

not allow of such retraction. No doubt the zooids, when active and expanded, are long and attenuated, and the long spines on which they are borne are very possibly to be regarded as contrivances for giving them a long reach. A tendency to attachment by the side of the base, within the zooid pore, has been already noticed as occurring in the dactylozooids of *Sporadopora dichotoma*.¹ It is here the normal condition, and much more fully completed. A closely similar method of attachment and retraction of the dactylozooids occurs in all the genera of Stylasteridæ which form regular cyclo-systems of zooids.

The smaller dactylozooids are simple bluntly-conical bodies of less than one-third the size of the larger form. They occupy the smaller dactylopores, and are retracted directly within these when at rest (Pl. V. D D).

Gastrozooids.—These are cylindrical in form, with a dome-like hypostome and six apparently simple conical tentacles set on in a single whorl. The zooids are, as usual, retracted within sacs lining their pores. The tentacles in the retracted condition of the zooids are doubled together over their hypostomes, with their tips bent inwards and downwards towards them. The zooid bases terminate in four large canals of the cœnosarcal meshwork, and are firmly united to the styles of the pores.

Gonophores.—No generative elements were discovered in the single specimen of this coral obtained for examination.

Stylaster, Gray.

The genus *Stylaster*, which gives its name to the family Stylasteridæ, was established by Gray, in 1831, for the reception of *Stylaster roseus*, the old *Madrepora rosea* of Pallas, and *Oculina rosea* of Lamarck, and others. The species, the structure of which is here to be described, was obtained off the mouth of the La Plata. It appears to have been hitherto undescribed.

Cœnosteum of *Stylaster densicaulis*, n. sp.

The cœnosteum (Pl. I. figs. 5, a) is flabellate in form, with a very stout main stem and branches, which make with one another angles of from 25° to 30°. The main stem and larger branches are oval in section, the longer diameter of the ellipse being at right angles to the plane of the flabellum. The stem and branches give off numerous comparatively small and short ramifying branchlets from their lateral margins. Occasionally as an exception a branchlet is given off from one of the faces of the flabellum at right angles to it, thus distorting its fan-like form.

¹ See page 44.