

On the following day we sounded in much shallower water—2800 fathoms; the bottom was much of the same character: and on the 28th in 2960 fathoms, with a like result; but at our next sounding in 2850 fathoms, on the 29th, the calcareous element in the mud had almost entirely disappeared; and the contents of the tube seemed to be identical with the red clay which occupied so large a part of our first section.

A temperature sounding was taken at this station at every 100 fathoms from the surface to 1500 (curve No. 28, Fig. 71); and in the afternoon the operation was repeated at intervals of 50 fathoms, with the result of verifying the temperatures taken earlier in the day, which seemed to indicate the presence of a mass of water nearly 200 fathoms thick, at a temperature ranging from 16° C. to 18° C., bringing down the isothermal line of 16° C. on Plate IX. from the 200 to the 300 fathom line, and producing a hump on the curve deduced from the sounding somewhat resembling that which we had traced along the west coasts of Europe.

On Monday, the 31st, the weather still continuing very pleasant, with a light south-easterly wind, we sounded and dredged in 2700 fathoms. The dredge brought up a quantity of reddish-gray mud of the usual character. Carbonate of lime was in some quantity, and the clay contained a number of the fresh shells of calcareous miliolines. The only higher animal sifted out was a scarlet caridid shrimp. A serial sounding (curve No. 29, Fig. 71) gave a still more decided indication of a stratum of warm water between the 1 and 300 fathom lines.

Surface.....	22°·2 C.	900 fathoms.....	3°·5 C.
100 fathoms.....	17·7	1000 " .....	3·4
200 " .....	17·0	1100 " .....	3·1
300 " .....	14·3	1200 " .....	—
400 " .....	10·6	1300 " .....	2·8
500 " .....	6·8	1400 " .....	2·8
600 " .....	—	1500 " .....	2·4
700 " .....	4·7	Bottom.....	1·6
800 " .....	4·1		