

*Iophon abnormalis*, Ridley and Dendy (Pl. XVII. figs. 5, 7).

1886. *Iophon abnormalis*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 350.

Sponge represented in the collection by two small, cylindrical fragments, the larger of which is branched, and measures 19 mm. in length by 4 mm. in average diameter. *Colour* in spirit black. *Texture* brittle and crumbling. *Dermal membrane* distinct, transparent, perforated by very distinct, round or oval pores.

*Skeleton*.—(a) *Dermal*; a network of tylota, loosely placed. (b) *Main*; a loose reticulation of stylote spicules.

*Spicules*.—(a) *Megasclera*; (1) styli (Pl. XVII. fig. 5, c), generally spined at the base and also slightly at the apex; size about 0.35 by 0.0126 mm. (2) Tylota (Pl. XVII. fig. 5, a, b), each with a nearly straight or slightly curved shaft, bearing a distinct spined knob at each end; size about 0.28 by 0.008 mm. (b) *Microsclera*; only the anisochelæ appear to be present, but these are of two very distinct sizes. (1) Large palmate anisochelæ of the usual *Iophon* type, 0.0378 mm. long, arranged mainly in very fine rosettes (Pl. XVII. fig. 7). (2) Smaller anisochelæ of about half the size. It is of course possible that the smaller anisochelæ are merely young forms of the larger ones, but it is noteworthy that it is the larger ones, and not the smaller, which are arranged in rosettes.

It is very abnormal to find an *Iophon* without bipocillate spicules (hence the specific name), and in only one other specimen of *Iophon* have we seen the anisochelate spicules arranged in rosettes, viz., in a small specimen from Station 142, which we have referred (though the identification must be considered doubtful) to *Iophon chelifera*, considering it as a young form; in this also the bipocillate spicules were very rare.

*Locality*.—Off Marion Island, 50 to 75 fathoms. Two fragments.

*Iophon* (?) *omnivorus*, n. sp. (Pl. XVII. fig. 10).

Sponge massive, amorphous. Size of specimen 21 mm. long by 8 mm. broad. *Colour* in spirit light brown. *Texture* soft, brittle, very fragile (owing to its sandy skeleton). *Surface* smooth. *Dermal membrane* very distinct, transparent, perforated by numerous round or oval pores, about 0.035 mm. in diameter, aggregated in groups over subdermal cavities (Pl. XVII. fig. 10). *Oscula* doubtful (? on small, prominent papillæ).

*Skeleton*.—Composed chiefly of foreign bodies arranged so as to form a dermal layer (Pl. XVII. fig. 10) and a deeper skeleton, in the same way as the skeleton of other species of the genus *Iophon*. The nature of these foreign bodies is very various, sand grains, Foraminifera, Polyzoa, calcareous sponge spicules, foreign siliceous spicules, &c., occur in great profusion, and appear to take the place of the proper megasclera. We have, however, in the dermal membrane a good many tylota, some of which may be proper to the sponge; the heads and shafts of these are quite smooth and they vary much in size, probably many of them are foreign.