700 fathoms	4 ·8 C.	1200 fathoms	3 ·1 C.
800 "	4 ·6	1300 "	2 ·6
900 "	4 ·0	1400 "	2 ·7
1000 "	3 ·5	1500 "	2 ·6
1100 "	3 ·3	2720 " bottom	1 ·9

On Saturday, March 1st, we sounded in the morning in 2575 fathoms, with the "Hydra" and 3 cwt., the slip water-bottle, and one thermometer—the stop-cock water-bottle being again attached at 500 fathoms from the "Hydra." The bottom was ooze still, containing a large proportion of silicate of alumina, but with much more calcareous matter and many more minute shells than in the previous sounding; showing that we were passing from the region of dead red clay which occupies the extreme deep water in this place. The small dredge was sent down at 9.55 A.M. with 3000 fathoms of rope, 2000 fathoms of which were 2-inch rope and new; 1 cwt. was attached 300 fathoms before the dredge, and later in the day an additional hundred-weight was slipped down the line. At 5.20 P.M. the dredge came up bottom upward and quite empty. A little mud on the netting showed that it had been at the bottom; and as the double chain to which the dredge is immediately attached was twisted up into a close spiral, we judged that the *bouleversement* of the dredge had plainly been caused by the twist in the new line. A series of temperature observations were taken at intervals of 20 fathoms from the surface to a depth of 200 fathoms, in order to determine the depth to which the temperature of the water is affected by direct radiation. The following is the result:

Surface	22°·2 C.	120 fathoms	18°· 0 C.
20 fathoms	22 ·2	140 "	——
40 "	22 ·2	160 "	16 · 3
60 "	22 ·2	180 "	15 ·15
80 "	21 ·8	200 "	14 · 7
100 "	19 .9		