

Prince Edward Island; depth, 310 fathoms; bottom, volcanic sand. Fairly abundant fragments, of a brown colour.

Station 148, January 3, 1874; lat. 46° 47' S., long. 51° 37' E.; Possession Island; depth, 210 fathoms; bottom, hard ground, gravel, shells. Two or three small, yellow pieces.

Genus *Ciocalypta*, Bowerbank (Pls. XXXIII., XL.).

1864. *Ciocalypta*, Bowerbank, Mon. Brit. Spong., vol. i. p. 179.

Megasclera stylote and sometimes oxeote, forming a more or less dense central skeleton (fibrous or reticulate) from which are given off pillars of spiculo-fibre nearly at right angles. These spread out at their distal ends and support the dermal membrane, with its reticulation of spiculo-fibre, at some distance from the central portion of the sponge, thus leaving huge subdermal spaces into which the water enters through the pores in the dermal membrane. No microsclera.

Bowerbank's original diagnosis (*loc. cit.*) runs as follows:—"Skeleton. Composed of numerous closed columns, each consisting of a central axis of compact, irregularly elongated, reticulated structure, from the surface of which radiate, at about right angles, numerous short simple, cylindrical pedicles, or stout fasciculi of closely packed spicula; the distal ends of each pedestal separating and radiating in numerous curved lines which spread over the inner surface of the dermal membrane, separating and sustaining it at all parts at a considerable distance from the central axis of the skeleton."

In this diagnosis there is not a word as to the form of the spicules. The original type of the genus is *Ciocalypta penicillus*, Bowerbank, in which the spicules are all stylote. In *Ciocalypta tyleri*,¹ Bowerbank, the spicules are all oxeote, but it seems very doubtful whether this species is referable to the genus *Ciocalypta* at all.

Bowerbank's *Ciocalypta leei*,² represented by a single, minute, dry specimen, about 13 mm. in length and only about 3 mm. in greatest diameter, must be regarded as a young specimen of *Ciocalypta penicillus*, or at the most as a mere variety, and the same remark applies to the specimen which has been called by Mr. Carter *Ciocalypta tuberculata* (*vide* p. 175). There are thus (excluding the doubtful *Ciocalypta tyleri*) three species of the genus now known, viz., *Ciocalypta penicillus*, Bowerbank, *Ciocalypta hyaloderma*, nobis, and *Ciocalypta amorphosa*, nobis; for *Ciocalypta calva*,³ Ridley, is wanting in one of the chief characters of the genus, viz., the characteristic arrangement of the dermal skeleton; and it also possesses a horny fibre.

The genus differs from *Axinella* most markedly in the possession of a distinct, spiculo-fibrous dermal reticulation, and further in the very large size of the subdermal cavities.

¹ *Proc. Zool. Soc. Lond.*, 1873, p. 21, pl. iv. figs. 9-12.

² *Mon. Brit. Spong.*, vol. iii. p. 296, pl. lxxxvi. figs. 1-4.

³ *Zool. Coll. H.M.S. "Alert," Proc. Zool. Soc. Lond.*, 1881, p. 115, pl. x. fig. 7.