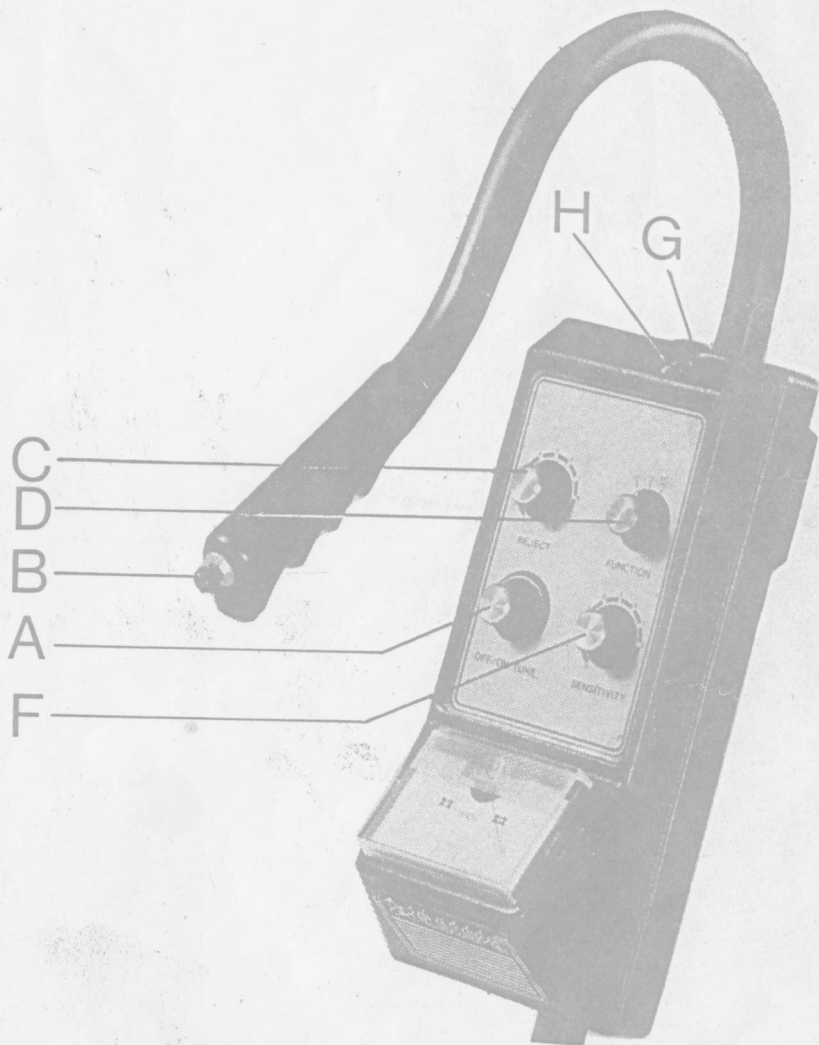


# TREASURE SEEKER

METAL DETECTOR



**VLF/TR 950-D**  
**OPERATING INSTRUCTIONS**

## INTRODUCTION

You are now the owner of a Treasure Seeker metal detector which is recognised as one of the finest metal detectors available. It has been designed and manufactured to the highest possible standards by Britain's leading manufacturer.

Metal detecting is an enjoyable pastime but the amount of satisfaction and success achieved depends upon the operator's understanding of his instrument.

Read these instructions and follow them carefully to obtain the maximum results – your enjoyment depends upon it.

## DIAGRAM OF THE CONTROLS AND THEIR FUNCTIONS (see front cover photograph)

### A) On/Off Tune

Switches machine on and controls level of tuning. The tuning is normally set for a meter reading of approximately mid-scale so that the sound is just audible. (This is the setting for best sensitivity).

### B) Auto-Tune Button

Should be depressed when any control is operated and when the detector requires re-tuning.

### C) Reject Control

Controls the level of discrimination and functions in conjunction with the Discrimination modes.

### D) Function

The 'Function' switch changes the mode of discrimination of the machine and operates in conjunction with the 'Reject' control.

It also incorporates a 'Battery Check' setting.

When battery check is selected the meter will indicate the state of the batteries irrespective of the settings of the panel controls provided that the machine is switched on. Replace batteries when needle falls below the red line.

### Discrimination Modes (D1, D2)

As the 'Function' switch is rotated clockwise the detector operates so as to discriminate more and more severely with the 'Reject' enabling a fine adjustment of each position.

#### D1

The machine will reject most small iron objects such as nails, nuts, bolts, etc., but still detect all coins, silver paper and pull-tabs, etc.

#### D2

As D1 but also rejects silver paper from cigarette packets.

### F) Sensitivity

This control allows reduction of the sensitivity of the machine and is used mainly on the discriminate modes on sites where there is excessive ground effect. Turning the sensitivity control towards 'Nil' will also reduce the depth penetration.

### Assembly and adjustment of the Stem

Your Treasure Seeker comes to you broken down for packaging. To assemble simply slacken the knurled locking collar on the control box handle and insert the middle stem. Then slacken the knurled locking collar on the middle stem and insert the lower stem.

Once the stems are in place wrap the search head cable around the stems until the slack is taken up. Then attach the search head to the lower stem with the bolt provided, and attach head cable to control box.

**N.B. DO NOT USE TOOLS TO TIGHTEN THIS BOLT AS DAMAGE TO THE SEARCH HEAD MAY RESULT.**

Now that the assembly is complete, adjust for the correct height and tighten both locking collars.

## Adjustment of The Search-Head

The waterproof search-head is tiltable and is clamped in position by two knobs either side of the detector's stem base. By loosening these knobs the search-head position can be adjusted so that the base of the search-head is parallel to the ground. In this position the maximum pick-up area is presented to the ground. To maintain this position the two tightening knobs are tightened down but it is not necessary to tighten them so that the joint becomes rigid because friction washers are fitted to reduce movement but allow the position to alter if the search-head is knocked.

## Fitting Batteries and Headphones

Before testing your detector it is necessary to purchase and fit two PP6 batteries. To fit these, turn fastener (G) anti-clockwise through 90° and pull out. Open the control box outwards, and slide the batteries under the clip holders and snap on battery terminals. The battery life will be extended by using headphones and ensuring the detector is switched off after use. The longer the individual periods of use, the shorter the battery life, for example, if we use the detector for three four-hour sessions the loss of battery energy will be less than if we use the detector for twelve hours continually.

If you intend to use headphones insert the headphone's jack plug into the output socket (H) at the top of the control box.

## Battery Check

To ensure maximum performance from your Treasure Seeker it is necessary to check that the batteries are in good condition. A visual indication of the battery condition is given on the meter. Switch the detector on and turn the function control (D) to the battery check position. If the needle does not pass the red line on the meter then the batteries should be replaced, or they are not connected correctly.

## Tuning

Now that we have made mechanical adjustments and fitted new batteries we proceed to tune the instrument to detect metal.

It is important to familiarise yourself with the controls of your Treasure Seeker (as illustrated on the front cover) before embarking on your first search. This is ideally carried out by lying the detector on a flat wooden surface such as a wooden table with the search head over the edge away from any metal objects which may influence the detector's performance.

To tune the detector depress the red retune button (B) at the end of the detector's handle and turn the OFF/ON/TUNE control clockwise until a faint sound is continually produced — the needle on the meter will now be central. Release the retune button (B) and the detector is now tuned on the threshold of producing a signal which is its most sensitive point of tune.

## Retuning

Metal detectors may drift off tune due to changes in temperature or close encounters with large metal objects. In cases such as these where the detector needs retuning but the settings of the control have not altered, the detector can be simply retuned by depressing the retuning button (B). When the button is depressed a part of the detector's electronic circuitry that records and recalls the tuning prescribed by the detector's controls is activated. It is essential that whenever any alteration is made to the detector's controls the retune button must be depressed; this records the setting of controls.

## Discrimination

Your Treasure Seeker discriminator has two modes of operation, D1 and D2, which are variable by means of the reject control. The selection of the D1 and D2 modes is made by rotating the Function Control (D) to the required setting.

Depress the retuning button (B) to retune the detector after changing from one mode to another. The D1 setting has a rejection scale from normal TR operation to the rejection of iron, and D2 has a scale from iron to foil rejection.

The level of discrimination in each mode is varied by turning the reject control (C) clockwise to increase. If the D2 setting is selected and the reject control is turned to maximum the detector will now reject silver paper, small foil cake cups and iron objects by going silent, and the needle will move to the left. However, it must be realised that the sensitivity to thin sectioned objects, i.e. gold rings

and small nickel coins, i.e. five-pence pieces, will be reduced at this extreme point of discrimination. The ground effect will also increase as the level of discrimination is increased. It is advisable at all times to use the minimum amount of discrimination possible. The position on the reject control where specific types of items are rejected will alter according to the mineralisation of the ground. It is therefore necessary to check the setting on site if accurate discrimination is desired.

All TR discriminators do suffer from anomalies in their performance and on occasions you will find that you receive a false signal. This is usually caused by one of two reasons. If the target object is very large or close to the search-head the signal can be reversed because one coil detects the largest object instead of both. The other phenomena is when the target object is a better conductor because of its physical shape, i.e. iron rings are better conductors than iron bars and are detected as non-ferrous.

Discrimination is often more accurately achieved by raising the search-head higher than normal in the case of large or close objects. If the signal strength reduces, the object is junk.

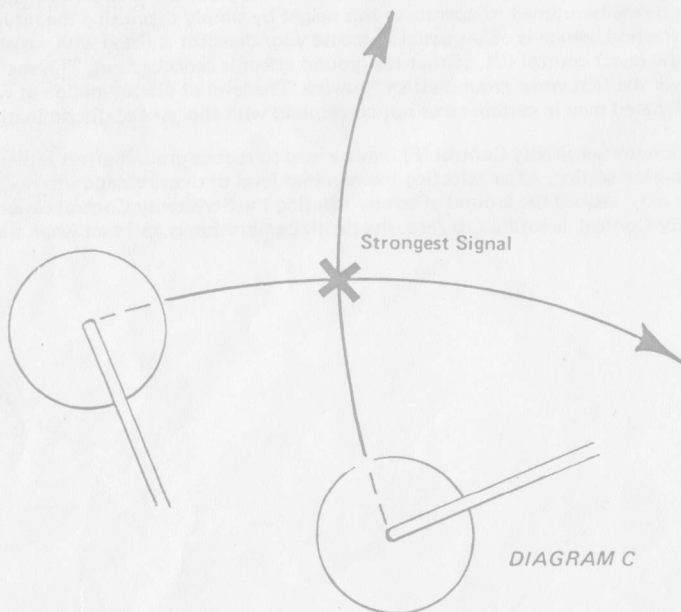
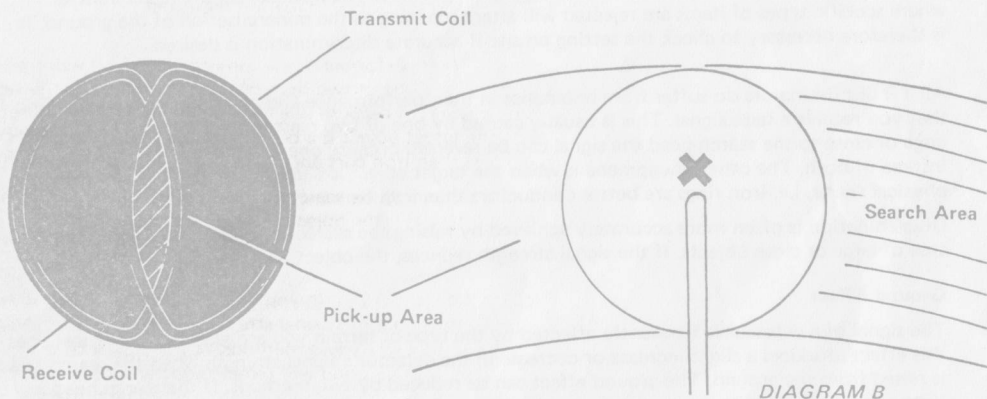
### Ground Effect

The signal of a detector is frequently affected by the type of terrain you are searching. On most sites this effect produces a slight increase or decrease in the detector's signal strength when the search head is raised from the ground. The ground effect can be reduced by two methods. If the search head is kept a constant distance during the sweep the effect of the ground will remain constant and the detector can be easily retuned to operate at this height by simply depressing the retuning button. The second method, which is only possible because your detector is fitted with variable discriminate, is to adjust the reject control (C), so that the ground effect is cancelled out. This method has a disadvantage over the first when ground effect is severe. The level of discrimination at which the ground effect is eliminated may in certain cases not correspond with the level of discrimination you require.

In this situation the Sensitivity Control (F) may be used to reduce ground effect rather than by altering the discrimination setting. After selecting the required level of discrimination to reject unwanted items the operator may reduce the ground effect by rotating the Sensitivity Control towards zero. When the Sensitivity Control is rotated to zero, the depth penetration is half that when the control is set at 10.

## PINPOINTING

Since the detector employs a Total Response search-head the object can be detected across the full width, back to front, of the search-head.



The strongest signal will always be received when the object is directly beneath the centre of the head (see X in diagram B.). To pinpoint the find, stop the search head when you are directly over the target object, then move the search head through  $90^{\circ}$  and sweep again, thus forming a cross with the two sweeps. The target object will be at the intersection of the two sweeps as shown in diagram C.

## DETERMINING THE TARGET SIZE AND DEPTH

An operator who is familiar with his instrument will be able to do an excellent job of determining object size, shape, and depth before he digs. This technique is learned from careful analysis of the audio signals coming from the detector. Each time a signal is heard, listen for any peculiar characteristics it

may have; determine over how large an area you get a detector signal; and try to "outline" the object before you dig. Listen for the sharpness or dullness of the signals and determine the magnitude of strength of the signal.

After digging-up the object, compare the object size, shape, depth, and position in the ground with sign information you received before digging. After careful analysis of many digs, you will learn to "read" the hidden target before digging.

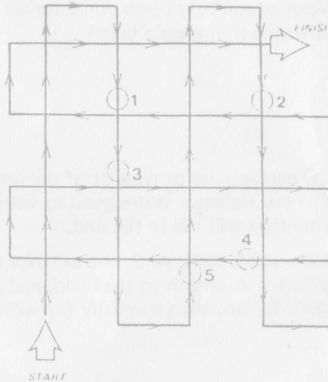
### RECOMMENDATIONS FOR USE

Treasure hunting can be a profitable and a rewarding hobby, if approached in a patient and diligent manner. Time spent researching to locate a worthwhile site for a search can be time wasted if your search is hasty and erratic.

To achieve maximum results, it is important, then, to decide on your approach to each particular site, in advance of the actual search.

Tactics will be decided by the type of site — it is more profitable to scan a small area thoroughly than to conduct a haphazard search of the total site. However, when the site is too far away for you to make several return visits, a plan should be adopted which gives maximum site coverage, at the same time as indicating the most likely areas for detailed search.

DIAGRAM 2



On arrival at the site a criss-cross search is made marking the positions of finds: 1, 2, 3, 4, and 5. A detailed search of the area around the finds is made on completion of the criss-cross search as in Dia. 3.

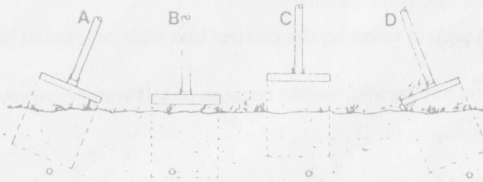
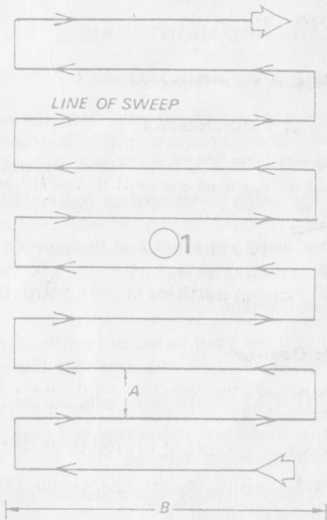


DIAGRAM 4 It is essential that the search head is kept close and parallel to the ground to avoid missing finds as in A, C, and D.

DIAGRAM 3



An area ten foot square is marked out around the find located by criss-cross search. This is then divided into strips which are carefully searched. Distance A = width of the detector's pick-up area. Distance B = length of a comfortable sweep.

One method is to divide the area into large squares by use of a 'criss-cross' search pattern. Starting along the left hand perimeter, search in a straight line, marking the location of any finds with small sticks, until you have covered the length of the site. Then, moving approximately ten feet to the right, search in a straight line parallel to the first line of search. This pattern should be repeated until the right hand perimeter is reached; then follow a similar pattern **across** the tracks of the first lines of search. (See diagram 2).

It quite often happens that where one find is made, other finds will be made in the immediate vicinity. Accordingly, places having the highest density of markers, placed where finds were made, represent the most likely spots for further finds.

The detailed search is made by marking out strips of a width determined by the sweep of the detector, and moving forwards the approximate diameter of the search head after each sweep until the 'strip' has been completely covered. The adjacent strips are covered in a similar manner, until the complete area has been thoroughly searched. (See diagram 3).

Wooden pegs and string are ideal for marking out areas, but very often natural land marks such as trees, rocks, and plants can with practice, prove just as effective.

Whilst searching it is important to remember that the search head should be kept as close to the ground as possible. This ensures maximum depth penetration. There is a maximum detection range and a large gap between head and ground reduces the effective depth of the search. (See Diagram 4.).

Be as tidy as possible when extracting the finds from the ground. Nobody likes to see a footpath or field with great 'pits' left in it through careless digging — and even small holes are dangerous because people can trip and injure themselves. So, please, follow the treasure hunter's, 'Code of Conduct', see page 9.

Use a blunt trowel, or a medium-sized screwdriver to cut away the sod, and extract a core of earth from beneath this. Check that the core contains the find, before breaking it open. Avoid the use of sharp instruments (such as knives) at all times, since a scratch on a coin can reduce its value considerably.

After extracting the find, replace the soil and put back the sod as neatly as possible.

Another useful tip is to 'collect' all pieces of silver paper or junk that you come across — if you simply throw them to one side, you will probably end up detecting them again later!

## CARE AND MAINTENANCE

### Care of Your Detector

The working life of your detector will be shortened by careless use or neglect of the unit. Think of your detector as a scientific instrument NOT A TOY. Your detector is designed to withstand rugged handling on any terrain, but mis-use or lack of due attention will tell in the end.

After using your detector in a hostile environment (salt water, sand, etc.), the exterior parts of the casing should be flushed with fresh water, paying particular attention to the head, and carefully wiped dry. Foreign particles in the control box can be removed by brushing carefully (or with compressed air or vacuum cleaner).

### Salt Damage

If you use your detector continually in a salty environment, particularly when the wind is blowing off the sea, salty air can penetrate the control box.

Corrosion can occur in vital parts of the delicate electronic circuitry.

It is, therefore, recommended that precautions such as covering the control box with polythene be taken to avoid damage.

The guarantee cannot cover such occurrences and any repairs needed because of salt water or spray will be charged.

### The Use of Solvents

It has been found that some types of solvent used for cleaning circuitry will in fact melt the plastic covered components.

Clean the circuit board only with recognised circuit board cleaning agents.

The life of the controls may be extended by periodic (100 hours of use) application of small quantities of light lubricant to the spindles, threads and knob grub screws ('3 in 1' or similar household oil is suitable).

This operation requires the knobs to be removed.

Light packing grease should be smeared on the threads of the locking collar, and at the same time, the head fixing bolt. Do not store the detector in a damp place.

If the detector is to be stored, remove the batteries as they may leak and corrode the surrounding electronics.

#### **Detector Not Operating**

- (a) Check the conditions of batteries.
- (b) Interchange batteries and ensure connections are correct and secure.  
Battery life can vary tremendously between makes, therefore your 'new' batteries may already be insufficiently powerful to run your detector.

#### **Oscillating Signal Accompanied by Slight Meter Fluctuation**

- (a) Caused most often by outside equipment such as fluorescent lights, taxis, radios, power lines, and other metal detectors working nearby. Little can be done to alleviate the problem except to find a new site.

#### **Intermittent Sound From Speaker**

- (a) This could be due to poor battery connections. Ensure they are tight and the batteries are securely clipped into place.
- (b) Radio transmission from passing taxi or vehicle using radio transmitter equipment.
- (c) Loose speaker, in which case the speaker needs fastening back into place.

#### **The Detector Drifts Out of Tune**

- (a) Temperature drift caused by the change in air temperature when a machine is moved from a house or a car into the open.
- (b) The greater the change in temperature the more the drift, and up to 30 minutes may be needed for the electronic circuitry to acclimatize itself.
- (c) Sometimes battery drain can cause drift of signal. Replace batteries and this should help to maintain a stable signal.

Before returning a detector for repair to C-Scope ensure you have done the following:-

- (a) Read instructions thoroughly.
- (b) Tried new batteries and checked procedure outlined above.
- (c) Spoken to the local dealer about performance of the detector, especially if you are still unfamiliar with metal detectors in general.



# A GUIDE TO TREASURE HUNTING

## THE IMPORTANCE OF THE RIGHT APPROACH

### HOW TO LOOK

### THE BEST SITES

### WHERE TO LOOK

### TREASURE HUNTING & THE LAW

### THE RIGHTS OF THE FINDER

### TREASURE TROVE

### A CODE OF CONDUCT

## THE IMPORTANCE OF THE RIGHT APPROACH

Your detector alone is not a guarantee of successful treasure hunting. Any detector needs an operator, and for the best results the operator needs the right approach, attitude and technique. Too many beginners neglect the importance of pre-planning and research before using their detector in the field, and patience and technique during the actual search.

A successful search should begin with research sometime before the day of the actual search. The extent and thoroughness of your research will be one of the major factors in the success of your detecting. You should aim to get as complete an understanding as possible of the local history and geography.

The key to the choice of the site is to think of people, where they congregated over the past few hundred years. What were their customs and pursuits? Where did they spend money? Where did they carry money? The answers are not Roman sites, nor are they associated with mystic treasure stories of crocks of gold. Rather, they are unassuming, undramatic places, like public footpaths and ancient rights of way, old houses and so on.

When you have chosen your site, allocate a whole day from early morning to early evening for the search. Make sure that you have all equipment you are likely to need. Your detector should be checked before starting out, and you should always carry a spare set of batteries. You will also need a strong, sharp trowel. It is also a good idea to have a set of lines and pins so that you can lay out your search area scientifically. Most beginners make the mistake of rushing about hoping to chance upon a rare find. If for example, there happened to be a valuable ring that was buried 4" deep on the site you were searching, if you rushed about haphazardly and quickly on the site, the odds would be very much against your finding it. On the other hand, if you pegged out the area scientifically and searched slowly and thoroughly, the odds of finding the ring would be much more in your favour.

Remember, **BE PATIENT** and **WORK SLOWLY**. Do not try to cover too large an area. Restrict yourself to a small area and work through it thoroughly. Make a note of the position and extent of the area, and then when you return you can start again further on without missing any ground or covering the same area twice.

It is also important to keep the detector head as close to the ground as possible. Ideally, you should "iron" the ground with the search head of the detector, so that you do not lose any detection range.

Similarly, if you work slowly and carefully, you should be able to distinguish the faint signals as well as the clear-cut signals and further increase your finds.

The technique of getting the best out of your detector is not learnt overnight. You need to get as much experience as possible so that you can recognise every kind of signal. Indeed, a good detector operator can often tell you what is being detected before it is unearthed.

## WHERE TO LOOK

It has already been mentioned that the most profitable sites are those where people have congregated, walked, or lived over the past few hundred years, or even longer.

**Houses** If you live in a Victorian house you might not even have to leave your home for your treasure hunting. Old houses have seen remarkable amounts of money pass over the threshold during their history. Britain has had its fair share of misers, and it is surprising how many little hoards or boxes containing savings turn up.

One area to concentrate on is under skirting boards, where coins or rings might have rolled. Doorways too, may prove rewarding as many money transactions take place there. Old fireplace and chimneys should be well scanned with the detector, as these are favourites for finding hoards, etc. The floorboards should be examined carefully and special attention paid to short lengths which could conceal caches. It is also surprising how much money is lost in old chairs, so give them a look over. And then, of course, the garden should be thoroughly examined. The amount of coins lost in old houses cannot be over-estimated. Most coin shops confirm that many people bring coins in for valuation that they have found *accidentally* in their houses. A deliberate search in a house of the right age can hardly fail to be rewarding.

**Rivers** The best parts of rivers to concentrate on are (1) public footpaths along river banks. (2) Bends of the river where erosion has been taking place. (3) Bends in the river where coins are likely to be deposited against a particular bank by the action of the current. (4) Areas downstream of old drainage pipes or upstream of projections such as wooded piers, or other obstructions. (5) Old fords or bridges. (6) Areas exposed at low tide where eddy action has been taking place.

Tidal rivers are particularly interesting, as once you have found a good site or spot where coins have collected due to the currents, you can search the area well one day and still return at a later date for more rewarding finds. Rivers tend to sort out their load and distribute it according to weight along the bank in places like those itemised above.

**Beaches** Beaches are, without a doubt, the favourite haunt of the average British treasure hunter. At one time or another, almost everybody has made the journey to the coast. The beaches are the only place where people undress publicly; anyone who has attempted to change into a bathing costume discreetly and then store their coins on the open sand knows the chances of losing not only coins, but jewellery and wristwatches, too.

Once an object has been mislaid on the beach, it is maddeningly difficult to find it again.

There is also a high incidence of wrecks along our coasts, the contents of which are deposited at intervals on our beaches.

These factors contribute to make our beaches probably the richest site for the amateur treasure hunter. The best times to explore beaches are after heavy storms when the sand has been thoroughly stirred up and shifted. A good place to concentrate on is along or just below the tide marks, which are easily identified by the lines of debris that are left. Under piers or alongside breakwaters also usually pay dividends.

Other good sites are:- Fairgrounds, Children's Playgrounds, Toboggan runs and Demolition Sites.

## TREASURE HUNTING AND THE LAW

### RIGHTS OF THE FINDER

The rights of the finder fall into two distinct classes. The first relates to objects that have recently been lost, and the second to items of gold or silver which are subject, or might by subject, to the laws of the Treasure Trove.

In the first place, where the object has been recently lost and found and is valuable, it should be handed to the Police as soon after it has been found as possible. The Police will then attempt to locate the owner. If they succeed in locating the owner, he has the legal right to the object and is not legally bound to reward the finder. That is a matter for the owner's conscience.

In the event of the Police failing to locate the owner they will probably return the object to the finder. If, however, the owner makes a claim for the object at a later date, the finder must return the item to the owner.

If the owner is not located the finder has the best rights to ownership, provided that the object was not found on private property, in which case the owner of the land often has a better right than the finder. The solution here, of course, is to obtain permission beforehand and to come to some agreement with the landowner with regard to the division of any finds.

If on the other hand, the find of gold or silver can be proved to have been deliberately concealed, with a view to recovery at a later date, the find comes under the laws of the Treasure Trove. If the objects cannot be proved to have been deliberately concealed, the find cannot be declared Treasure Trove. Usually this point centres around the quantity of coins in a hoard, or whether the find is in a container. Obviously, if there are a hundred or so coins in a pot, they were almost certainly deliberately concealed. If, however, there are only one or two coins, it is more likely that they were lost accidentally.

If the objects are declared Treasure Trove, the finder has no need to worry, for he is rewarded with a cash settlement to the full market value of the find.

When the objects are not declared Treasure Trove, the owner of the land on which the find was made usually has a better claim to ownership than the finder.

## CODE OF CONDUCT

1. Do not interfere with archaeological sites or ancient monuments. Join your local archaeological society if you are interested in ancient history.
2. Do not leave a mess. It is perfectly simple to extract a coin or other small object buried a few inches under the ground without digging a great hole. Use a sharpened trowel or knife to cut a neat circle or triangle (do not remove the plug of earth entirely from the ground); extract the object; replace the soil and grass carefully and even you will have difficulty in finding the spot again.
3. Help keep Britain tidy — and help yourself. Bottle tops, silver paper and tin cans are the last things you should throw away. You could well be digging them up again next year. Do yourself and the community a favour by taking all the rusty junk you find to the nearest litter bin.
4. Do not trespass. Ask permission before venturing on to any private land.
5. Report all unusual historical finds to the local museum and get expert help if you accidentally discover a site of archaeological interest.
6. If you discover any live ammunition or any lethal object such as an unexploded mine, do not touch it. Mark the site carefully and report the find at once to the local Police.
7. Learn the treasure trove laws and report all finds of gold or silver objects to the Police. If a coroner's inquest finds that the objects were deliberately concealed with the intention of retrieving them, they become the property of the Crown and therefore treasure trove. But even if the British Museum decides to exercise its right to keep the property, the finder is granted the full market value.
8. Respect the Country Code. Do not leave gates open when crossing fields, and do not damage crops or frighten animals.
9. Never miss an opportunity to show and explain your detector to anyone who asks about it. Be friendly. You could pick up some useful clues to another site. If you meet another detector user, introduce yourself. You may learn much about the hobby from each other.
10. Remember that when you are out with your detector, you are an ambassador for the amateur treasure hunting fraternity. Do not give us a bad name.

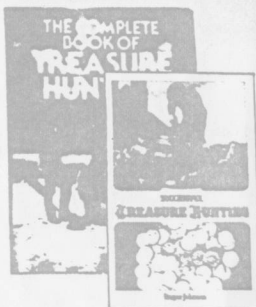
## ACCESSORIES

### **SUCCESSFUL TREASURE HUNTING – ROGER JOHNSON – HARDBACK**

This book takes the metal detector enthusiast through the basics of the hobby. Particularly valuable for the enthusiastic beginner, and the serious amateur who wishes to get more from his detector. Illustrated by a wide selection of photographs and drawings.

### **THE COMPLETE BOOK OF TREASURE HUNTING – KATE JOHNSON – HARDBACK**

Whether you have a metal detector or not, this book explores the whole gamut of treasure hunting and collecting. The various treasure hunting techniques are explained, with many illustrations and diagrams, a worthwhile book for the complete treasure hunter.



### **GLITTERING PROSPECTS – JOAN ALLEN – PAPERBACK**

An illustrated paperback tracing the growth of treasure hunting from its origins, to the use of modern techniques on all types of sites. Still one of the most useful and popular metal detector enthusiast's companions.

### **SUCCESSFUL TREASURE HUNTERS SITE GUIDE – J. WEBB – HARDBACK**

An ideal companion to Successful Treasure Hunting, written by one of the most respected names in metal detecting. This book shows how to choose and research sites, and answer the question "Now I know how to use my detector, where do I go?"

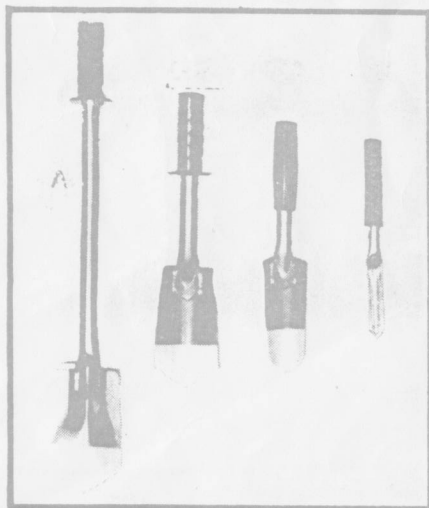
## TROWELS

**(a) Finepoint Trowel** Ideal for coinshooting, this trowel enables the accurately pinpointed coin to be extracted from even the hardest ground with minimal disturbance to the site.

**(b) Standard Trowel** Strongly constructed, its narrow blade is pre-sharpened for ease of use on all types of terrain. The ideal general purpose trowel for both inland and coastal sites.

**(c) Wide Blade Trowel** Heavily constructed for extended heavy use. The wide blade trowel has a variety of applications. Ideally suited to ploughed land, beaches or any site where the deeper objects are to be found.

**(d) Foot Assisted Trowel** Designed to enable the treasure hunter to accurately and carefully cut a small divot causing the least amount of damage, particularly to turfed sites. Its long shaft with foot assist or bar helps extract those deeper finds with the minimum of effort.



*A wide range of C-Scope Treasure Hunting Accessories are available from your Local Stockist – See Brochure for full details!*