Brian G. Harvey.

Price, 2d.

THE MAP AND COMPASS

Principles, and General Rules for their Use

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by

H. CHARDON

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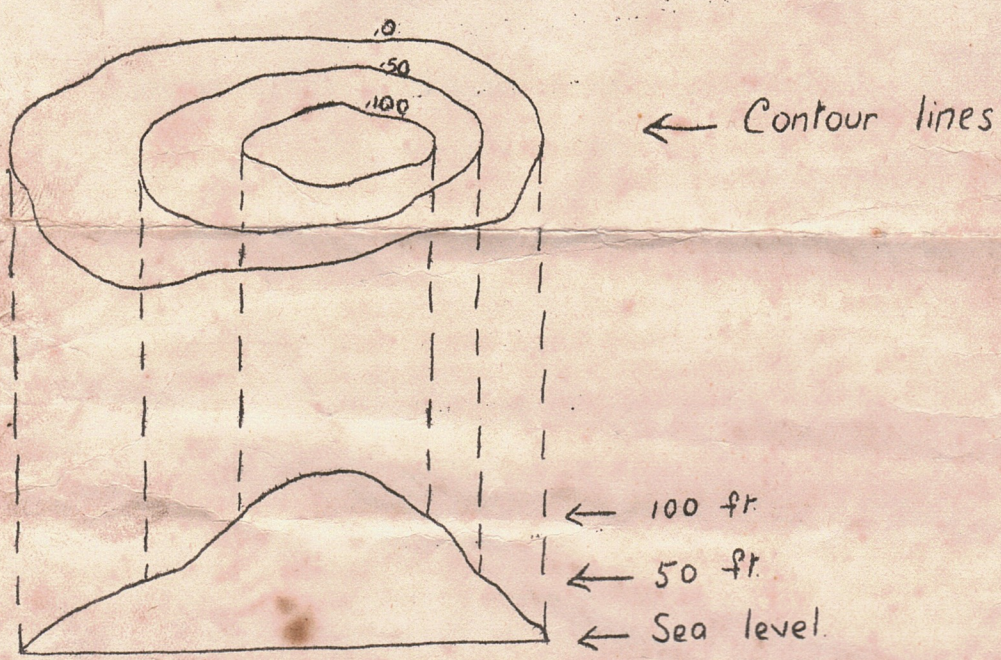
0
50
100
Contour lines
100 ft.
50 ft.
Sea level

MAP AND COMPASS.

by H. J. Chardon.

Probably no two items of equipment are shrouded in so much mystery as the map and the compass. This is a great pity because, intelligently handled, they cease to be just two articles which one carries to save one's face should the necessity arise to unpack under the eagle eyes of one or more of the "old hands".

COMPLETE knowledge of the use of map and compass is something acquired only by years of patient study and practice, and is only possessed by a very few of our members. A WORKING KNOWLEDGE of the underlying principles may, however, be obtained in a very few hours by anyone really interested, and once these principles have been fully mastered they will never be forgotten.

So much for the preamble. Now let us get down to business, and consider first of all THE MAP.

Maps are serial pictures of the country, drawn to scale, on which the various topographical features such as mountains, streams, lakes, and the like are represented by conventional signs. There are three main types of map which are in general use by bushwalkers. They are:-

(1) Military Maps
(2) Tourist Maps
(3) Lands Department Maps.

Military maps are printed for use by the army and possess a wealth of accurate detail not possessed by either of the other two classes. They are, without doubt, the finest examples of map-making to be seen in Australia, and are eminently suited to the purposes of bushwalking. The chief difference between this type of map and the others lies in the method adopted in showing hill features. This is done with great accuracy by means of contour lines. These are lines drawn on the surface of the map (usually in red) linking all points of the same height above sea-level, the height in feet being printed in at intervals along the lines. The accompanying sketch will serve to illustrate the use of contours far better than any written description.

All the rest of the conventional signs are clearly shown in the margin, and should be carefully studied so that they may be recognised when seen on the map. The squares into which the map is divided may be completely ignored as they are only used for reference purposes when it is necessary to describe a point on the map in a written report.

Tourist maps are the next in order of usefulness, and are fairly easy to understand. Conventional signs are also listed in the margin, and should be carefully studied before using the map.

Unfortunately, it is impossible to secure either Military Maps or Tourist Maps of a suitable scale for use in certain sections of New South Wales. This brings us to the third class of maps, those issued by the Lands Department. The State of New South Wales is divided into large tracts of country called Land Board Districts, maps of which may be obtained, but which are of too small a scale to be of much practical use. They form, however, a very useful index to the next smaller divisions, the counties. County maps are very useful, although the scale is still a bit on the small side. Their chief advantage lies in the fact that one map will probably be all that is required for a trip, and will provide information regarding landmarks in the surrounding country. County Maps are in turn divided into Parish Maps, which are usually drawn to a scale of 2 inches to one mile, and are of a fairly convenient size to handle. In addition to the County and Parish Maps, it is possible to obtain Shire Maps. Shire Maps are of a fairly convenient scale and size, and very often give portions of two or more counties.

It might be as well at this stage to give a word of warning with regard to Lands Department Maps. These maps are drawn solely to show the position of privately-owned

In handling a map and a compass, the first thing to do is to open the map out on the ground, place the compass on the line indicating Magnetic North, and turn the map round until the Magnetic North of the map is pointing in the same direction as the compass needle. This procedure is termed "orienting the map"; in other words, placing the map in such a position that all the surrounding country is in the same relative position as shown on the map.

Next, provide a length of straight twig about one foot or eighteen inches in length and lay it on the map to act as a sighting-rod or pointer.

If one's position is known, find the point on the map and mark it with a pencil cross. Then, pivoting the stick on this cross, swing it round until it is pointing towards some clearly defined landmark; then look on the map along the edge of the stick and try to pick out the place in question. This can often be made easier by estimating the distance to the landmark and scaling the distance off along the stick from the pencil cross. Another method is by counting the number of ridges between the two points and comparing this with the map. Repeat this with several other landmarks, and then the minor features will be easily recognisable without the use of the stick. It is always a good plan to stop on some elevated position when resting and so get a good idea of the surrounding country before going on.

If your position is uncertain, look around and see if any of the previously located landmarks can be seen; if so, mark them with crosses. Again pivoting the stick on each cross in turn, point it at the landmark in question, and draw a light pencil line back from the cross towards where you are standing. The point of intersection of two or more of such lines will be your position. Check this by sighting new landmarks as in the previous paragraph, and, if possible, locate points which will be of use in further observations.

In following rivers it is of the utmost importance to mark off on the map all bends and junctions passed. Endeavour to estimate accurately the rate of travel in miles per hour, and don't be surprised if it works out around one and one half to two. In ticking off the bends, do not be content with an estimate of the bearing, lay the map down and do the job properly. Never miss the opportunity to use the piece of stick on a landmark should one be seen.

Ranges and roads fall under the one heading as most of our roads follow the ranges. The same principles apply to ranges as to rivers, except that more opportunities will present themselves to tie up to known landmarks in the way previously described.

Walking on a compass course is a very simple matter if the sun is shining. Merely turn your face in the direction in which you wish to go according to the compass, note the angle of your shadow, and keep your shadow in the same position. Check up every half hour at least as the sun shifts, and consequently your shadow will be in a different direction. If the sun is not shining, keep the compass in your hand and look at it occasionally,noting. some distinctive tree or rock in the distance which you can use as a guide. In very misty or rainy weather, or at night, remain in camp if possible, but if you must push on, do so with the utmost care as the only guides you will have will be your compass for direction,and your estimate of speed for distance covered,the latter being very difficult to gauge.

So much for the map and the compass. If the foregoing principles are mastered, these become guide,philosopher and friend to any who may have become a trifle "slewed" in the wilds.

A few last words will suffice to provide against the human element, which is so often at fault.

See that your compass needle is swinging freely. Avoid iron or other compasses in the vicinity of the compass in use. Believe the compass. Don't convince yourself that the map is ALL wrong; surveyors are not fools. Check your observations in every possible way. Don't be afraid to admit a mistake. Always remember that "being lost" is purely a state of mind.