

of the main skeleton, the largest being generally found at the ends of the primary fibres. (3) Short, thick, straight, very bluntly pointed styli (Pl. XXIX. fig. 6), strongly spined all over, size about 0.08 by 0.005 mm.; echinating the skeleton fibre in great numbers. (b) *Microsclera*; of one kind only, viz., minute palmate isochelæ about 0.005 mm. long.

We have called this species after Dr. von Lendenfeld, who has a much fuller acquaintance with the sponge (viz., in its native haunts) than we have, although he has as yet published no description of it.

The strong development of the horny fibre, with the coincident reduction in the spicular element of the skeleton, and the form and great abundance of the echinating spicules, are good characters by which to recognize the species.

*Locality*.—Off Port Jackson. One specimen.

*Clathria frondifera*, Bowerbank, sp.

1875. *Halichondria frondifera*, Bowerbank, Proc. Zool. Soc. Lond., April 1875, p. 288.

1880. *Amphilectus frondifer*, Vosmaer, Notes from the Leyden Museum, vol. ii. p. 115.

1884. *Clathria frondifera*, Ridley, Zool. Coll. H.M.S. "Alert," Brit. Mus., pp. 448, 612, pl. xlii. fig. j; pl. liii. fig. J.

This is a widely distributed and very common shallow-water species, and has been already described by two authors (Bowerbank and Ridley, *loc. cit.*), hence it is not necessary to enter into further details regarding it in this place.

*Locality*.—Station 188, September 10, 1874; lat. 9° 59' S., long. 139° 42' E.; west of Torres Strait; depth, 28 fathoms; bottom, green mud. One fine specimen.

*Habitat*.—Strait of Malacca; Gaspar Strait (Bowerbank); west of Torres Strait (Challenger); Thursday Island; Prince of Wales Channel, Torres Strait; Percy Island and Fitzroy Island, Queensland; Providence Reef and Island, Mascarene Group; Amirante Islands; Seychelle Islands (Ridley, "Alert").

*Clathria elegantula*, Ridley and Dendy (Pl. XXVIII. figs. 3, 3a; Pl. XXIX. figs. 14, 14a, 14b).

1886. *Clathria elegantula*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 474.

Sponge (Pl. XXVIII. fig. 3) sessile, the single specimen present consisting of several much flattened, expanded, divided lobes, based upon half of a dead bivalve shell. Height 81 mm., greatest breadth about the same. Thickness of lobes usually about 10 mm. The margins of the lobes are more or less deeply notched and slightly undulating. Colour in spirit pale, brownish-yellow. Texture soft and spongy, elastic and fibrous; internally rather cavernous. Surface very uneven, beset with numerous projecting conuli, between which is stretched the thin, semi-