

membrane fairly distinct, thin and transparent. *Oscula* (?). *Pores* scattered or in irregular groups.

Skeleton.—(a) *Dermal*; composed of thickly strewn, spined styli and fusiform oxea, the former sometimes predominating and the latter sometimes collected into distinct bands of fibre. (b) *Main*; composed of stout ropes of spined stylote spicules, abundantly echinated by numerous other spined styli apparently of the same kind. These fibres are not very regularly disposed and appear to originate from any foreign body which may form a convenient base, from which they radiate towards the surface, often branching in their course. In addition to these fibres, abundant, loosely scattered, spined styli occur.

Spicules.—(a) *Megasclera*; (1) small, usually curved, sharply pointed, entirely and strongly spined styli, varying in size from 0·1 by 0·008 to 0·16 by 0·013 mm. We have not been able to satisfy ourselves that there are really two distinct kinds of spined styli, although great variation in size occurs. (2) Fusiform oxea; slender, and tapering gradually to a very sharp point at each end; size about 0·175 by 0·0048 mm.; these spicules are probably homologous with the dermal spicules of typical *Myxillæ*. (b) *Microsclera*; of one kind only, viz., tridentate isochelæ, with very strongly curved shaft, length about 0·015 to 0·02 mm.

The Challenger variety differs from the British form chiefly in the possession of a more tapering oxeote spicule and a stouter isochela.

This species is very aberrant in its skeleton arrangement, resembling *Myxilla frondosa*, nobis, in this respect, and forming a connecting link between *Myxilla* and *Plumohalichondria*. It is only doubtfully that we include it in the former genus.

Locality.—Off Bahia, shallow water. One specimen and a fragment.

Genus *Clathria*, Schmidt (Pls. XXVIII., XXIX., XLVII.).

1862. *Clathria*, Schmidt, Spong. Adriat. Meer., p. 57.

1870. *Tenacia*, Schmidt, Spong. Atlant. Gebiet. p. 56.

Of various form, generally erect; possessing usually a well-developed horny fibre cored by stylote spicules and echinated by smaller spined styli. Typical microsclera small palmate isochelæ; no special dermal crust of spicules as in *Rhaphidophlus*.

Schmidt's original diagnosis (*loc. cit.*) runs as follows:—"Halichondriæ maxime ramosæ, ramis in modum clathrorum sæpissime inter se connexis. Substantia aciculas involvens subcornea, elastica dum aqua est imbuta, fragilis et fere friabilis, dum spongia est exsiccata. Rete microscopicum spiculorum, ista substantia conjunctorum maxime irregulare."

This, though very true so far as it goes, is obviously insufficient, and Vosmaer¹ in

¹ Notes from the Leyden Museum, vol. ii. p. 149.