

are of so little importance in the constitution of the body of the Actinia that their appearance has not even been followed by an increase in the number of the tentacles.

Family, POLYOPIDÆ, Hertwig.

Paractiniæ, without pedal disk, posterior end of the body round and saccular, with aboral opening (?); tentacles transformed into stomidia by retrograde metamorphosis.

In earlier systems the Polyopidæ would have been placed among the Ilyanthidæ, to which family, apart from the absence of tentacles, they bear a strong external resemblance. It is quite possible that at some future time forms may be found which shall furnish a closer link between our Polyopidæ and the Edwardsiæ formerly described as Ilyanthidæ; more especially as the Edwardsiæ occupy in some measure a central position in the midst of the Actiniæ, and send out lines of affinity in various directions. At present, however, it is more convenient to separate the Edwardsiæ and the Polyopidæ as the paired grouping of the septa, which is so pronounced in the latter, is still wanting in the former.

*Polyopis*, n. gen.

Polyopidæ with smooth wall, the surface having longitudinal furrows indicating the position of the septa; circular muscle wanting.

*Polyopis striata* (Pl. II. fig. 11; Pl. XI. figs. 1-12).

Wall with thirty-six longitudinal lines; oral disk with thirty-six strongly developed radial swellings and thirty-six marginal stomidia arranged in a circle.

*Habitat*.—Station 299. December 14, 1875. Lat. 33° 31' S., long. 74° 43' W. Depth, 2160 fathoms. One specimen.

*Dimensions*.—Height, nearly 2 cm.; breadth, 2 cm.

*Colour*.—(Determined from the spirit specimen) wall saffron-yellow, oral disk whitish, œsophagus dark brown.

The small Actinia without tentacles, which I call *Polyopis striata* (ὄπη=opening), was probably sac-shaped during life; its rounded posterior end probably stuck in the sand, whilst its broad anterior end formed by the oral disk projected freely. In consequence of packing, the animal was pressed quite flat, the oral disk and œsophagus turned out and very much injured, the septa consequently misplaced and torn. The difficulty of examining the septa was increased by the fact that from the hardening by alcohol, the septa had stuck together, and could not be easily separated by dissection. The preservation of the tissue was satisfactory, especially that of the epithelium on the oral disk, œsophagus, and septa.

The wall is of a delicate yellowish colour, which is contained in the endoderm, as the ectoderm is rubbed off and the mesoderm colourless and transparent after the epithelium