

bihamate or C-shaped flesh-spicule, sometimes without any flesh-spicule at all. Forms massive, lobo-branched; branches compressed, dichotomous, separate or anastomotic, flabellate proliferous." On page 195 of the same volume the author gives "*Halichondria plumosa*, Johnst. (= *Hymeniacidon plumosa*, Bowerbank)" as an example of this group.

In vol. xviii of the same periodical (1876, p. 236) we first meet with the generic name "*Plumohalichondria*" in the description of the species named by Mr. Carter "*Plumohalichondria microcionides*"; but we find no generic diagnosis. Under these circumstances it has appeared to us advisable to retain the genus, which supplies a great want in the classification of the Monaxonida, and to give a generic diagnosis as above. Thus constituted, the genus appears to be fairly compact and well characterised; it includes a portion of Bowerbank's very heterogeneous genus "*Microciona*"<sup>1</sup> and certain other forms.

As examples of sponges which belong to the genus "*Plumohalichondria*," we may give *Plumohalichondria microcionides*, Carter, and *Plumohalichondria mammillata*, Carter.<sup>2</sup>

*Plumohalichondria mammillata*, Carter (Pl. XXX. figs. 4, 4a; Pl. XLVII. figs. 4, 4a).

1885. *Plumohalichondria mammillata*, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. xvi. p. 355.

Sponge (Pl. XXX. fig. 4) massive, with erect, compressed and rounded lobes. Height 94 mm., breadth 137 mm. Colour in spirit pale, yellowish-grey. Texture compact but soft and spongy. Surface glabrous but rather uneven and lumpy. Dermal membrane distinct, much strengthened by the presence of a very well-developed dermal reticulation of spicules. Oscula scattered; round openings, about 2 mm. in diameter, with their margins sometimes surrounded by a slight, projecting, membranous collar; sometimes flush with the general surface of the sponge, but usually sunk a little below the surface. Pores very numerous, thickly scattered, rounded openings; about 0.07 mm. in diameter.

*Skeleton*.—(a) *Dermal*; a very regular and definite reticulation (Pl. XLVII. fig. 4) of small, spined, stylote spicules; the meshes of the network are roundedly polygonal and only about 0.1 mm. in diameter, and each side is of about one spicule's length; the "fibre" (if we may be allowed to use a term which does not seem very applicable to the case in point) is composed of several spicules lying parallel side by side. (b) *Main*; composed of plumose columns of spiculo-fibre (Pl. XLVII. fig. 4a, p.c.) running towards

<sup>1</sup> Mon. Brit. Spong., vol. ii. p. 124.

<sup>2</sup> The genus *Plumohalichondria*, Carter, must not be confounded with the genus "*Aulospongos*," Norman, which was founded (Ann. and Mag. Nat. Hist., ser. 5, vol. i. p. 267, footnote) for the reception of Bowerbank's "*Haliphysema tubulatum*," a remarkable sponge from Ceylon, which has some resemblance to *Plumohalichondria* but has no chelate nor oxeote spicules and is probably a very different thing.