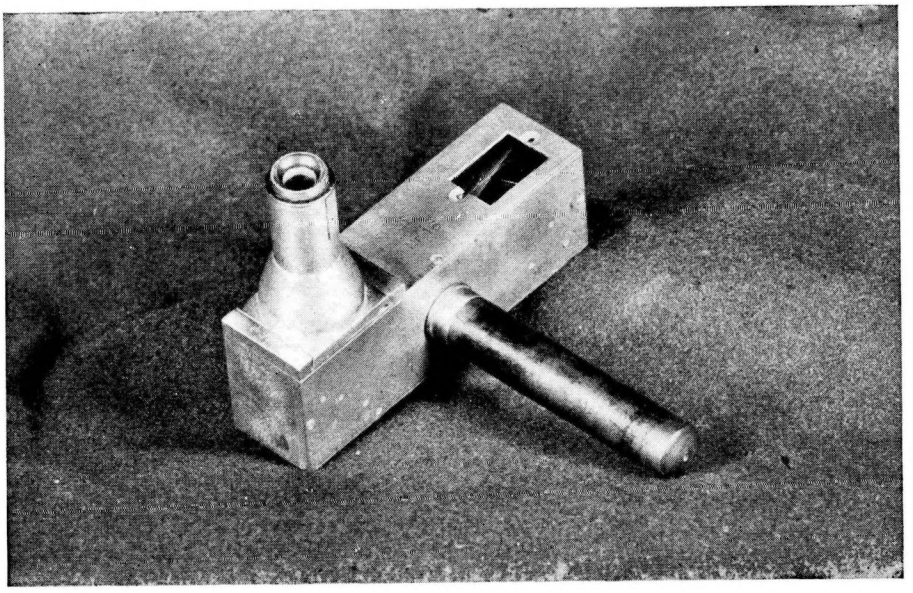

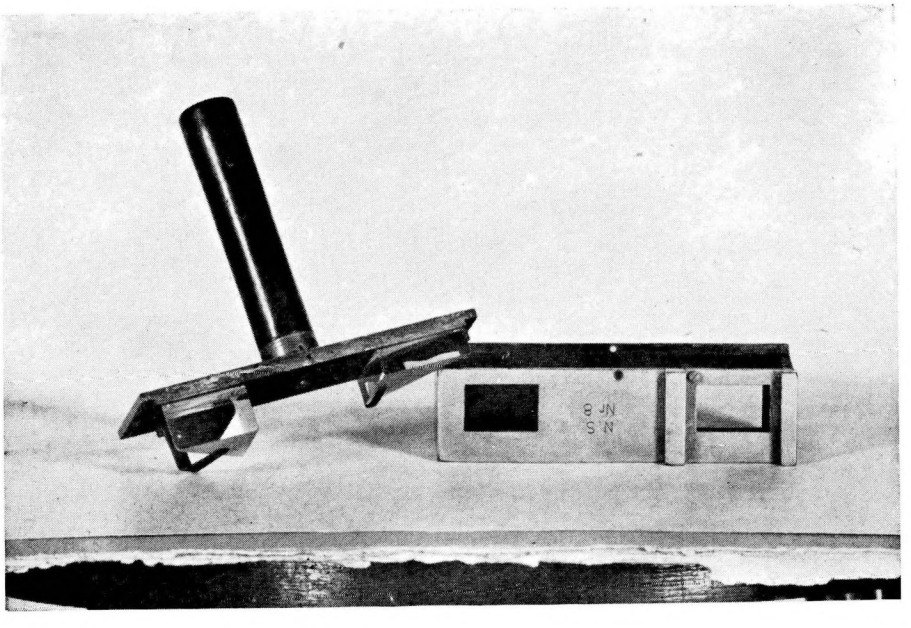

The Angle Prism.

THE ANGLEPRISM

The angleprism is a very handy instrument frequently used when surveying in the Norwegian fjords.

The instrument consists of a metal case in which are solidly mounted two right angle isosceles prisms placed as shown in fig. (1).

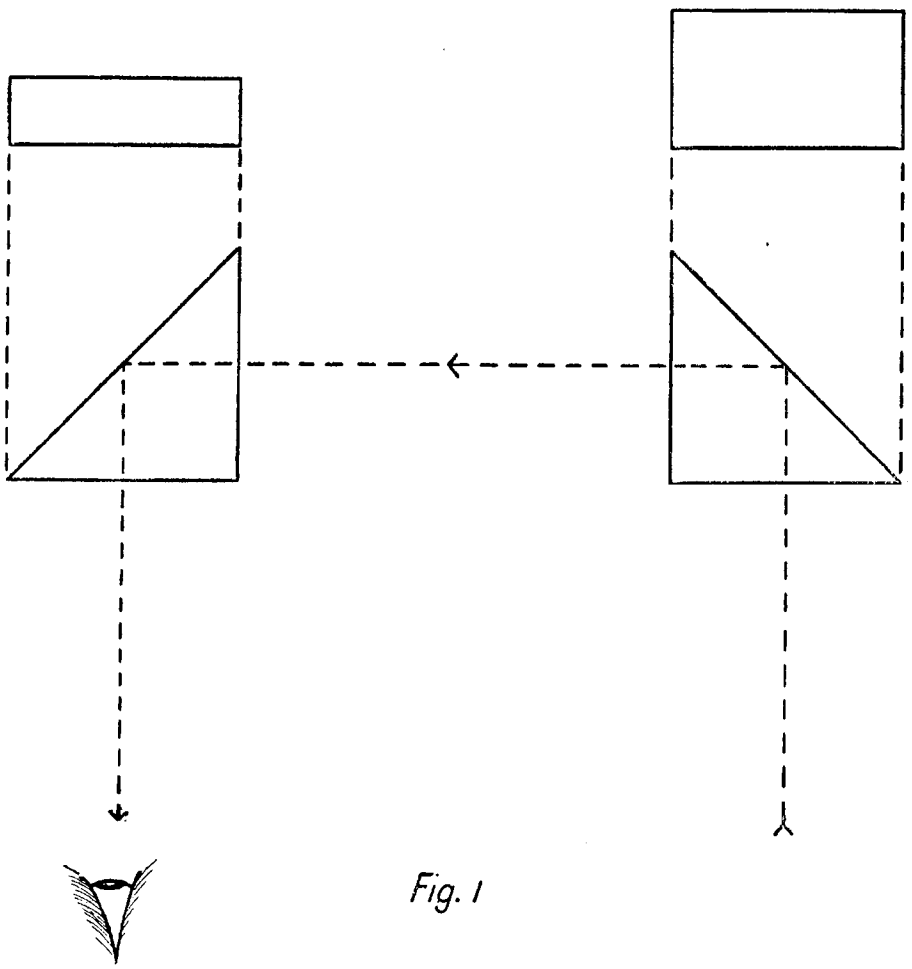

Fig. 1

A light beam falling into the right prism will be totally reflected from both the hypotenuses. An eye in front of the left prism will observe the landscape behind the observer, and when simultaneously looking over the same prism, observe the landscape in front as well. Two coinciding points in both pictures lie on the straight line through the observer's spot.

As the light beam does not lose any strength by total reflection it is unnecessary to foil the hypotenuses.

The size of the metal case is $13 \times 4, 5 \times 3, 5$ cm³. When used a handle 10. 5 cm. long is fitted to the instrument. A single field glass may be connected to the case in front of the left prism.

When not used the instrument is kept in a small wooden box of convenient dimensions.

The metal case is fitted with windows for both prisms to enable the light to pass through. The reciprocal position of the prisms cannot be adjusted.

The bottom of the case to which the prisms are fastened may if necessary be unscrewed for inspection and polishing of the prisms.

To check the positions of the prisms the observer may choose two arbitrary distant points, and by means of the angle prism place himself in the straight line between them, then by turning around 180° exactly on the same spot, the same two points will coincide if the positions of the prisms are correct.