

BROCK CAMERA — APPAREIL DE PRISES DE VUES BROCK



BROCK CORRECTING PROJECTOR - PROJECTEUR CORRECTEUR BROCK



USE OF AIRCRAFT IN SURVEYING.

The October 1928 number of the Journal of the Franklin Institute contains an article by L. J. R. HOLST entitled: "Topography from the Air".

The Author describes the Brock appliances and photographic camera as well as the Brock process as employed by the firm of Brock & Weymouth, Inc. of Philadelphia, Pa, for some years.

Photographs are taken with the optical axis as vertical as possible and with such overlap that the foot of the vertical from every point where an exposure was made appears on both the preceding and following photograph. It is necessary to have the distance between two points of known height in order that the altitude at which the photograph was taken and the scale may be calculated. Such bases may be as much as 10, 15 or even 20 miles apart which makes it possible to select easily accessible points for the purpose. The relative positions of the succeeding view-points are deduced from knowledge of the differences of level between four ground points which appear on both photographs. The determination of these differences makes it possible also to ascertain the tilt and to adjust the photographs by means of the *Correcting Projector* whenever the tilt is sufficient to affect the directions of the straight lines joining various points on the plate to its centre. It is these directions which are used to fix the points on the charts and thus the scale of each photograph need not be known. This method ensures a very accurate connection of the succeeding photographs and enables all of the common parts to be used.

By means of a special stereoscope the contours of equal height are then drawn and, finally, the *equalising projector* is used to redraw and adjust, for position and scale, each area of the same altitude with reference to the points the positions of which have been fixed on the chart as described above.

This method avoids the use of costly and complicated mechanical contrivances which are liable to get out of order. P. V



Brock Stereoscopic Table