so for a long time, but it is not impossible that it lived at the depth at which it was dredged." Mr. Ridley, who examined specimens of this Coral, thought it was probably to be referred to *Pleurocorallium johnsoni*, Gray, which occurs at Madeira.

Apparently the same species was again met with at Station 85, off the Island of Palma, in 1125 fathoms. It may possibly be a deep-sea form.

Order II. PENNATULACEA.

The families, genera, and species belonging to this family have been already described by Professor A. von Kölliker.[1]

Order III. ALCYONACEA.

Family I. HELIOPORIDÆ, Moseley.

Helioporidæ, Moseley, Phil. Trans., vol. clxvi. p. 91, 1876.

A compact corallum is present, composed of a fibro-crystalline calcareous tissue as in Madreporaria. Corallum consisting of an abundant tubular cœnenchyma, and with calycles having an irregular number of lateral ridges resembling septa. Calycles and cœnenchymal tubes closed below by a succession of transverse partitions. Polyps completely retractile, with tentacles when in retraction introverted. Mouths of the sacs lining the cœnenchymal tubes closed with a layer of soft tissue, but communicating with one another and with the calycular cavities by a system of transverse canals of soft tissue.

We place this family in close connection with the families Nephthyidæ and Alcyonidæ; in conformity, as we believe, with the views of Professor Moseley, whose researches on *Heliopora cærulea* have completely revolutionised our knowledge of the family.

Genus *Heliopora*, Blainville, *emend.* Moseley.

Colony compact, branching, tissue calcareous as in *Madreporia*. Calycles with from eleven to sixteen plications; eight symmetrically and radially disposed lobes form a covering closing the mouths of the calycles. Polyps retractile; the colonies probably unisexual.

Heliopora cærulea, Blainville.

Heliopora cærulea, Blainville, Manuel d'Actinologie, p. 392, pl. lxi. fig. 3.
" " Milne-Edwards, Hist. Nat. des Coralliaires, vol. iii. p. 231.
" " Moseley, Phil. Trans., vol. clxvi. p. 91.

This species has been so well and fully described by Professor Moseley (*loc. cit.*) that it is unnecessary to give further details here, the more so as only a small fragment of

[1] *Vide* Zool. Chall. Exp., vol. i. part ii.