

## STATION 97.

Moseley writes: "At night the sea showed wonderful phosphorescence, being lighted up for miles around. Wherever the water broke a little on the surface, the white foam was brilliantly lighted up, and the water close to the ship, as viewed from above on the bridge, was full of small luminous points. As the water broke at the ship's side the lower studding sails were quite lighted up by the glow. The whole sea had a peculiar weird look. The water was found to be full of small Crustacea, larval crabs in the megalopus-stage being present in by far the greatest abundance, and the light must evidently be considered as due to them in part, but mostly to *Pyrocystis* [at first thought to be fish spawn, afterwards looked upon as an encysted form of *Noctiluca*], the specimens of which were of various sizes and showed phosphorescence when first caught and placed in a globe of water. The spectroscope used on the light under the stern allowed a very small portion of red, all the yellow, and a certain amount of green, to be seen, but the light was not strong enough to allow of exact determination."

## STATION 98.

**Station 98** (Sounding 169), St. Vincent to St. Paul's Rocks (see Chart 12 and Diagram 7).

August 14, 1873; lat. 9° 21' N., long. 18° 28' W.

Temperature of air at noon, 79°·8; mean for the day, 77°·7.

Temperature of water:—

Surface, . . . . .	78·2	150 fathoms, . . . . .	52·0
20 fathoms, . . . . .	66·5	200 " . . . . .	49·7
50 " . . . . .	59·3	300 " . . . . .	45·2
75 " . . . . .	55·5	400 " . . . . .	42·0
100 " . . . . .	54·2	500 " . . . . .	41·2
125 " . . . . .	53·1	Bottom, . . . . .	36·7

Density at 60° F. at surface, 1·02605; bottom, 1·02605.

Depth, 1750 fathoms; deposit, Globigerina Ooze, containing 62·22 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 10 A.M. shortened and furled sails, and got up steam to sound. Sounded in 1750 fathoms, having approached the west coast of Africa, in order to make a haul with the dredge in shallower water. Took serial temperatures down to 500 fathoms. At 12.15 P.M. put over dredge, and veered 2500 fathoms. At 4 P.M. commenced heaving in the dredge, which came up at 5.15 P.M. containing a few specimens. At 5.40 P.M. made sail. In the evening there was a similar display of phosphorescence as on previous days.

Distance at noon in direct line from St. Paul's Rocks, 825 miles. Made good 136 miles. Amount of current 13 miles, direction S. 32° E.