

1,000 fathoms	30.5 C.
1,250 „	3.3
1,476 „	2.7

We have here on a large scale, as Dr. Carpenter has pointed out, conditions very analogous to those which exist in comparatively shallow water, and on a small scale in the cold area in the Færoe Channel. There is a surface layer of about 50 fathoms, superheated in August by direct solar radiation, and, as we see by the variations of surface isothermals, varying greatly with the seasons of the year. Next, we have a band extending here to a depth of nearly 800 fathoms, in which the thermometer sinks slowly through a range of about 5° C. Then a zone of intermixture of about 200 fathoms, where the temperature falls rapidly, and finally a mass of cold water from a depth of 1,000 fathoms to the bottom, through which, whatever be its depth, the thermometer falls almost imperceptibly, the water never reaching the dead cold of the Arctic undercurrent in the Færoe Channel, and the lowest temperature being universally at the bottom (Fig. 58).

The area investigated during the second cruise of the 'Porcupine' at the mouth of the Bay of Biscay, about a couple of hundred miles west of Ushant, may be regarded as simply a continuation southwards of the tract between Scotland and Ireland and the Rockall ridge. As, however, the depths were greater than any attained on any former occasion—were so great, indeed, as probably to represent the average depth of the great ocean basins—it may be well to describe the methods of observation and the conditions of temperature somewhat in detail.