

Station 80 (Sounding 144), Azores to Madeira (see Chart 6 and Diagram 3).

STATION 80.

July 12, 1873; lat. $35^{\circ} 3' N.$, long. $21^{\circ} 25' W.$ Temperature of air at noon, $73^{\circ} \cdot 8$; mean for the day, $70^{\circ} \cdot 7$.

Temperature of water:—

Surface,	$71^{\circ} \cdot 0$	500 fathoms,	$49^{\circ} \cdot 5$
25 fathoms,	$63^{\circ} \cdot 2$	600 "	$47^{\circ} \cdot 9$
50 "	$59^{\circ} \cdot 7$	700 "	$45^{\circ} \cdot 5$
75 "	$57^{\circ} \cdot 8$	800 "	$43^{\circ} \cdot 1$
100 "	$56^{\circ} \cdot 4$	900 "	$40^{\circ} \cdot 5$
200 "	$53^{\circ} \cdot 6$	1000 "	$39^{\circ} \cdot 0$
300 "	$52^{\circ} \cdot 0$	Bottom,	$36^{\circ} \cdot 6$
400 "	$50^{\circ} \cdot 9$		

Density at $60^{\circ} F.$ at surface, $1\cdot02706$; 600 fathoms, $1\cdot02667$; bottom, $1\cdot02601$.

Depth, 2660 fathoms; deposit, Globigerina Ooze, containing 66·43 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 2660 fathoms. At 3 P.M. obtained serial temperatures down to 1000 fathoms, and water from 600 fathoms. At 4.45 P.M. completed observations, and at 5 P.M. made all plain sail.

Distance at noon from Pt. Pargo, Madeira, 256 miles. Made good 120 miles. Amount of current 14 miles, direction S. $27^{\circ} W.$

Station 81 (Sounding 145), Azores to Madeira (see Chart 6 and Diagram 3).

STATION 81.

July 13, 1873; lat. $34^{\circ} 11' N.$, long. $19^{\circ} 52' W.$ Temperature of air at noon, $73^{\circ} \cdot 5$; mean for the day, $71^{\circ} \cdot 5$.Temperature of water at surface, $71^{\circ} \cdot 0$; bottom, $37^{\circ} \cdot 0$.Density at $60^{\circ} F.$ at surface, $1\cdot02710$.

Depth, 2675 fathoms; deposit, Globigerina Ooze, containing 62·38 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 3.45 P.M. shortened and furled sails, and got up steam to sound. At 5 P.M. sounded in 2675 fathoms. At 6.20 P.M. completed heaving in line, and at 7.5 P.M. made all plain sail.

Distance at noon from Pt. Pargo, Madeira, 171 miles. Made good 85 miles. Amount of current 13 miles, direction S. $45^{\circ} W.$