

could be brought round to steam up to it, the line unfortunately parted, and the hydra, two thermometers, and a water-bottle were lost. There was scarcely sufficient strain shown on the accumulators to account for this, and the accident may probably have been caused by a sudden jerk, or by some imperfection in the line. The hydra was again sent down with 3 cwt. of weights on a No. 1 sounding-line as before, and the ship was put before the wind. The line was checked from time to time to insure its being as perpendicular as possible. Each time the line ran out it was carried astern in a bight by the current, and when checked it came forward, cutting its way through the water until it was up and down.\* To keep up to the line, the ship was steamed ahead at the rate of three knots an hour, and on the least decrease of speed the line moved ahead, or rather the ship was carried astern. All our usual time indications of the progress of the sounding were at fault, and in a most perplexing way, for the rate of the current was nearly the same as the ordinary rate of the running-out of the sounding-line, so that, had the weights reached the bottom, the line would have been carried out by the water with the same rapidity as before. When 2650 fathoms were out, there was a lessened strain on the accumulators, and the line was hove in; but on the arrival of the instruments at the surface it was found that the weights had not slipped, and had, in fact, never reached the bottom; although they could not have been far from it, as the thermometers registered a temperature of  $1^{\circ}\cdot8$  C.

In the course of the afternoon three series of temperature observations were taken which showed that we were on the slope of the so-called "cold wall."

Surface.....	23 <sup>o</sup> ·9 C.	60 fathoms.....	21 <sup>o</sup> ·7 C.
20 fathoms.....	21 ·8	80 " .....	20 ·0
40 " .....	21 ·5	100 " .....	18 ·3

\* See Reports of Captain G. S. Nares, R.N., to the Admiralty, published in 1874, p. 6.