

USE OF ALUMINIUM SHEETS WITH PLANE-TABLE BOARD.

(Extract from an article by S. J. BAKER in *The Geographical Journal*, London, March 1935).

An expedition, sponsored by Oxford University, explored in 1933-34 the island of Espiritu Santo, New Hebrides. During the exploration plane-table surveys were made in order to complete the known topographical information. The surveyor made use of a plane-table with aluminium sheets to which the paper was permanently attached, a device which avoids deterioration of the paper on account of dampness.

The plane-table sheets were prepared as follows. The aluminium sheets (thickness 0.04 inch) were first cut accurately to the size of the plane-table top. The corners were then rounded and all the edges carefully smoothed and rounded. Next a "grain" was put on the sheets by going over them carefully with a wire scratch brush in the chuck of an electric drill. This left a surprisingly regular granular "tooth" for the adhesive. Both sides were similarly treated. Then the paper was cut to a little over the size of the sheets, and the surface of the sheet and the under surface of the paper were both spread with "Rawlplug Durofix" (selected as being unaffected by heat and damp), and the two were placed in position together. The exposed face of the paper was then rapidly sponged over with water, and the paper was then stripped off again, and set aside (sticky side up) for about five minutes to expand. The aluminium sheet was then given a second coat of Rawlplug Durofix, and the paper was again applied, and carefully rubbed out from the centre with a clean rag, the edges being rubbed over the edges of the aluminium to about a right angle, the surplus paper being removed by sandpapering through it against the edge of the aluminium sheet. Paper was applied to the other side of the sheet in the same way. The object of papering both sides of the aluminium was to economize in the weight of sheets to be carried and to provide a second sheet available in the field if required. The aluminium sheets were attached to the board by strips of 2-inch surgical zinc oxide adhesive tape, so as completely to seal the edges.

