

A HANDBOOK OF WEATHER, CURRENTS AND ICE, FOR SEAMEN.

Publication M. O. 379 of the British Air Ministry Meteorological Office.

(16 × 24 cm. - 154 pp., 34 figs. tables - H. M. Stationery Office, London 1935 - Price : 4s. od. net).

This manual, which was drawn up under the direction of Captain L. A. BROOKE SMITH, Marine Superintendent of the Meteorological Office, London, gives most comprehensive information concerning the weather systems of the oceans and tropical revolving storms, a description of general ocean currents, information on sea-ice and a chapter on Ocean Pilotage; it has been drawn up mainly with a view to meet the needs of navigating officers of the Merchant Navy.

Since the foundation of *The Marine Observer* in 1924, there has been marked progress in the regular transmission of weather information to seamen, and the present small manual is the outcome of *The Marine Observer's* work in this direction; in its compilation the staff of the Marine Division has used a large amount of information supplied by the seamen themselves and, in particular, by British voluntary marine observers.

Chapter I contains general remarks on the relation between air and sea, and formulates BUYS BALLOT'S Law.

Chapter II describes, by oceans, the various wind systems and their regimes. Chapter III is devoted to tropical revolving storms and in the fourth chapter the winds and weather in middle and high latitudes are studied. Chapter V explains the manner by which Weather Charts are constructed, while Chapter VI contains a study of the currents of the oceans. Chapter VII gives a description of sea-ice; Chapter VIII deals with pilotage along the ocean routes and the proper use of Pilot Charts.

Numerous meteorological tables are given in an appendix, with a Horn Card for the graphical study of the propagation of cyclones.

H. B.

THE NEWFOUNDLAND BANKS

by

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(Extract from the *Annales de Géographie*, Paris, 15th November, 1935)

The *Président-Théodore-Tissier*, oceanographic vessel of the OFFICE DES PÊCHES, made an exploratory voyage last autumn in the Newfoundland region. The object of this note is to set forth briefly, in connection with this voyage, some of the problems which arise regarding the morphology of the Newfoundland Banks, and to direct attention to the interest attached to the surveying and charting of the exact depths on the continental shelves.

THE NEWFOUNDLAND BANKS. — This name is given that portion of the continental shelf which extends south of the islands of Newfoundland and Cape Breton delimited with sufficient accuracy by the 100 fathoms depth line shown on the chart (Fig. 1). The Lawrentian Channel separates two groups of shoals.

(1) To the East, the Great Bank, the Green Bank, the St. Pierre Bank and the Bonnet Flamand, themselves separated by channels mostly reaching depths of 100 fathoms.

(2) To the West, the Misaine Bank, the Artimon Bank, the Banquereau, to mention the easternmost ones only.

The Banquereau and the St. Pierre Bank, which bound the southern part of the Lawrentian Channel, have depths of 50, 40 and even 30 m. The depths on the Great Bank lie between 60 and 95 m. practically all over it.

We have thus to do with a plateau submerged under a layer of water of 50 m. or so interrupted by the fissure of the Lawrentian Channel, the depth of which lies some-