THE FLOW OF WATER THROUGH THE STRAITS OF DOVER

as gauged by continuous Current-meter observations at the Varne Lightvessel (50°56' N., 1°17' E.)

PART II

SECOND REPORT ON THE RESULTS OBTAINED (*)

by

J. N. CARRUTHERS, D. Sc.

Dr. CARRUTHERS has recently published a second report on the results obtained from continuous current observations at the Varne Lightvessel, dealing with the conditions of water-flow in the Straits of Dover.

This second part, comprising Series II, Vol. XIV, No. 4, 1935, of the Fishery Investigations published by the British Ministry of Agriculture and Fisheries, gives the results of observations made from 1928 till April 1935 by means of instruments of the Drift-Indicator type.

The report also contains an analysis of all the previous observations made in the neighbourhood of the Varne Lightvessel from 1911 on.

Section IV of the report contains a comparison between the variations of seasonal strength of the Straits of Dover current compared with the changes in salinity through the year. It has been found that during the period in question the water-flow from the Channel towards the North Sea attains its maximum strength in the month of November and its minimum strength in February. The other months of the year may be classified in the following order of decreasing strength: January, August and October, December, July, May, March and April, June.

H. B.

DER HYDROGRAPHISCHE AUFBAU UND DIE DADURCH BEDINGTEN STRÖMUNGEN IM SKAGERRAK.

(THE HYDROGRAPHIC CONSTITUTION AND RESULTING CURRENTS OF THE SKAGERRAK.)

by

GERTRUD KOBE

published by MITTLER & Sohn, Berlin SW 68, Nov. 1934. 6 Rm.

The Institut für Meereskunde has issued a work by Gertrud KOBE on the Skagerrak based on observations made at 18 stations from 1902 to 1914 by Sweden and Germany. These observations were published in the hydrographic bulletins of the Conseil Permanent pour l'Exploration de la Mer.

The Skagerrak is the end of the Norwegian furrow, which there attains its greatest depth — 809 metres (442 fms.). It connects the North Sea with the Baltic; the movement of the waters there is very complicated and annual variations of period have been found both in the displacements of the water and in its nature. Attempts have subsequently been made to utilise this knowledge of the density distribution to calculate the convection currents by BJERKNES' theory. First, working charts were made, showing, by horizontal sections at a series of depths for each month, the distribution of the temperature and of the salinity. Vertical sections along profiles show the arrangement of the layers of various temperatures and of various salinities; they are used for the computation of components of velocity.

(*) See *The Hydrographic Review*, Vol. VI, No. 1, May 1929, p. 193.