

In the cavities of the pedicles of the more mature lobules a tissue containing a few transparent rounded cells was seen to be present. This may represent a spadix. No rounded spadix such as that occurring in *Allopora* is present in the interior of the lobules. The histological details were preserved with very great completeness in the present form when hardened in spirit and decalcified, so much so that Plate X. fig. 10, might almost have been executed with a camera lucida from a fine section of a gonophore stained with carmine. It is, however, impossible to determine, without close study of fresh material, so difficult a problem as the determination whether the male elements are derived from the ectoderm or endoderm. The apparent development from endoderm cells, in the present instance, may be entirely misleading; the presence of hard skeletons in the Stylasteridæ unfits them for research on such points.

Cryptohelia, M.-Edw. and H.

A deep-sea coral, dredged in many parts of the world by the Challenger, is referable to the above genus, and although the specimens vary a great deal, they seem not distinct from Milne-Edwards' and Haime's species, *Cryptohelia pudica*. The specimens, the anatomy of which is here described, were dredged off the mouth of the La Plata.

Cœnosteum of *Cryptohelia pudica*.

The cœnosteum is well figured by Milne-Edwards and Haime,¹ and described² by these authors as having the form of a small espalier tree, with all the branches comprised in the same vertical plane, and all the calicles turned to the same side (Pl. XII. fig. 7). As far as the form and arrangement of the branches is concerned, the cœnosteum of *Cryptohelia* differs in no important particular from that of *Astylus subviridis* which has just been described. The striæ on the surface of the branches are in the present form finer and run for shorter courses than in *Astylus subviridis*, and well-marked prominent ridges are not formed between them.

Regular cyclo-systems are present in *Cryptohelia*, and are all turned towards one face of the flabellum. Their mouths are not elevated above and isolated from the surfaces of the branches as in *Astylus*, but the branches swell vertically as well as horizontally where cyclo-systems are present, and the cœnenchym of the branch thus rises in a gradual curve to the level of the margin of each cyclo-system (Pl. XXXV. fig. 7).

¹ Milne-Edwards et J. Haime, Ann. des Sci. Nat., 3 ser., t. xiii., pl. iii. fig. 1, 1860.

² Hist. Nat. des Coralliaires, Paris, 1857, t. ii. p. 127.