The main feature in the section was the steady increase to the westward of the temperature of the surface-layer, the isothermobaths of 19°, 20°, 21°, 22°, 23°, and 24° C. being added in regular succession. This was due chiefly to the southward direction of the section, partly to the advance of the season, and partly to the westward determination of the warm surface-water.

From St. Thomas to Bermudas the surface-temperature naturally fell gradually, the lower lines remaining pretty steady; but at Station XXVIII., lat. 24° 39′ N., long. 65° 25′ W., a very marked widening of the space between the isothermobaths of 18° and 19° C. was observed, and, farther on, the whole of the space between the lines of 16° and 19° C. became abnormally expanded, indicating the presence of a layer of water 200 fathoms thick, considerably above its normal temperature, lying between the 100 and the 300 fathom line. This warm band appeared again to the north of Bermudas, and on our north-westerly course toward Sandy Hook (Plate XI.) it maintained its volume and position to lat. 36° 23′ N., long. 71° 51′ W., when it came to the surface, or became merged in the phenomena of the Gulf-stream.

We next crossed the Gulf-stream, of which I have nothing further to say than that all we saw confirmed our previous convictions as to its cause and its effects; and we sounded in the Labrador Current, the local and most insignificant return stream from the Arctic Sea.

On our return from Halifax to Bermudas (Plate IX.), we again encountered the warm band at Station LII., lat. 39° 44′ N., long. 63° 22′ W., and traced it all the way to the island. To the east of Bermudas it again made its appearance on our section from Bermudas to the Açores (Plate XVI.), and maintained its volume to Station LXX., lat. 38° 25′ N., long. 35° 50′ W., where it became less definite, and then thinned out, while at the same time the lower isothermobaths began to dip down and to separate, indicating an enormous accumulation of super-