STATION 69.

Density at 60° F. at surface, 1.02712.

Depth, 2200 fathoms; deposit, Globigerina Ooze.

At 9.20 a.m. shortened and furled sails, and got up steam to sound and trawl. At 10 a.m. put trawl over, and at 12.30 p.m. sounded in 2200 fathoms. A water-bottle was sent down attached to the sounding-line, but it came up empty, the line having fouled the slip-valve. At 2 p.m. obtained serial temperatures at intervals of 100 fathoms down to 1500 fathoms. At 5.30 p.m. trawl came up, containing a large red Schizopod and Pyrosoma. At 5.50 p.m. made all plain sail.

Distance from Fayal at noon, 404 miles. Made good 95 miles. Amount of current

27 miles, direction N. 19° W.

Animals from Trawl.

The following species are recorded in the Zoological Reports from the trawl at this Station:—

SCHIZOPODA (Sars, Zool. pt. 37).

Gnathophausia gigas, Willemoes-Suhm, n.g., n.sp. One specimen; part of the moulted skin of another specimen was obtained at Station 157, 1950 fathoms.

Tunicata (Herdman, Zool. pt. 76).

Pyrosoma spinosum, n.sp. Gigantic specimen, of which only pieces were preserved (may have been caught near the surface). Obtained also at Station 133, 1900 fathoms.

The above *Pyrosoma* was 4 feet 2 inches in length and 9 inches in diameter: a wonderfully perfect and beautiful specimen dotted all over with red dots, each dot being the visceral nucleus of an individual. It showed phosphorescence at night when irritated, and one could write one's name on it with the finger. It all broke up into separate animals before morning. In each individual was an ovum not yet sufficiently developed to show the quadripartite embryo. The trawl evidently did not reach the bottom.

STATION 70.

Station 70 (Sounding 134), Bermuda to Azores (see Chart 6 and Diagram 3).

June 26, 1873; lat. 38° 25' N., long. 35° 50' W.

Temperature of air at noon, 73°.3; mean for the day, 71°.1.

Temperature of water at surface, 70°.0.

Density at 60° F. at surface, 1.02708.

Depth, 1675 fathoms; deposit, Globigerina Ooze, containing 83.31 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).