sheets of light caused by *Noctiluca* [= *Pyrocystis*] or dead fish matter on the surface. When held in the hand, the specimens showed well the breaking out of light all over the body, from irritation, or rather considerable shock, as a blow from the finger, at one end; the light shows first at the place struck." STATION 96.

Station 97 (Sounding 168), St. Vincent to St. Paul's Rocks (see Chart 12 and Diagram 7). STATION 97.

August 13, 1873; lat. 10° 25′ N., long. 20° 30′ W.
Temperature of air at noon, 81°·3; mean for the day, 78°·2.
Temperature of water :—

Surface,	78·0	700 fathoms,	40·0
25 fathoms,	69·0	800 ,,	39·2
50 ,,	59·4	900 ,,	38·4
75 ,,	55·0	1000 ,,	38·0
100 ,,	53·2	1100 ,,	37·6
200 ,,	48·7	1200 ,,	37·2
300 ,,	45·0	1300 ,,	36·8
400 ,,	42·2	1400 ,,	36·7
500 ,,	40·5	1500 ,,	36·7
600 ,,	40·2	Bottom,	36·6

Density at 60° F. :—

Surface,	1·02610	300 fathoms,	1·02616
50 fathoms,	1·02633	Bottom,	1·02604
100 ,,	1·02625		

Depth, 2575 fathoms; deposit, Globigerina Ooze, containing 30·15 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 9 A.M. shortened sails and stopped to sound. Sounded in 2575 fathoms. Took serial temperatures down to 1500 fathoms. Obtained sample of water from bottom for analysis. At 12.15 P.M. completed temperatures, and at 1.55 P.M. made all plain sail. In the evening the sea was remarkably phosphorescent.

Distance at noon from St. Paul's Rocks, 780 miles. Made good 102 miles. Amount of current 26 miles, direction S. 67° E.

Surface Organisms.—The following are recorded in the note-books :—*Pyrocystis*, *Squillerichthus*, Zoëæ, *Lucifer*, *Phylliroë atlantica* (brown with golden spots), *Pyrosoma*, and *Gonostoma* (?). ORGANISMS FROM SURFACE-NETS.