

long. 12° 52' W.; 862 fathoms; bottom temperature, 39°·7 F.; ooze with sand and shells. Two armless specimens.

Station 43. Lat. 50° 1' N., long. 12° 26' W.; 1207 fathoms; bottom temperature, 37°·7 F.; Globigerina ooze. Two young specimens, one without arms.

H.M.S. Challenger. Station 76. July 3, 1873; south of Terceira (Azores), lat. 38° 11' N., long. 27° 9' W.; 900 fathoms; Pteropod ooze; bottom temperature, 40° F. Three specimens without arms.

Rhizocrinus rawsoni has also been dredged by the surveying ships of the U. S. Coast Survey, as recorded in the following list.

SS. "Hassler," December 29–30, 1871. Off Sandy Bay, Barbados; 100 fathoms.

SS. "Blake," 1877–78. No. 32, off Havana; lat. 23° 32' N., long. 88° 5' W.; 95 to 175 fathoms.

1878–79. No. 155, off Montserrat; 88 fathoms; bottom temperature, 69° F. No. 166, off Guadeloupe; 150 fathoms; bottom temperature, 59½°. No. 177, off Dominica; 118 fathoms; bottom temperature, 65° fine sand and broken shells. No. 211, off Martinique; 357 fathoms; fine yellow sand and broken shells. No. 273, off Barbados; 103 fathoms; bottom temperature, 59½°; coral and broken shells, yellow. No. 277, off Barbados; 106 fathoms; bottom temperature, 58°; hard rocky bottom. No. 290, off Barbados; 73 fathoms; bottom temperature, 70¼°; coarse coral sand and broken shells. No. 296, off Barbados; 84 fathoms; bottom temperature, 61½°; hard bottom. No. 297, off Barbados; 123 fathoms; bottom temperature, 56½°; calcareous stones.

Telegraph steamer "Investigator," Captain E. Cole. Saba Bank; 200 fathoms. Fifteen miles N. by E. from Panama; 300 fathoms.

The French steamer "Travailleur," 1882,¹ "1900m. de profondeur sur les côtes du Maroc, par le travers du cap Blanc."

Also the "Talisman," 1883,² "Par le travers du cap Ghir et du cap Noun, à 120 milles environ de la côte," 2000 to 2300 metres.

Remarks.—The first examples of this type which were actually obtained were those dredged by the "Porcupine" in 1869, at depths of 862 and 1207 fathoms off Cape Clear (Stations 42 and 43). They were, however, considered by Sir Wyville Thomson merely as unusually large specimens of *Rhizocrinus lofotensis*; and the correctness of this identification would perhaps not have been doubted, but for the discovery in 1871 by the U. S. Coast Survey steamer "Hassler" of some fine individuals, which Mr. Pourtalès recognised as specifically distinct from *Rhizocrinus lofotensis*. Two specimens which were obtained by the Challenger in 900 fathoms among the Azores (Station 76) were at first referred to *Rhizocrinus lofotensis*; but having compared them with the *Rhizocrinus rawsoni* of the Caribbean Sea, I find that they likewise belong to that species. It is generally larger and more robust than *Rhizocrinus lofotensis*, and the calyx, instead of being regularly obconical, is extremely variable in form, as will be seen subsequently.

All the specimens that I have seen have been regularly pentamerous, while in *Rhizocrinus lofotensis* the number of radials is not unfrequently four or six (Pl. VIIIa. fig. 7), and may reach seven. Those of *Rhizocrinus rawsoni* are generally shorter

¹ *Comptes rendus*, t. xvi. p. 459.

² *Ibid.*, t. xvii. p. 1392.