

Temperature of water:—

STATION 51.

| | | | |
|------------------------|------|------------------------|------|
| Surface, | 59.0 | 900 fathoms, | 38.0 |
| 100 fathoms, | 55.0 | 1000 " | 37.8 |
| 200 " | 47.0 | 1100 " | 37.7 |
| 300 " | 42.0 | 1200 " | 37.5 |
| 400 " | 39.8 | 1300 " | 37.4 |
| 500 " | 38.8 | 1400 " | 37.3 |
| 600 " | 38.4 | 1500 " | 37.2 |
| 700 " | 38.2 | Bottom, | 36.0 |
| 800 " | 38.1 | | |

Density at 60° F. at surface, 1.02625; bottom, 1.02595.

Depth, 2020 fathoms; deposit, Blue Mud, containing 27.75 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 7.30 A.M. stopped to sound and dredge. At 8 A.M. sounded in 2020 fathoms. At 9 A.M. sent jolly-boat to collect surface animals. At 10 A.M. put over dredge, and veered 2900 fathoms. At 1.55 P.M. commenced heaving in dredge, but the dredge rope parted at 1700 fathoms, the dredge being 300 fathoms from the bottom; at the time of the accident no undue strain on the rope was observed. Obtained a series of temperatures at intervals of 100 fathoms down to 1500 fathoms. Obtained samples of water from 250 and 500 fathoms for analysis.

Distance from Bermuda at noon, 550 miles. Made good 55 miles. Amount of current 10 miles, direction S. 33° E.

Surface Organisms.—Willemoes-Suhm writes: "The iridescent *Saphirina*, found so often in the eastern part of the Atlantic, was, with some other species of the same genus, very abundant at the surface. *Salpæ* and Siphonophoræ also abound, and some Ctenophoræ, *Sagitta*, and Heteropods were also present."

ORGANISMS FROM
THE SURFACE.

Station 52 (Sounding 110), Halifax to Bermuda (see Chart 9 and Diagram 2).

STATION 52.

May 23, 1873; lat. 39° 44' N., long. 63° 22' W.

Temperature of air at noon, 68°.2; mean for the day, 68°.3.

Temperature of water:—

| | | | |
|------------------------|------|------------------------|------|
| Surface, | 67.2 | 700 fathoms, | 39.8 |
| 100 fathoms, | 64.8 | 800 " | 39.0 |
| 200 " | 63.8 | 900 " | 38.7 |
| 300 " | 61.4 | 1100 " | 38.1 |
| 400 " | 53.5 | 1300 " | 37.7 |
| 500 " | 46.4 | 1500 " | 37.3 |
| 600 " | 42.0 | Bottom, | 36.2 |