HYDROGRAPHIC REVIEW.

The author indicates also the method of reduction applied in working out the results.

The Italian Geodetic Commission considers that gravity measurements taken at sea must be associated also with gravity measurements taken on Italian territory. The gravimetric measurements hitherto made both in Italy and in the neighbouring waters form about 550 stations. At the same time, these measurements are not all homogeneous nor uniformly spread over the territory; this makes it difficult to deal with them as a whole. The measurements made before 1910 have generally an insufficient degree of precision to enable them to be associated with the more recent measurements taken during the last twenty years; consequently Professor CASSINIS and Professor DORE have limited themselves to reproducing the calculations for 230 stations only, including 86 stations of the *Vettor Pisani*.

These measurements chiefly concern the Tyrrhenean Sea, Sardinia, Sicily and the southern part of the Italian peninsula. The authors first of all took care to construct really general tables which could be used with the various methods of reduction; a certain number of copies of these tables have been multigraphed, and they are analagous to those which are being worked out by the Coast and Geodetic Survey of the U.S.A. and which will be finally published under the auspices of the International Geodetic Association.

Afterwards applying the method of calculating the normal values of the gravity by the international formula proposed by the Italian Commission and accepted by the Assembly of Stockholm in 1930, the authors have determined the anomalies and have established charts of isanomalistic lines corresponding respectively to the values -100, -50, +50 and +100.

In Calabria and Sicily these isanomalistic lines have a configuration analogous to that found by MEINESZ for the Sunda Islands Archipelago where the tectonic activity is also very great. It is exactly along a narrow band running from Terranova to Etna, to Cape del l'Armi, to the Gulf of Squillace, to the promontory of Cotrone and to Castrovillari, that one finds on the one hand great positive anomalies and on the other hand great negative anomalies.

In conclusion, the author insists on the necessity of taking new gravity measurements to fill the present gaps in the terrestrial measurements, and also of pursuing the measurements at sea, notably in the Adriatic and the Aegean.

A MAGNETIC SURVEY OF SWEDEN.

by

G. S. LJUNGDAHL

31 × 24 cm. - 37 pp. + 5 fig. + tab. + 6 maps. Jordmagnetiska Publikationer NR 9 - Kungl. Sjökarteverket, Stockholm, 1934.

The Swedish Hydrographic Service has published a report entitled Magnetic Survey of Sweden made by the Hydrographic Service in the years 1928-1930.

This report is by Dr. Gustaf S. LJUNGDAHL, Head of the Section of Magnetic Research, and is drawn up in English. The Hydrographic Service had decided to "begin all over again" by the establishment of an homogeneously measured net over the whole area of the country, the stations of which have been selected in such a manner that they may be exactly reoccupied, thus assuring the continuity and homogeneity of future surveys. The actual survey carried out by the Hydrographic Service includes 86 stations not counting that of Lovö, so that the average distance between two stations is 72 kilometres. Reduction to the common epoch 1929.5 was made by interpolation between three base-observatories, namely Lovö, Rude Skov (Copenhagen) and Sodankylä (Finland).

In 1930 the Hydrographic Service published magnetic charts of Sweden giving the elements D, I and H.