

irregular number of septa-like parietal ridges. Calyces and coenenchymatous tubes are closed below by a series of transverse floors. The polyps are completely retractile, and the tentacles are invaginated. The opening of the pockets, which ensheath the coenenchymatous tubes, is closed by a layer of delicate tissue. Communication between the individual tubes, and between them and the calyces, is established by a system of delicate, membranous, transverse canals.

Heliopora, Blainville, Manuel d'Actinologie, p. 392; Milne-Edwards, Hist. Nat. des Coralliaires, t. iii. p. 230; Moseley, Phil. Trans., vol. clxvi. 1876, pt. i. p. 91; Moseley, Zool. Chall. Exp., vol. ii. pt. vii. p. 103.

Order II. PENNATULACEA, Verrill.

Pennatulacea, Verrill, Proc. Essex Inst., vol. iv. p. 148.
Pennatulida, Kölliker.

The Pennatulacea may be derived, as Kölliker has shown, from Cornularid forms, among which the remarkable genus *Pseudogorgia*, Kölliker, may serve as a transition link. For details of this order we refer to Kölliker's monograph.¹ For the sake of completeness, however, we here append the classification given by Kölliker in his Report² on the Challenger Pennatulida, with modifications due to the labours of Verrill,³ Koren,⁴ and Danielssen.⁵

Section I. PENNATULACEA.

Subsection I. Penniformes.

Family I. PTEROEIDIDÆ.

<i>Pteroeides</i> , Herkl.		<i>Godefroyia</i> , Köll.
		<i>Sarcophyllum</i> , Köll.

Family II. PENNATULIDÆ.

<i>Pennatula</i> , Lam.		<i>Ptilosarcus</i> , Gray.
<i>Sciophyllum</i> , Verr.		<i>Haliscyprum</i> , Herkl.

¹ Kölliker, Anat. systemat. Beschreib. d. Alcyon., 1870.

² Kölliker, Zool. Chall. Exp., vol. i. pt. ii.

³ Verrill, Amer. Journ. Sci. and Arts, vol. xxiii., April 1882; Bull. Mus. Comp. Zool., vol. xi. No. 1, 1883.

⁴ Koren and Danielssen, Nye Alcyonider, Bergens Museum, 1883.

⁵ Danielssen and Koren, Norske Nordhavs-Exped., Pennatulida, 1884.