accord a higher value to the presentation of interesting and original dowsing information than to literary or production merit.

Entries shall be considered from any member of the Society, Home or Overseas, being in good standing. The prize shall be a single money payment of ten guineas, given at the close of the calendar year.

The copyright of all entries shall be vested in the Society. The Editor reserves the right to publish the winning or any other entry, either in full or part, in any issue of the Journal editorially convenient, i.e., not necessarily in the issue following adjudication.

A SPLINTER OF SOUND

A talk given at Malvern by Wing-Commander CLIVE BEADON, D.F.C., R.A.F. (Ret.)

The talk this morning falls into three parts : Firstly, the development of the right attitude of mind towards dowsing, secondly, the world in which I operate as a professional dowser, thirdly, some of the methods I use in the field.

Human education starts in observing something done. We follow this by trying to do it ourselves. We do not progress unless we practise, and much practice leads to experience. After this we evolve a system or method, and in due course the system can be applied to other activities. From this point we can reach a stage where we are able to exercise a choice in what we do.

I should like those who are becoming interested in dowsing to keep these points in mind, because they are the basic steps in education which I took towards becoming a full-time professional. I am very young in this activity and many of you will feel that my experience is very limited and has been gained in a very narrow field. This is true. I was a Career Officer all my life in the Royal Air Force. In the first few years after retirement my wife and I ran a boatyard on the Thames. It is only three years since we took ourselves off to Portugal. I have, however, been fortunate in the amount of work that has come my way in the last two and a half years, since I turned to dowsing as a full-time job.

Twenty years ago I saw someone in a field moving around doing very strange things and wondered what he was up to. He told me he was looking for water. "May I try?" I asked. He lent me his rod, showed me how to hold it and said, "Now think about water, move over this point here and see what happens."

This was the first step, and in the next twenty years I practised just a little, but never got beyond the first few pages of the standard manual on dowsing—to me it was plainly beyond belief. Still, it had a strong fascination for me. Although we may develop a technique and become professionals, dowsing must always have an element of adventure and must never be allowed to become the only thing in our lives, because other people have to put up with us and our brand of "shop" can be a deadly bore.

I didn't really know what to do with this ability while in the Air Force, but one night I took a rod into the air with me. I was piloting a big transport aircraft, heading for home. I went down to the empty passenger compartment at the back, leaving my co-pilot at the controls, with my navigator on radar. Standing in the dark at the rear of the aircraft I called up the navigator. "This is the skipper from the passenger deck. I will tell you when we come to the next river." He told me please to mind my own business and come back to the sharp end of the ship, as he knew where he was (this was in keeping with his disbelief that any pilot knew anything about navigation anyway). Telling him to watch his radar scanner carefully, and to take a squint out of the window, I signalled to him that we were coming up to something, and he was able to confirm that we had been directly over a river. As time went on I used to do this quite often and at varying heights. Again, holding a bunch of keys in my hand as a witness, I searched for and found railway lines as the aircraft passed over them. Each new experience helped to build up my modus operandi. The main point is that the system you adopt for yourself is what matters, not the one which someone else says he finds the best.

Eventually you will reach the stage where you can choose from all the fields open to you what you wish to do with this unusual ability which we call "the sixth sense". Choices are numerous : Dowsing for water, oil or minerals. Diagnostician in the human or veterinary world or a healer in either. Horticulture, dealing with plants and problems of Nature. In the field of search there are several horizons—archaeology, missing persons or property. Many of you will think of a dozen other activities.

When you have chosen your subject and become proficient at it, if someone comes along and says, "Could you have a look at my sickly plants and fix them up?" or "My cat Jenny is lost," instead of "trying your hand" in a neighbourly way you may have to be very firm and say, "No, but we have a Society with members who are expert at your sort of problem. Pick up the 'phone and ask the Secretary if he has anyone around who can help". Why be standoffish? Well, if you try to do everything you will fill your mind with half truths. Only by working out the detailed process many times over can you reach the point where you are justified in saying, "I can give you an answer". If you want to be professionals in any subject it will have to be this way. Though feeling a sense of sureness of yourselves you must still be prepared to keep an ear open for new thoughts that invade the conscious mind. Be prepared to refine the data on which you are giving an opinion, for it is no good giving half truths to people knowingly, then saying, "I didn't say that" or "I didn't mean it in that way". YOU have to be sure and then you must stand by it. No-one is perfect and mistakes do occur, but errors are of our own making. Sometimes our interpretation of signals is at fault, or we may guess at signals which we have never heard. We must be prepared to provide not the answer that we think is wanted of us but only the true answer, and sometimes this means saying, "I don't know."

I regard myself as a water diviner still on the bottom rungs of the ladder, with a very long way to go. My technique is constantly being modified and evolved. Those of you who are starting to dowse should not be afraid of taking a witness in your hand and saying, "This small bottle of water represents to me the water that I am going to look for now". From my own experience I know that in the initial stages witnesses can be of great help, but do not let yourselves become dependent on them. As proficiency increases you will be able to discard your props one by one.

When you go into the field to dowse your mental attitude must be one of determination and certainty. You have to extract information from your mind, so the conscious mind has to be disciplined to listen to the subconscious mind. The signals which come from it have to be deciphered, checked and written down, so that at a later date the same set of readings can, if possible, be taken again, comparisons made and, where different, understanding reached as to the variation. This is where "Shibboleths" creep in and cause a great deal of confusion—such as not dowsing unless the day is bright, only dowsing within certain hours, or wearing leather-soled shoes but never rubber boots. The dowser must not allow his mind to be limited by conditions of dress and time, state of the weather and what have you. Commonsense should be his guide. If you have built these limiting factors into your mind you should work to discard them.

The questions to your mind have to be direct and simple. Where ahead of me is a flowing stream? Now that I have found it, is this fresh water? How deep is it? How much water is flowing in gallons per hour? And when you have evolved a method of interpreting the reply don't stop there. Find another way of arriving at the same result. Double checks are, in my humble opinion, the way to avoid some of the mistakes made by dowsers in deciphering signals. It isn't always a matter of questioning our minds, sometimes it is a matter of puzzling over a simple signal sent back and understanding its exact meaning. If two different ways of finding the answer give a variation this must never be dismissed as the result of changing light, different boots or that we are just plain tired out. The variation, if there, is for analysis. The attitude of mind towards the task is totally important at all times. As a Serviceman my mind was schooled to examine facts and reach conclusions based on facts associated with the five senses. Logic plus five senses, you got ten out of ten. Logic plus six senses, they made you a general or gave you a bowler hat. Either way, the Establishment never likes things dished up with a portion of sixth sense for a dressing. It was apt to say, "He's a nice chap but not quite with it, you know. Can't be letting him run a war on hunches."

Although my first experience was many years ago, my present activities started in Portugal. My wife and I had gone there to retire and the country was a closed book to me. I had no goal of activity, only the desire of the ordinary man to do something useful. Listening to people around me, I gathered that water. or rather the lack of it, was a problem. Inevitably I asked them, "Don't you have a dowser here?" "A dowser?" they said. "You mean one of those chaps with a funny little stick? Water engineer is another matter, but a dowser, no, certainly not." So I started to go around the farms and gardens of my friends' houses to see what I could find out for them. I did a bit of reading out of the books I had kept with me over the years, but most of it still didn't make sense. So when next in England I hunted round and found there was a Society, a group of people who were " in dowsing." I went up to see the Secretary and his wife, and they will remember that rather horrendous day which started about lunchtime and went on deep into the night and most of the next day as well. Question after question. To our Secretary and his wife, Mr. and Mrs. Smithett, I owe a great debt of gratitude, and a very big "Thank you " for their patience in answering my many questions. They showed me how to hold a pendulum and introduced me to the whalebone rod. They talked to me about colours and demonstrated the use of the Mager colour disc. Between them they said, "Look, go and find out for yourself. We are not setting exercises, practise by yourself and read. Work out your own system and don't slavishly follow what someone elsc has written in print." That and a great deal more. That advice and plenty of encouragement which they gave to me I want to pass on to each of you today.

I returned to Portugal determined that if the opportunity existed to carn my daily bread it must not be passed up. Finding water became a job to do, because there was a shortage of water. Many of you are going to say that you don't have such a clear-cut opportunity, that you don't see how you can use your ability. There are no simple answers to these valid points. Only you can say how much of your life you can devote to these abilities and only you can decide what is important to you personally. If your aspirations exceed your ability and you just can't make progress, or if there are no situations in your world which can profit from your activities, then look around again in some field of work other than your first choice, and bear in mind that twenty years separated my initial experience and the first water well brought into operation that I had dowsed.

We live in the southernmost part of Portugal, known as the Algarve—Portugal's Other Kingdom, as it is sometimes called. It is in an earthquake belt, where the ground has been turned over and is badly fractured, where the rivers and streams from the intervening hill country seem to peter out in all but the winter months, presenting dry and boulder-strewn beds to the casual eye for most months of the year. From June to December the sky can be absolutely cloudless. The South Coast has almost a hundred miles of unspoilt and unpolluted beaches, a sparkling see and a nearly "set fair " weather pattern. Although nothing is ever perfect, the Algarve is a very wonderful place, a colourful country after rain has brought the brilliant flowers, with lush green farmlands which bask in the spring sunshine, but a very arid place in the middle of summer.

Into this area hurry the holiday-makers from all over Europe in ever-increasing numbers, and settlers from all over the world. The water resources available to town councils at present are very limited, both from the point of view of quantity and the distribution network. Councils are apt to say when asked for a big supply for a new hotel or an apartment block development, "See what you can do to help yourself." Out there that means, "Drill for it."

The main sources of water in the villages since the time of the Romans have been the open-faced wells. In Southern Portugal they call the little wells, which are operated by a line and bucket, "Pocos," and those that are operated by one donkey power or an ancient Lister diesel cranking an endless chain of buckets, "Noras". The latter are wonderful water storage wells, some dug to 120ft. or more, and carefully lined with a stone face from top to bottom. Most have been sited by dowsers in the past and are situated over anything up to four or five good streams. Enough water enters this type of well for a good-sized village, but not the sort of flows which would suit a developer who wants anything from 100,000 to 750,000 gallons per day for a hotel complex.

I have become conscious of a good percolation layer across the south of Portugal which can be reached through complex rock formations at a level of about 300 to 450 ft. Geological survey maps of the area are sketchy, to say the least, but to some extent bear out my surmise. However, I spend most of my time on the shallower crevice streams, in order to save my clients the cost

Streams coming from the north and of drilling to those depths. north-east in general tend to be pure and fresh. From the northwest a greater proportion have salts in solution, which make them unpleasant to drink. Where does the water come from in the first place? We think that water should be flowing down from the hills, and it undoubtedly does, yet in dowsing interesting discoveries are always at hand. Last year I re-measured some of the flows that I had done in the early spring and summer months. Ι did this when the land was at its driest and before the first rains were due to fall in Portugal. I was more than surprised to find that each of six streams selected at different points showed a sizeable If this was due to rainfall, where had it fallen? Rain increase. had certainly fallen in Northern Spain. An interesting thought, although one cannot draw a definite conclusion, that water in Portugal might come from the high Spanish Sierras.

Another time I was searching for water on a property near the sea shore. I had already done a map dowse and had come up with a flow running in from the sea across the beach directly inland. The site dowse confirmed this. Since then I have come across many flows of good clean water fingering in from the sea into the land at depths between 150 and 300 ft. In two or three places along this coastline local fishermen will show you where it is boiling up through the floor of the seabed, demonstrating that it has a good pressure behind it. Not surprising, since this is a volcanic area. Twice I have made use of these flows from the direction of the sea as primary aquifers, and in each case the water has proved to be pure and totally free from salt, as I had predicted. So let us keep an open mind on the way water may be circulating under our feet and not necessarily conclude that it is coming from a hill nearby. It could well be going straight towards it.

In England we have good strata charts readily available and good water engineers and consultants to interpret them for us. In the Algarve a water consultant is a rare bird and a geologist even rarer. In the past dowsers in Portugal have found their sites for wells without the expertise of the qualified hydraulic engineer and that is the way it is now, as in most undeveloped countries. However, to the developer who has always surrounded himself with experts the business of engaging a dowser to provide the essential information on which the success or failure of the whole project depends is a nightmare of uncertainty. He will want to know in great detail what he is likely to get for his money. Ι myself aim to provide the following information : I always search for two or more crossing streams for a start and, if necessary, more than one pair. The depth of each stream must be given to the client as a basis on which to cost out the project. The volume flows of each pair have to be calculated in order to ensure a satisfactory margin above the requirement, and finally an assessment made of the purity, and the trace elements which can be expected in the flows. Then there are the factors which affect the driller. What sort of strata has he to go down through? Are the aquifers so narrow that the smallest deviation at the start of drilling will mean the difference between picking up the aquifer and missing it altogether? Is there a limit to the depth he may drill, after which the water he has found will be contaminated with a salt flow deeper down?

It becomes important to know just what kind of water is wanted, apart from its being fresh. Orange growers tell me that they like water with iron in it, and certain other crops could do with a little of this or that. Here is yet another field for the dowser to study—the field of minerals and salts in solution. Rarely is one able to meet all the requirements demanded and some compromises are inevitable, but the same may be said of any task that we endeavour to undertake in any walk of life.

Finally, I have to be on my guard that I do not inadvertently rob someone else of his existing supply by putting down a drill hole on his supply channel. It is absolutely essential to understand the direction of the flows beneath your feet, and it is imperative that at some stage the flows are plotted on to a map, together with the position of the surrounding farms which have wells in use. Being of primary importance, this study is most easily and rationally done when the project is in its infancy and the first streams are being drawn in on the map dowse.

In an earthquake area the fractured nature of the ground provides many problems and depthing becomes a major headache. Recently in a spot selected for drilling I came across two entirely different types of sandstone, clay at four different levels, two separate limestone belts, and what appeared to be a type of basalt rock. which even now I haven't properly identified-as well as two different types of granite and a marble belt-all in 200ft. Finding out all about this may not be essential to the client ; however, it does help to fill in the picture for the dowser, because strata can distort his vision and throw out predictions of depth and volume Sometimes it helps in choosing the right drilling firm to flow. do the job, according to whether a rotary rig or percussion rig is likely to be the better tool. As the dowser is concerned with the end result he has to see that no-one along the line fouls it up.

There are plenty of abandoned holes in the Algarve. Many have not been drilled down straight and have missed the crevice flows for which they were aimed. In South Portugal these crevice flows are seldom more than 20in. to 30in. wide, and shooting for a picture window of 24in. by 24in. presented by two crossing streams some 300ft. beneath one's feet allows the driller no room for deviation. Other abandoned holes contain the hardware that the driller has decided to leave in the ground rather than attempt to fish it out in a long retrieving operation, and yet another large number of holes have been abandoned because the dowser has been totally at fault.

In general, drilling crews in Portugal pay scant attention to the dowser, because of the number of dry holes they have dug over the years. The important question is whether the bulk of the faults should have been laid at the driller's door or on the local dowser's prospecting ability. In my opinion it is six of one and half dozen of the other. The two commonest errors made by the dowser are siting the drill over the shadow of the real thing and the error in siting it over a "spook"—i.e. a dry aquifer. From my experience, some of the abandoned holes might have been saved if drillers were more competent at their jobs—such as straightening a bent hole, or had more sophisticated fishing equipment.

I shall devote the last part of this talk to the technique I employ to resolve a task to the point where I can give an opinion. In a word, I am a map pendulist at home and a rod man in the field. The tools of my trade are simple—an iron stake and a heavy hammer to thump it into the ground. Pegs which can be easily found and marker flags. A tape measure up to 50 metres, a handbearing compass, a Mager colour wheel, several small sample bottles, a small plastic pendulum for map reading and a small selection of rocks which I keep to hand as witnesses, and a couple of whalebone rods. A clip board and pencil complete the field outfit.

I always start by asking my client for a map of the property; then I have to decide how deep a well he can afford. Over 500ft. the cost will clearly be almost prohibitive unless he is a developer who *must* have water regardless of expense. I therefore programme my mind that I don't want to be involved with any flows below, say, 300ft. Then, starting at one corner, I work my way down the first edge of the map. At each point where the inert or swinging pendulum starts to rotate I mark the map. When the four boundaries have been traversed each point is examined in detail. In setting out to discover the water veins crossing the property each bit of information fed back to the mind must be challenged and tabulated. An exhausting exercise it may be, but worthwhile, if only to save shoe leather on field work.

Every mark I have made on a map boundary must first be made to reveal its serial number. When all those that don't answer to the correct number for water have been eliminated the quantity left is usually drastically reduced. By dowsing round each mark that is left I look for points either side of the original one, which together will form a straight line. Next I determine whether what I have is a true aquifer or its shadow. All I need to do is to stick a pin into the line I have made on the map. On one side

of the pin I can pick up the water—on the other side the pendulum is dead. From this I can deduce the direction of the flow. (Of course, if I find the flow on both sides of the pin I have a shadow and not a flow at all). After that, depth and flow volumes are determined and, most important of all, a colour identification is given to the stream. When I come to plot a flow across the map I have now an easy way of making sure that a little fellow I have labelled "Jack," which may be blue, green and violet, doesn't get joined up to "Jill " on the other side of the map, whose colours are red, green and violet, even though they look like merging together in the centre of the map into a single flow line. When I have the complete picture and have decided where the best pairs of streams are located I start to weigh up the contours on the map, which may cause me to eliminate some very promising data. At this point I usually transfer the flow lines to a geographical map of the area and check to see that the most likely and desirable streams are not knowingly serving a neighbour's property. Then with some care I take map reference bearings of the selected drill point, so that I know where to go on the site to find this chosen point. If the position is suitable for the client and also for the driller, who will have to get his gear to the place, I can proceed with the field work, which is largely a matter of re-measuring and confirming all that is known from the map dowse. Some information is most easily gained in the field, such as the width of the aquifers and the strata profile down to the water, the detection of spooks" and the unwelcome presence of salt-bearing flows adjacent to the proposed drill point.

Every calculation made and every bit of information gathered from the map dowse should be challenged in the field. Say, for example, I arrive at the site in order to find a pair of streams crossing one above the other, my initial check will be to see that the streams underfoot at the calculated drill point approach me from the directions discovered on the map dowse and have the correct colours. If this is so I confirm each in turn by its depth and flow volume. The individual streams are flagged, and the crossing is marked with a wooden stake. On the upstream side of this peg, and in the exact centre of each flow, I now drive in an iron pin (one per stream). If these pins have been accurately placed I should not expect to be able to "find " either of these flows at the crossing point marked with the wooden peg. I now search round the intersection point; if there is another flow I shall need to know all about it, and once I am certain from which direction it is coming I give it the same treatment as the first two streams and eliminate it from the immediate scene. What else might have A "spook," i.e. a long since dead aquifer? been overlooked? Since it is not adding to the flow does it matter ? Yes, very much. for if it is running through the centre of the proposed drill hole it

could mean abandoning the whole project at this point. If it is above or between the two flows, or near to the lower one by a few feet, it could drain off all the water when the borehole is made.

Next I examine each stream in detail, as until I know its depth I cannot begin to evaluate its flow. I use the mental count down system to determine its depth, then set about determining the flow volume in gallons per hour. This can be done in a variety of ways, both by mental methods and physical measurements. The first check I do mentally, rotating my body through 360 degrees, counting the number of revolutions before my rod moves from horizontal to vertical. This is done exactly over the stream and each revolution is equivalent to so many gallons per hour. The idea is not new, but it took me some time to arrive at figures which I could trust, which applied to me. It is a quick and practical method in the field, but it is also a trap if used without care. For example, if you are measuring a flow and it happens that there is a "spook" or the shadow of a stream running through the same point and at the same depth you can quite easily come up with a hopelessly inflated answer. Here the map dowse figure will be invaluable in highlighting the error.

The next task is to determine the quality of the water and whether the flows mix under the ground. The metal rods are all removed from the ground, after the upstream colour of each flow has been determined by the Mager colour wheel. Each flow on the downstream side of the crossing point is now checked. If the colour patterns have changed from the original by the addition of any colours present in the other flows, the streams are mixing under the ground. Whilst this may seem unimportant, there are some measurements which have to be made concerning flows on which this particular fact may have a considerable bearing.

Time does not permit me to go into much detail on the next phase of measurements, which are basically founded on Major Creke's Linear Measurement Techniques. The information acquired must be refined by personal experience. In my case measurements giving depth need to be modified and corrected when certain types of rock and clay strata are present. The strata bands therefore have to be analysed down to the aquifers. Distortion factors, as I call them, have to be applied to each band to provide the correct depth of that band. Similarly linear measurements for flow can be equally inflated by clay. In such cases the bands of clay correctly identified and depthed can be made to provide their current distortion of total volume figure.

All the figures now collected together must clothe the framework. If any discrepancies appear that I cannot understand I may have to return to the site at a later date to analyse the reason for variation. True, I could swing a pendulum and attempt to get the right answer that way, but my inclination is to pin down the error and understand how it has occurred. I have found dowsing for water an absorbing and intriguing business. The hours can be long and exhausting in the hot sun, and hard work in broken, rocky country. But the rewards are there when the long-awaited day comes round, and the water is found where you said it would be, and uncertain grins turn to smiles as the quantity and quality of the predicted flows are proved.

The more I work in this field of activity the more I am aware of the complex questions that we all face. "What is this sixth sense and how does it work?" There is a splinter of a thought that I would like to pass on to you, a small sound that rings true. It is that there seem to be sound mathematical laws pervading every aspect of this sense which must be understood, and one day the world of science will accept them as such. To me this realisation that laws do exist, and that they must be found and interpreted, makes it all so worth while.

I hope that what I have said will give many of you some encouragement to say to yourselves, "I want to know more." Certainly, we have no business to ignore a great potential in our hands.

YOGA, LOGOTHERAPY AND NERVOUS TENSION

A talk given at Malvern by F. S. HEILBRONN, B.Sc., A.C.G.I., A.M.I.Mech.E.

(Continued from Journal 161, page 261)

In the introduction I referred to the three inter-related levels at which tension operated. I should like to go into a little more detail and mention a few techniques that are of use in self-healing. Neuroses, tensions and depressions at the level of the physical body and the electro-static force field develop for many reasons :

Depletion of vital energy through fatigue. (This is much more common than we realise).

Metabolic depletion after illness or pregnancy. (Post-influenza depression is a very, very common example of this).

Insufficiency of essential items of diet, or unbalanced diet. (And particular attention should be given to the vitamins of the B complex and Vitamin E and to trace elements, tissue salts and particularly the phosphates).

There is endocrine instability with particular reference to the thyroid and adrenal glands and, of course, there are toxic conditions due to faulty elimination through the bowels, the respiratory system and the skin. Lastly, there are lesions of the nerve currents in the spinal column through vertebral pressure