

of the ocean for the parallel of latitude. At a depth of 200 fathoms, however, the divergence between the curves of the warm and cold areas is most remarkable. The curve of the warm area, No. 87, shows a fall of scarcely half a degree at 500 fathoms, and less than one degree more at 767 fathoms at the bottom. Between 200 and 300 fathoms the cold area curves run down from  $8^{\circ}$  C. to  $0^{\circ}$  C., leaving only one degree more of gradual descent for the next 300 fathoms. The temperature of the 'hump' on the curves of the 'cold area' between 50 and 200 fathoms corresponds so nearly with that of the long gradual sinking of the curve of the warm area from the surface nearly to the bottom, that it seems natural to trace it to the same source. We therefore conclude that a shallow layer of Gulf-stream water drifting slowly northwards overlies in the cold area an indraught of cold water represented by the sudden and great depression of the curves, while in the warm area this cold indraught is absent, the Gulf-stream water reaching to the bottom.

Tracing the 'warm area' southwards from the mouth of the Færoe Channel along the coast of Scotland, we find that the area between Færoe, the Lews, and Rockall, is a kind of plateau with a depth of from 700 to 800 fathoms; and we may be certain from analogy, although this region has not yet been actually examined, with a bottom temperature not lower than  $4^{\circ}5$  C. Commencing opposite Rockall, and extending between the great shoal which culminates in the Rockall fishing banks and the singular isolated rock, and the west coast of Ireland, there is a wide trough deepening gradually southwards, and at length