenal, physician to Louis XVI, became interested in his achievements and in 1781 published an involved essay comparing the phenomena of the divining rod with those of magnetism and electricity. In 1782 Bleton underwent a series of tests in Paris, which did not prove entirely to his credit. At this time the [14] theory of “animal magnetism” and “terrestrial magnetism” were widely accepted as an explanation of divining. When Bleton and others failed their tests, this hypothesis was abandoned. Instead, most serious investigators in the last century held the view that the motions of the divining rod, like those of “table turning” and the “magic pendulum” were due to involuntary movements on the part of the performer.

The Glasgow geologist, J.W. Gregory, put forward this same view in 1927, adding that the diviner, by no means necessarily a charlatan, is guided by his experience and observation of soil, topography, vegetation and other surface signs: and more recently professional African diviners (who do not use a rod) have been seen at work in Nigeria, where they display a remarkable gift for finding underground water. Even so, there are well authenticated cases where the movement of the rod seems to have been too violent and powerful to be explained by simple movement of the hands.

At the Northern meeting of the Cave Research Group at Skipton on 21st May 1960, Dr. T. Ford gave a lecture on diviners. Although Dr. Ford based his findings against diviners, tending to expose the humorous, one can only conclude that diviners generally have shown up badly on tests, but it must be remembered that tests of the subject tend to be very artificial and “proof” one way or another is difficult to ascertain. It appears to be finally resolved as the matter started; a belief or matter of faith.

Assuming that one is prepared to lend a kindly ear to the subject of divining, the principles can be applied in many ways and the following is modified to show that it is possible to influence the methods of siting. Commencing with cave excavations; in this case no rash claims are made as we have found that the results are generalisations, but the indications can be very useful if studied critically and carefully.

When searching for water in valley bottoms and on relatively low-lying flat land, divining is just a guess; for if there is sand or gravel to a good depth water can be found almost anywhere, if one digs deep enough. In hilly districts where the rock lies close to the surface, water tends to be confined to distinct [15] channels, and in limestone districts, if other conditions are fulfilled, these channels form explorable caves. To extend a known cave system, or better still to be the discoverers of an entirely new Cave or pot hole is the goal of the bands of determined “diggers”. Most diggers base their labours on extensive experience of exploring known systems, and a little knowledge of the structure of limestone, but are willing to apply the knowledge of those learned in the ‘ologies’ and even to use delicate

instruments. A gaggle of scratters ensconced in a shake hole can have the weirdest reasons for being there and we feel that divining methods can come about midway between the two extremes.

The type of divining rod which was used for the following is the most usual form of rod, the 'Y' or Alpha shape. This is composed of a piece of copper wire, about 30 inches long or alternatively brass or steel wire, folded and crossed in the middle to form a crude 'Y'. The rod is held with the hands about a foot apart, palms upwards and thumbs out. The fingers are clenched and the rod is allowed to point forwards and downwards. Tension is put on the rod by moving the hands, slightly apart. The presence of "something" is indicated when the rod revolves in the hands. One or two tries over a known system about 30 feet underground will show whether the user has the ability or not.

After the "guinea-pig" has had some practice, assuming that one has received a definite reaction, he can be allowed to wander over the moors "discovering" cavern after cavern, but before he can become famous in caving circles two difficulties must be overcome. The first is to convince a party of those suitably interested but the more serious point is to make an entrance.

The method which we use for plotting a hypothetical system is a modification of surveying underground. We set out by splitting the party into two groups, the diviner with his legman starts off by taking readings and the leg man, watching closely, pushes a small peg into the ground where the diviner makes a mark in the turf with his boot heel, this is called a "spot" reading. When a line of 100 to 300 feet has been marked out in spots the diviner attempts to find the intersection point of each change of direction, looking along the spot pegs. From intersection point to intersection point is taken as one leg. [16] The surveyor's 1engthsman then erects his ranging pole at the end of the first leg and the surveyor takes bearings as is normally done. If interest is aroused at any point, then the diviner attempts to give an estimate of depth from the surface and also the width of the "subject". These are known as spot depths and widths. The readings, when drawn out, are known as the "S.D. Line" and "relevant surface detai1" and any caves likely to run nearby are also plotted on the drawing. The result is a "very pretty picture" which one attempts to "sell" to the handiest digging group.

Since we often arrive at a point where our S.B. line contradicts existing knowledge, we have to consider all matters carefully and we have been fortunate in that our surveyor is extremely keen to resolve all surveys as accurately as possible and although strong arguments have arisen we have mutually agreed that error can creep into even the most carefully laid plans.

Again we were fortunate, as the first survey of Mongo Gill South to North, Greenhow Hill, was found to have an error of about 5 feet in any direction when we connected by sinking the present entrance shaft. Later work has led

us to believe that this was an extremely high standard, but we usually agree to an error of 10 to 15 feet which is sufficient to justify a rather elaborate set-up.

Since we have not the services of an experienced geologist we tend to rely on what is often described as “black magic”. One advantage, perhaps a dubious practice, is that if the magic wire wags the lads will dig!

At one time divining influenced our surveying methods and therefore it is perhaps not surprising that we also altered our digging techniques and therefore feel that the following observations can be made. Excluding resurgences, about which we have had 1ittle experience; sites for prospective digs can be classified as sinks, shakeholes, fissures or even the interesting “little hole under a rock” and finally the “dead reckoning type”.

[17]

Sinks – Unfortunately nature has endowed water the property of disappearing into nooks-and crannies which even the smallest and keenest of diggers cannot follow. If the course of the underground stream is known the dig can be sited to follow this direction. This is not the full solution however, as the water can vary its course by running into bedding planes or solution tubes. If the site is-on badly shattered solid ground, rather than of washed-in boulders, the water becomes scattered and attempting to follow the water course is not necessarily the best, or the easiest, way in. At Mongo Gill North the water probably missed the main cavern by as little as three feet, also, after digging had commenced we found by dyeing that the water had to run over one cavern to appear in the opposite wall of an adjacent cavern.

Shakeholes – If the influence on the divining rod is constant during differences in the weather, shakeholes are probably better than sinks, but shakes can become difficult to dig at any depth if the opening becomes a bottleneck. Rubble in sinks tends to be rounder, whereas in shakeholes the filling material is more often angular and therefore can be more difficult to remove.

Fissures – This type of site usually ends at the first constriction and appears to be of the “Go” or “No Go” proposition.

Dead Reckoning
This is a terse description of the decision to start a dig which is based on knowledge or hypotheses when all the surface indications would appear to be against or would suggest an alternative to the chosen site.

Since it is likely that digging, at least in the North of England, will become more advanced and that co-operation between various groups will be necessary to amass the equipment needed, some pothole clubs have had the

opportunity to use a magnetometer and co-operation would, in time, benefit all those interested in digging, although at present all groups go their separate ways.

[18]

After our first failure with the Mongo Gill North shaft, we moved about a hundred yards south and took up a shakehole dig which had been started by the Earby Pothole Club, who had opened up a tube into a small chamber. A low opening led into a very tiny chamber and a trial check with the divining rod on the surface indicated two cavities. During the period when our Society was attempting to force a crawl at floor level in the larger chamber, by digging out the floor, we discovered that one wall was hollow. The removal of less than one foot in depth of loose gravel allowed us to take a loose block from out of the wall and we dropped through a "window" into the first four hundred feet of the new south system. Delightedly we surveyed the whole of our acquisition and found that the second of the two cavities indicated by the rod was shown on the survey to be the cavern below the window. The further we pressed our find, the nearer we approached our old dig, and as transporting men and materials was becoming difficult, and also as we presumed that we were approximately under our old dig (as we had a boulder fall at the point we judged the shaft to be) we pressed the connection. When the connection had been made we realised that our survey was inaccurate by about five feet and that we had probably failed the first time by as little as three feet. The divining rod did not indicate the-whole of the cave, but merely showed a series of dis-connected cavities and on reflection was probably of more use as an incentive to keep the group working than a definite tool. I've always found something whenever we reached the point where the rod had indicated a cavity.

The most ambitious of our projects was the S.D. from Black Keld, near Kettlewell. Having read the report of the Cave Diving Group (1947) and believing that this resurgence might prove to be the back door to the Mossdale system, we started our S.D. line from the cave mouth and went as far as the start of the limestone "benches". At this point the task was shelved owing to slow progress, bad ground and fading indications. The plan obtained had however a number of interesting features. The line indicated that the system pointed in the general direction of Mossdale and that it appeared to be "drowned", at [19] least as far as the first of a series of small fir woods to be seen soon after passing under the road. From this point to the foot of the screes, the watercourse appeared to run at the level of the water table. At this point there were indications that some form of cavity or stream passage which connected with the main water flow came within forty feet of the surface. This is a reasonable distance to dig but the decision for or against it being a reasonable gamble has yet to be taken.

Gill House Pot, on Grassington moor, was also looked at as a possible entrance to the Mossdale System. This pot, an overflow sink for Mossdale beck, is a collapse in the valley floor and can be followed to an aven. The floor and roof of this chamber are composed of jammed boulders of such size that, even if it were possible and safe to dig under such a roof, it would be impossible to move and stack the debris. That the aven continues downwards is undeniable, the amount of water that must flow along the passage in flood times is tremendous, but the only way to remove the blockage would be to dig down from the surface. The S.D. check contradicted the rather sketchy plan of the pot we had with us, so we re-surveyed and now believe we could site a shaft.

The area on Fountains Fell behind Darnbrook Farm near Arncliffe has been systematically dug by the Craven Pothole Club for some time. A visit to this area produced several indications, some of which have been proved erroneous by subsequent discovery and survey. The area was not done as an S.D. survey and as we have had no opportunity to study the plan of the caverns this matter is as yet inconclusive.

During a Club meet in the Chapel-le-dale area a discussion arose as to whether it would be possible to rescue anyone trapped by flood in Meregill. We examined the ground about the Mere and, theoretically the best place to dig would be at the saddle of two shakeholes to the north east of the Mere.

All the above described projects have been carried out with the forked rod method which in [20] reality only applies to persons who may be considered as “gifted” in this direction; but there is also the “double rod method” which appears in other cases to be quite practicable. The two rods are composed of 1/8th to 3/16th of an inch diameter brass, copper or steel wire bent into ‘L’ shaped, each about 20 inches by 6 inches in length. The short arm is a very loose fit in a piece of 1/4 inch bore pipe about 6 inches in length. One sleeve is held in each hand with the short arm plugged in and held vertically; the long arm is positioned pointing forwards p horizontal and parallel to each other and about 12 to 18 inches apart. If one walks about steadily, the rods will indicate by crossing and lying one above the other across the chest. At least half the general public obtain some reaction, although the degree varies from person to person.

In conclusion, it is realised that this is a controversial subject and that the phenomena appears uncanny to those unused to it, but a definite attempt has been made to put it to a good use for speleology. Those concerned with the projects described cannot be said to be unbiased, nor can the results be said to be conclusive so the matter is left open for further more conclusive evidence.

References:

Beausoleil, Baroness de, “La Restitution de Pluton”, 1640.
Chevreul, M.E. “De la Bagnette Divinatiore”, 1854.
Amy, F. “Art de Decouvrir les Sources”, 1861.
Carrie, Abbe. “Art de decouvrir les Sources par l’Electro-Magnetisme”, 1863.
Barrett, Sir William F, and Besterman, T. “The Divining-rod; an experimental and psychological Investigation”.
Mullins, John and Sons. “The Divining Rod; its history, truthfulness and practicability” Bath, 1914.
Mager, H. “Water Diviners and their Methods”, 1931. (Trans. from 4th ed. of “Les Sourciers et Leurs Procedes” by A.H. Bell). [21]
Pericas, B.D. “Investigation of Underground Waters”.
Regnault, J. and Maby, J.C. “Psychical and Physical Aspects of’ Dowsing”. (In Trans. Bt. Soc. of Dowsors, II, 9, 1935 and II, 10, 1935).
Edney, A.J. “Dowsing”. (In Roy. Eng. Journ. 1936, 257-69)
France, H. de, Vicomte, “The Modern Dowser”, 1936
Maby, C. “Science and the Divining Rod”, (In Journ. Roy. Soc. Arts, Vol.88, 1938-40, 520-39)
Besterman, T. “Water-divining; new facts and theories”, 1938
France, H.de, Vicomte, “The Elements of Dowsing”, translated by A.H.Be11, 1948