Professor G. FORNI's work published last year by the HYDROGRAPHIC INSTITUTE OF THE ROYAL ITALIAN NAVY takes the form of a precise handbook of observations by means of the astrolabe. It gives the description and method of use of the JOBIN instrument and of the instrument constructed by the S. O. M. (SOCIÉTÉ D'OPTIQUE ET DE MÉCANIQUE DE HAUTE PRÉCISION, Paris).

For the computation of observations by prismatic astrolabe the Italian Hydrographic Institute has adopted the JORDAN formula by means of which the computations of distance from the estimated position to the position line given by the astrolabe observation, may be easily estimated. An example of computation is given in the work.

For the preparation of the programme of observations the Italian Hydrographic Institute has adopted a graphic procedure worked out by Admiral TONTA; this procedure, which makes use of stellar plans of the northern and southern hemispheres in stereographic-polar projection and of a graph representing the almucantar of 30° zenithal distance corresponding to the station position, is described on pp. 40-45 of Professor FORNI's publication; by its means the list of sidereal times and azimuths of the different stars observable passing at the zenithal distance of 30° is very readily established.

THE ASTROLABES OF THE WORLD

by

Dr. ROBERT T. GUNTHER

Vol. 1: *The Eastern Astrolabes.* Pp. *xvii* + 304, 68 plates
Vol. 2: *The Western Astrolabes.* Pp. *viii* + 305-609, plates 69-153
(Oxford: Printed at the University Press, 1932, £10.10s. net)

Dr. Robert T. GUNTHER, Curator of the Lewis Evans Collection in the Old Ashmolean Museum at Oxford, has published a general Catalogue of the astrolabes of the world based upon the series of instruments in the LEWIS EVANS Collection in the old Ashmolean Museum at Oxford, with notes on astrolabes in the collections of the BRITISH MUSEUM, the SCIENCE MUSEUM, Sir J. FINDLAY, Mr. S. V. HOFFMAN, the MENSING collection, and in other public and private collections.

He begins with the astrolabes of Greece, Byzantium, Persia, India, Arabia, and Morocco in Volume I, which is devoted to the astrolabes of the East, and continues with those of Spain, Italy, France, the Low Countries, Germany and England in Volume II (The Western Astrolabes). Under each of these heads, dated instruments are arranged in order of antiquity, but there are also numerous interesting examples to which no exact date can be assigned.

This interesting publication constitues a valuable contribution to the history of the astrolabe.

A NEW READING MICROSCOPE.

In the *Zeitschrift für Instrumentenkunde* 53.4, page 159, is a description by Engineer H. WEDEMEYER of Göttingen of a reading microscope suitable for the reading of the divided circles on theodolites, universal transits, and particularly suitable also for the reading of the graduations of the stadia in levelling instruments.

This new reading microscope is distinguished from the known appliances in that no micrometer screws are employed and that, hence, no kind of error can ensue through wear. It consists essentially of a reading microscope of standard design in the focussing plane of which there are two small graduated plates, one of which may be rotated from outside by means of a milled ring at the eye-end of the telescope. The fixed graduated