

At 1 P.M. on the 26th, after completing the temperature sounding, the course was resumed, and Bermuda was reached without encountering any other considerable changes in the condition of the surface water, the mean temperature of which for the remainder of the passage was  $71^{\circ}7$ , the extremes being  $73^{\circ}5$  and  $69^{\circ}0$ .

In the Halifax-Bermuda section eight soundings, five dredgings and two trawlings in deep water, and eight serial temperature soundings were obtained.

On the 22nd May, at Station 51, the dredge rope parted as it was being hauled in, apparently without cause, as the dredge was off the bottom, and the accumulators did not indicate any undue strain. The rope had probably got stranded previously by meeting some obstruction on the bottom.

On the 26th May, at Station 53, the line used in obtaining submarine temperatures became jammed between the rudder and the stern-post, and defeated all attempts to recover it, eventually parting, by which accident seven thermometers were lost. This was the only occasion on which any serious mishap occurred in taking temperature observations throughout the voyage.

The temperature of the water at the bottom in the Halifax-Bermuda section was, as in the previous sections, remarkably uniform when the depth exceeded 1800 fathoms, the mean being  $36^{\circ}2$  and the extremes  $36^{\circ}0$  and  $36^{\circ}3$ . One bottom temperature of  $35^{\circ}$  was obtained in 85 fathoms on the 20th May at Station 49, in the centre of the Labrador Current.

The serial temperature observations indicate in a remarkable manner the influence of the cold water of the Labrador Current on the temperatures below the surface, for it will be seen by referring to the section (Diagram 2) that although that current, judging from the surface temperatures obtained, does not extend more than 100 miles from the land, and is consequently confined in this locality to a depth not exceeding 100 fathoms, yet its lowest stratum apparently flows over the edge of the 100 fathom bank off Nova Scotia, and gradually descends to the bottom of the North Atlantic basin, as evidenced by the parallelism of the isotherms to the contour of the bottom in the immediate vicinity of that bank. The influence of the Labrador Current upon the adjacent water was traced for 150 miles to the southward of its edge, for it will be noticed that the isotherm of  $40^{\circ}$ , which for 450 miles north of Bermuda occupied the same or nearly the same depth at which it had hitherto been found over nearly the whole of the western part of the North Atlantic, rises almost vertically to the surface 600 miles north of Bermuda.

On the 27th May, at Station 54, the surface current was found to be N.E.  $\frac{1}{4}$  mile per hour.

On the 28th May, at Station 55A, the surface current was found to be N.  $60^{\circ}$  E.,  $\frac{1}{2}$  mile per hour, and the current drag at 200 and 500 fathoms indicated no movement at those depths, as the surface water ran past the watch buoy at the same rate and in the same direction as when it was anchored, by the lead line, to the bottom.

On the 28th May, at 8 P.M., Bermuda was sighted, and the 29th, 30th, and part of