

surprise, for it was already suspected that the valves had closed before the bottle reached the surface, from having been scarcely sufficiently tightened up. The slip water-bottle had also miscarried, some mud having got into the valve, and prevented its closing fully. The sample in the tube of the "Hydra" was ooze containing many foraminifera; the thermometer registered a temperature of $1^{\circ}9$ C.

The trawl was hauled in at 5 P.M. The beam was broken through the middle, and otherwise strangely torn and crushed, by the combined action of the pressure to which it had been subjected, and the strain of pulling it up rapidly through three miles of water. The wood was driven in and compressed so as to reduce the diameter of the beam by half an inch, and the knots projected a quarter of an inch on all sides. In the bread-bag chamber at the end of the trawl there was a little mud, full of large foraminifera and the otolites of fishes, the finer débris having been washed through the canvas; and sticking to the net were several examples of the two bryozoa previously mentioned, and a very perfect young specimen of the remarkable form which we dredged off the coast of Portugal, *Naresia cyathus*. Our position at noon was lat. $21^{\circ} 0'$ N., long. $46^{\circ} 30'$ W., Sombrero Island distant 972 miles.

On Thursday, the 6th, we sounded in 2325 fathoms, sending down a thermometer and the slip water-bottle. The bottom temperature registered was $1^{\circ}7$ C., and the specific gravity of the sample of water was 1.02470 at 21° C., that of the surface water being 1.02556, at $23^{\circ}3$ C.

The bottom was a yellowish ooze with a very large proportion of red clay, and a corresponding decrease in the amount of carbonate of lime and in the number of shells of foraminifera; a considerable approach to the character of the mud from Station 7 on the 24th of February, when we were approaching the bed of fine red clay. Serial soundings were taken at the usual intervals down to 1500 fathoms: