

On Tuesday, the 25th, a small dredge was lowered at 6.30 A.M. with 3500 fathoms of line (2500 fathoms of $2\frac{1}{2}$ -inch rope and 1000 of 2-inch), and 2 cwt. leads attached 300 fathoms in advance. At 7.30 we sounded in 2800 fathoms, with a bottom of the same reddish ooze, and a temperature of 2° C. A series of temperatures were taken at intervals of 100 fathoms down to 1000, the results agreeing closely with those of the previous series:

Surface.....	19°·5 C.	600 fathoms.....	6°·3 C.
100 fathoms.....	19 ·0	700 "	5 ·5
200 "	14 ·9	800 "	5 ·2
300 "	11 ·1	900 "	4 ·3
400 "	9 ·3	1000 "	4 ·0
500 "	6 ·7	2800 " bottom.....	2 ·0

At 5.15 P.M. the dredge came up clean and empty. It had either never reached the bottom, owing to some local current or the drift of the ship, or else every thing had been completely washed out of it on its way to the surface. The bottom water gave a specific gravity of 1·02504 at 19° ·6 C., that of the surface being 1·02617 at 21° ·3 C. While sounding, the current drag was tried, and indicated a slight north-westerly current.

As the attempt to drag on the previous day had been unsuccessful, it was determined to repeat the operation with every possible precaution on the 26th. The morning was bright and clear, and the swell, which had been rather heavy the day before, had gone down considerably. A sounding was taken about 10 o'clock A.M. with the "Hydra" machine and 4 cwt. The sounding was thoroughly satisfactory, a sudden change of rate in the running-out of the line indicating in the most marked way when the weight had reached the bottom. During the sounding, a current drag was put down to the depth of 200 fathoms, and it was then ascertained that, by means of management and by meeting the current by an occasional turn of the screw, the ship scarcely moved from her position during