Temperature of water :-

STATION 71.

| Surface, . | | • 1 | | 7Î:0 | 500 fa | thoms, | | | 42.8 |
|-------------|----|-----|----|------|---------|--------|----|---|------|
| 25 fathoms, | | | | 64.2 | 600 | " | | • | 41.2 |
| 50 | ,, | • | | 61.0 | 700 | ,, | | | 39.9 |
| 75 | ,, | | | 59.9 | 800 | " | ٠. | | 39.0 |
| 100 | ,, | | | 58.8 | 900 | ,, | | | 38.4 |
| 200 | " | | 34 | 55.2 | 1000 | ,, | | | 37.9 |
| 300 | ,, | • | | 50.8 | Bottom, | | | | 36.8 |
| 400 | ,, | | | 46.0 | | | | | |

Density at 60° F. at surface, 1.02696; bottom, 1.02668.

Depth, 1675 fathoms; deposit, Globigerina Ooze, containing 88:31 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 9 A.M. shortened sails, and got up steam to sound. At 11 A.M. sounded in 1675 fathoms. At 1 P.M. put over trawl, and obtained serial temperatures down to 1000 fathoms. Sent down slip water-bottle attached to sounding-line, and obtained sample of water for analysis. The carbonic acid was determined in the bottom (?) water, and amounted to 59.2 milligrammes per litre. At 7.40 P.M. trawl came up almost empty, having fouled the line. At 8 P.M. made all plain sail.

Distance from Fayal at noon, 284 miles. Made good 48 miles. Amount of current 16 miles, direction S. 72° E.

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

ALCYONARIA (Wright and Studer, Zool. pt. 64).

Telesto rigida, n.sp. Obtained at no other locality.

LAMELLIBRANCHIATA (Smith, Zool. pt. 35).

Arca (Barbatia) pteroessa, n.sp. Obtained also at Stations 16, 24, 73, 237, and 246.

A fragment of Euplectellid (?) is also recorded in the Station-book.

Station 72 (Sounding 136), Bermuda to Azores (see Chart 6 and Diagram 3).

Station 72.

June 28, 1873; lat. 38° 34′ N., long. 32° 47′ W. Temperature of air at noon, 72° 0; mean for the day, 70° 8.