

spicules, mainly arranged perpendicularly to the walls of the smaller canals. The latter spicules are mostly slender, slightly curved oxea; sometimes they become blunted; average maximum size, 0.23 by 0.009 mm.

Spicules.—Oxeote to strongylote, size variable (*vide supra*).

We were at first inclined to refer this sponge to *Rhizochalina singaporensis*, Carter, but closer examination shows certain well-marked differences, although in some respects the two forms approach one another. Thus in *Rhizochalina pedunculata*, the dermal membrane contains a number of cylindrical spicules, some of which attain great size (*vide* measurements), but which are, however, nearly or quite straight, while the deeper spicules sometimes show a strong tendency to become blunted. In Carter's species there are a great number of cylindrical spicules, but they are mostly very short, stout, and strongly bent.

The presence of a distinct peduncle (whence the specific name) may possibly be regarded as characteristic, although, as there is only one specimen, it is impossible to say whether it is a constant feature.

It is perhaps noteworthy that a great number of the oxeote spicules of this species show a tendency to become slightly rough and jagged at the points, suggesting the idea that they have begun to undergo absorption (that is to say, as a *vital* process, not the absorption occurring in dead spicules, which these are not).

Locality.—Api, New Hebrides, 60 to 70 fathoms.

Genus *Oceanapia*, Norman (Pl. IX.).

1869. *Oceanapia*, Norman, Brit. Assoc. Rep. for 1868, p. 334.

Microsclera (*viz.*, *sigmata*) present.

Oceanapia robusta, Bowerbank, sp. (Pl. IX. fig. 3).

1866. *Isodictya robusta*, Bowerbank, Mon. Brit. Spong., vol. ii. p. 304.

1866. *Desmacidon jeffreysii*, Bowerbank, Mon. Brit. Spong., vol. ii. p. 347.

1867. *Gallius robustus*, Gray, Proc. Zool. Soc. Lond., p. 538.

1867. ? *Biemna jeffreysii*, Gray, Proc. Zool. Soc. Lond., p. 539.

1869. *Oceanapia jeffreysii*, Norman, Last Rep. Dredging Shetland Isles, Brit. Assoc. Rep. for 1868, p. 334.

Sponge more or less globular, solid, with a number of tubular processes or *fistulæ* coming off abruptly from all parts of the surface. *Colour* in spirit yellowish to nearly white. *Size* (of the body) very variable. *Fistulæ* 75 to 100 mm. long by 6 mm. wide, closed at the ends, where they exhibit an irregular branching into four or five or more short, finger-like processes, resembling the tubes of *Rhizochalina oleracea*, figured by Schmidt (Spong. Atlant. Gebiet., pl. iv. fig. 1). *Texture* in well-preserved specimens firm and compact throughout. *Surface* smooth.