which it inhabits; (2) that the oscula are confined to one surface and the pores to the other, exactly as in so many other sponges which have a lamellar form.

The most closely allied species already known appears to be *Cliona warreni*, Carter,<sup>1</sup> but this is obviously distinct, as will be seen by comparison of the description (*loc. cit.*) with ours.

· Locality.—Station 188, September 10, 1874 ; lat. 9° 59' S., long. 139° 42' E.; south of New Guinea ; depth, 28 fathoms ; bottom, green mud.

## Family II. SPIRASTRELLIDE, Ridley and Dendy.

1886. Spirastrellidæ, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 490.

Microsclera present; typically forming a more or less continuous dermal crust.

Genus Spirastrella, Schmidt (Pls. XLI., XLV.).

1868. Spirastrella, Schmidt, Die Spongien d. Küste v. Algier., p. 17.

Sponge usually massive. Megasclera all monactinal, stylote or tylostylote. Microsclera spined spirulæ, occurring mainly as a dermal crust.

Schmidt founded the genus for his species Spirastrella cunctatrix, and gives only the following very brief generic diagnosis. "In der Rindenschicht eine eigenthümliche Art von strahligen Kieselkörperchen, deren Strahlen spiralig gestellt sind." A good many species have been discovered since and the Challenger adds three new ones.

## Spirastrella decumbens, Ridley, var. (Pl. XLV. figs. 12-12g).

1884. Spirastrella decumbens, Ridley, Zool. Coll. H.M.S. "Alert," Brit. Mus., p. 470, pl. xliii. fig. c.

Represented in the collection by a single fine specimen, consisting of a number of stout, irregular, anastomosing trabeculæ, forming together a sessile, cavernous mass, 70 mm. long. by 44 mm. broad. The original type was encrusting and thin, and of small size, and must, therefore, be regarded as only a young specimen. There are also slight differences in the proportions of the spicules between our specimen and the type, the tylostyli (Pl. XLV. fig. 12) and spined spirulæ (Pl. XLV. figs. 12a-12g) being both of rather more robust growth in the Challenger specimen, the tylostyli measuring 0.4 by 0.015 mm., the spirulæ 0.028 by 0.007 mm. (exclusive of the spines); but there are no differences sufficient to justify us in separating the two specifically.

1 Ann. and Mag. Nat. Hist., ser. 5, vol. vii. p. 370.