

regard to its spiculation we have placed it amongst the Axinellidæ, although the arrangement of the skeleton is opposed to this view. Such a skeleton is, however, quite capable of giving rise by further development to a typical Axinellid skeleton, and it is possible, judging from its extreme simplicity, that *Hymeniacidon* represents the starting point from which the more typical Axinellidæ have branched off. Were it not for the form of the spicules, which are monactinal instead of diactinal, we should include the genus amongst the Renierinæ. It differs from most Axinellidæ in having the spicules of one form only and all of about the same size.

The genus is characteristically an inhabitant of shallow water.

Hymeniacidon caruncula, Bowerbank (Pl. XXXIII. fig. 3).

1864. *Hymeniacidon caruncula*, Bowerbank, Mon. Brit. Spong., vol. i. p. 191, pl. xxxv. fig. 372; vol. ii. p. 166; vol. iii. pl. xxxii. figs. 1-4; vol. iv. p. 81.

1867. *Reniera caruncula*, Gray, Proc. Zool. Soc. Lond., p. 518.

1870. *Amorphina caruncula*, Schmidt, Spong. Atlant. Gebiet., p. 76.

There are in the collection two specimens of this common British sponge from the Cape Verde Islands; both are rather small and with uneven (conulose) surface (Pl. XXXIII. fig. 3); the proportion of horny matter in the skeleton is very considerable. As the species is already sufficiently well known we do not propose to give any further description of it in this place.

Locality.—St. Vincent, Cape Verde Islands; shallow water. Two specimens.

Habitat.—British Isles¹ (Bowerbank); Cape Verde Islands (Challenger); Port Jackson (Ridley, "Alert").

Hymeniacidon sp.

We have to record from Station 313 a single, soft, massive specimen, in bad condition, which seems to be referable to this genus but is not sufficiently well characterised to merit a specific name. The surface, where preserved, is smooth, and the skeleton consists of very sparsely disposed columns of smooth stylote spicules united together by a considerable proportion of horny matter; the same spicules also occur loosely scattered.

Spicules.—Of one form only, viz., smooth, gradually sharp pointed styli, measuring about 0.43 to 0.5 by 0.0126 mm.

Locality.—Station 313, January 20, 1876; lat. 52° 20' S., long. 67° 39' W.; south-east of Patagonia; depth, 55 fathoms; bottom, sand; bottom temperature, 47°·8. One specimen.

¹ "One of the regular tide-mark sponges of our southern and western coasts," Norman (Mon. Brit. Spong., vol. iv. p. 81).