

On Tuesday, the 11th, we pursued our course during the forenoon at the rate of from six to seven knots, with a light breeze, force 3 to 4. At 2 P.M. shortened and furled sails, and got up steam to sound, and at 3 o'clock sounded in 3000 fathoms. The bottom was a pale, chocolate-colored mud, with some gritty particles, but very little carbonate of lime, and no foraminifera. The bottom temperature, registered from the mean of two thermometers, was  $1^{\circ}\cdot3$  C. On the following morning, March 12th, the small dredge, with the bag lined throughout with bread-bag, was lowered early in the morning, with a slip water-bottle and two thermometers. This sounding was almost exactly on the spot of Lieutenant Lee's sounding of 3300 fathoms mentioned above, and gave a somewhat less depth, the "Hydra" tube returning filled with red clay-mud from a depth of 2975 fathoms. The bottom had very much the character of that of the very deep depression which we encountered earlier in the cruise, only the mud was not quite so homogeneous, containing a number of gritty particles. It was, however, on the whole very smooth, and contained scarcely a trace of carbonate of lime. The thermometer registered a bottom temperature of  $1^{\circ}\cdot6$  C., and the sample of bottom water had a specific gravity of 1.02416 at  $22^{\circ}\cdot6$  C., that of the surface having a specific gravity of 1.02470 at  $24^{\circ}\cdot9$  C. A series of temperature observations were taken at intervals of 100 fathoms from the surface to 1500 fathoms.

Surface.....	$24^{\circ}\cdot0$ C.	900 fathoms.....	$3^{\circ}\cdot5$ C.
100 fathoms.....	20 $\cdot$ 0	1000 " . . . . .	3 $\cdot$ 3
200 " . . . . .	15 $\cdot$ 6	1100 " . . . . .	2 $\cdot$ 9
300 " . . . . .	9 $\cdot$ 7	1200 " . . . . .	2 $\cdot$ 7
400 " . . . . .	7 $\cdot$ 0	1300 " . . . . .	2 $\cdot$ 8
500 " . . . . .	5 $\cdot$ 3	1400 " . . . . .	2 $\cdot$ 7
600 " . . . . .	5 $\cdot$ 0	1500 " . . . . .	2 $\cdot$ 5
700 " . . . . .	4 $\cdot$ 6	2975 " bottom.....	1 $\cdot$ 6
800 " . . . . .	4 $\cdot$ 0		

The dredge-line was veered to over 4000 fathoms—nearly