

being strengthened in this opinion by the fact that both came from the Cape of Good Hope.

The spiculation given by Vosmaer is as follows:—"Spic. tr. ac. f. (tr^o. ac. f.). tr. ac. sp. (strongly spined). ac². (rare). tr². Λ (sp.) \smile . anc²." He says also—"The sponge, which in the dried state is pure white, is rather elastic on account of the keratode-fibre. It forms more or less flat, branching lobes. Very characteristic for this species are the bows, the ends of which are spined . . . The anchors are small but rather stout, few in number. The spines of the tr. ac. sp. are very strong and bend towards the blunt end of the spicule. In the formula, I have designated with a \smile the small spicules which are often almost bent into a circle. I could not distinctly see whether the ends are blunt or pointed." We are pretty safe in eliminating the "ac². (rare)" either as foreign or abnormal, while the spicules designated with a \smile are almost certainly Diatom rings, which often occur abundantly as foreign bodies in sponge preparations; the presence of a tr². is perhaps a more serious difficulty; the large, smooth styli of the two sponges agree in being fusiform. It is the external appearance and the peculiar and very characteristic form of the spined styli and toxa in both sponges which induce us to put them in the same species, at any rate as a temporary arrangement. It is very unfortunate that Vosmaer has given no spicular measurements and no account of the arrangement of the skeleton; when these are known it will be much easier to arrive at a definite conclusion. The presence of the distinct tufts of slender stylote spicules at the ends of the primary fibres, forming a dermal crust, obliges us to place this species in the genus *Rhaphidophlus* rather than in the genus *Clathria*, though, as we have already had occasion to point out, the distinction is one of degree rather than of kind.

Locality.—Simon's Bay, Cape of Good Hope; depth, 10 to 20 fathoms. One specimen.

Genus *Plumohalichondria*, Carter (Pls. XXX., XLVII.).

1876. *Plumohalichondria*, Carter, Ann. and Mag. Nat. Hist., ser. 4, vol. xviii. p. 236.

The skeleton is arranged in plume-like columns (Pl. XLVII. fig. 4a). Megasclera oxea and styli; no special kind of dermal spicule. Microsclera isochelæ.

In his paper on the Classification of the Spongida¹ Mr. Carter finds a group of the "Ectyonida," under the name "Plumohalichondrina," in the following passage:—"Group 2. *Plumohalichondrina*. Here there are two forms of axial spicules, viz.—1, simple acuate, smooth or spined; 2, more or less pointed or inflated at the ends, which are often microspined scantily or sparsely. Echinating spicule club-shaped and spined. Flesh-spicule for the most part that termed by Dr. Bowerbank 'angulate equianchorate' (that is, with bow-shaped shaft and alæform arms), sometimes accompanied by a

¹ Ann. and Mag. Nat. Hist., ser. 4, vol. xv. p. 144.