

**Station 119** (Sounding 198), Fernando Noronha to Pernambuco (see Charts 12 and 15, and Diagram 4). STATION 119.

September 8, 1873; lat.  $7^{\circ} 39' S.$ , long.  $34^{\circ} 12' W.$

Temperature of water:—

Surface, . . . . .	77.5	400 fathoms, . . . . .	39.5
100 fathoms, . . . . .	62.2	500 „ . . . . .	39.0
200 „ . . . . .	47.2	Bottom, . . . . .	37.2
300 „ . . . . .	41.0		

Density at  $60^{\circ} F.$  at surface, 1.02745.

Depth, 1650 fathoms; deposit, Globigerina Ooze, containing 48.61 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 10 A.M. shortened sail, stopped and sounded in 1650 fathoms. At 11.45 A.M. completed sounding. Obtained a series of temperatures at intervals of 100 fathoms down to 500 fathoms. At 4 P.M. observed land on starboard beam. At 5.45 P.M. shortened and furled square sails, got up steam, and at 6 P.M. sounded in 22 fathoms. At 6.30 P.M. proceeded under steam. Observed Pernambuco and Olinda lights on starboard beam. At 9 P.M. altered course and sounded in 22 fathoms. At 10 P.M. sounded in 22 fathoms, and at 10.30 P.M. lost sight of lights. At 11 P.M. sounded in 26 fathoms, and at midnight in 40 fathoms, no bottom. *Sargassum* floated by the ship in considerable quantities, but not in patches.

Distance at noon from Pernambuco, 47 miles. Made good 65 miles. Amount of current 20 miles, direction N.  $37^{\circ} W.$

**Stations 120 and 121** (Soundings 199 and 200), between Pernambuco and Bahia (see Charts 12 and 15). STATIONS 120 AND 121.

September 9, 1873; lat.  $8^{\circ} 37' S.$ , long  $34^{\circ} 28' W.$

Temperature of air at noon,  $79^{\circ} 3$ ; mean for the day,  $77^{\circ} 1.$

Temperature of water at surface,  $78^{\circ} 0.$

Density at  $60^{\circ} F.$  at surface, 1.02740.

Depth, 675 fathoms; deposit, Red Mud, containing 38.93 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 4.40 A.M. stopped and sounded in 675 fathoms (Station 120). At 5.20 A.M. proceeded S.S.W. At 6 A.M. stopped, put dredge over, and lowered cutter to try current, which was found to be N.N.W.  $\frac{1}{2}$  mile per hour. At 10 A.M. hove up dredge with some specimens, and put over trawl. At 1.30 P.M. hove up trawl which contained various