

these smaller pores often have the sides of their mouths slightly raised above the surface which they perforate.

The main surface of the stems and branches of the cœnosteum is grooved by short canals, which are just open to the surface and run short courses, being never much branched and usually crooked (Pl. II. fig. 4). These channels correspond with those described as occurring in *Errina*, and are occupied in the recent condition of the coral by the most superficial reticulations of the cœnosarcial meshwork.

Lying in deep depressions between the bases of the spinous projections are the gastropores, which are deep pits with circular mouths, at the margins of which dactylopores of the smaller kind frequently open. The gastropores are provided with styles, which are very deeply situate and have brush-like tips, and are much like those of *Sporadopora*, but not so elaborately branched. The substance of the cœnosteum of *Spinipora echinata* is hard and compact in structure, and white.

Soft structures of *Spinipora echinata* (Pl. V.).

Cœnosarc.—The cœnosarc consists of the usual reticulation of canals (Pl. V.), offsets of which pass into and ramify within the dactylopore spines as at B, Plate V. There is a well-developed continuous surface layer of ectoderm which invests the spinous processes and entire surface of the coral, and feebly maintains, in decalcified specimens, the form of the cœnosteum. The layer is, as in other genera of the family, continued into the pores of the cœnosteum to form the sacs of the zooids. The nematocysts are closely similar to those of *Errina*.

Dactylozooids.—These are of two forms, larger and smaller. The larger dactylozooids are attached by elongate bases along nearly the whole lengths of the bottom of the groove-like dactylopore cavities. The ends of these elongate bases nearest the coral stems assume a cylindrical form, and are continued into the pore-like prolongations of the grooves to become continuous with canals of the cœnosarcial meshwork. In Plate V. two dactylopore spines, B B, are shown as cut open in order to exhibit this arrangement. The pore-like continuations of the dactylopore grooves are lined by continuations of the surface layer representing the zooid sacs. The free parts of the dactylozooids spring from the elongate attached parts not far from the tips of the spines. In the contracted condition they appear as short, stout, bluntly-conical bodies, which are slightly curved and bent inwards towards the coral stem, and at the same time directed towards its upper extremity. Since the larger dactylozooids were all found in the described condition in spirit specimens, it would appear that they are incapable of being retracted to a greater extent. The pores are certainly not deep enough to allow of their entire retraction within them, and the mode of attachment of the bases would