

## STATION 90.

Density at 60° F. :—

Surface, . . . . .	1·02688	400 fathoms, . . . . .	1·02610
100 fathoms, . . . . .	1·02735	500 „ . . . . .	1·02605
150 „ . . . . .	1·02661	Bottom, . . . . .	1·02645
300 „ . . . . .	1·02645		

Depth, 2400 fathoms; deposit, Globigerina Ooze.

At 11.20 A.M. shortened and furled sails, and got up steam to sound. At 1 P.M. sounded in 2400 fathoms. At 2.30 P.M. took serial temperatures at intervals of 100 fathoms down to 1400 fathoms, and obtained sample of bottom water for analysis. At 4 P.M. completed temperatures, and at 4.10 P.M. made all plain sail. The water still retained its green colour.

Distance at noon from St. Vincent, Cape Verdes, 268 miles. Made good 95 miles. Amount of current 4 miles, direction S. 63° W.

## STATION 91.

**Station 91** (Sounding 155), Madeira to Cape Verde Islands (see Chart 6 and Diagram 7).

July 25, 1873; lat. 19° 4' N., long. 24° 6' W.

Temperature of air at noon, 75°·8; mean for the day, 74°·1.

Temperature of water :—

Surface, . . . . .	74·0	600 fathoms, . . . . .	41·9
100 fathoms, . . . . .	60·0	700 „ . . . . .	40·7
200 „ . . . . .	54·0	800 „ . . . . .	39·8
300 „ . . . . .	49·5	900 „ . . . . .	39·1
400 „ . . . . .	46·2	1000 „ . . . . .	38·6
500 „ . . . . .	43·5	Bottom, . . . . .	36·5

Density at 60 F. :—

Surface, . . . . .	1·02710	300 fathoms, . . . . .	1·02623
100 fathoms, . . . . .	1·02637	400 „ . . . . .	1·02606
200 „ . . . . .	1·02649	Bottom, . . . . .	1·02696

Depth, 2075 fathoms; deposit, Globigerina Ooze, containing 60·95 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 1.15 P.M. shortened and furled sails, and got up steam to sound. At 2 P.M. sounded in 2075 fathoms, and obtained serial temperatures at intervals of 100 fathoms down to 1000 fathoms. Sent down water-bottle and procured samples of water from 100, 200, 300, and 400 fathoms, and bottom. The water, which for the last two days