

perature of $-0^{\circ}8$ C., showing that we had passed the boundary, and were in the 'cold area.'

At this point we requested Captain Calver to take a serial sounding, ascertaining the temperature at depths progressively increasing by 50 fathoms, which was done with the following result:—

Surface	11°·8 C.
50 fathoms	9·2
100 „	8·4
150 „	8·0
200 „	7·5
250 „	3·5
300 „	0·6
384 (Bottom)	0·8

We thus ascertained that the minimum temperature was at the bottom; and this we have found to be universally the case over the whole of the area which we have examined, whatever the bottom temperature might be. And we also ascertained that the decrease in heat from the surface downwards was by no means uniform, but that while after passing the surface layer it was tolerably regular for the first 200 fathoms, there was an extraordinary fall amounting to upwards of 7° C. from 200 to 300 fathoms, at which latter depth the minimum is nearly gained.

The next few observations, Stations 53 to 59, were all within the limits of the cold area, the bottom temperature at depths ranging from 360 to 630 fathoms, nowhere reaching the freezing-point of fresh water; and at one point, Station 59, lat. $60^{\circ} 21'$ N., long. $5^{\circ} 41'$ W., at a depth of 580 fathoms, the index standing so low as $-1^{\circ}3$ C. On Saturday the 21st we took a sounding in 187 fathoms, on the edge of the Færoe