quent where the bottom is of smooth ooze, and, from the appearance and structure of the bunches of horny tubes which form their roots, it would seem that they are in a certain sense free, merely anchored in the surface of the soft calcareous mud.

Among the bryozoa, at first sight closely resembling them in form and habit, were one or two specimens of an extremely delicate and beautiful siliceous sponge; one, apparently, of the aberrant stalked Esperiadæ. Several species of this curious little group occurred in deep water in the Atlantic: they will be described on a future occasion. A serial temperature sounding was taken, the intervals being 100 fathoms from the surface to a depth of 1500 fathoms:

Surface	22°·2 C.	900 fathoms	3°·6 C.
100 fathoms	18 ·9	1000 "	3 ·4
200 "	15 ·5	1100 "	3 ·0
300 "	12 ·4	1200 "	2 ·5
400 "	9 ·6	1300 "	2 ·5
500 "	6 ·7	1400 "	2 ·3
600 "	5 ·2	1500 "	2 ·2
700 "	4 ·7	1900 " bottom	1 ·9
800 "	4 ·1		

The specific gravity of the bottom water was 1·02517 at 22°·1 C., that of the surface water being 1·02579 at 22°·8 C.

During the following night we made about one hundred miles, and on the morning of the 5th we were a little to the south-west of a sounding of 1875 fathoms (Lieutenant Berryman) on the chart, so that we were still on a comparatively elevated plateau. A trawl with a 22-feet beam was sent down at 9 A.M., and we sounded at 10 A.M. in 1950 fathoms. A slip water-bottle accompanied the "Hydra" sounding-machine to the bottom, and a stop-cock water-bottle was bent on to the line at 1000 fathoms from the bottom. On hauling up, the strong brass cylinder of the stop-cock water-bottle was found collapsed and crumpled like a piece of paper. This was not a matter of