

## Family II. CLIONOPSIDÆ.

1855. *Clioidea*, Gegenbaur (*pars*), Untersuchungen über Pteropoden und Heteropoden, p. 212.  
 1859. *Pneumodermonidæ*, H. and A. Adams (*pars*), The Genera of Recent Mollusca, vol. ii. p. 613.  
 1862. *Clionidæ*, Bronn, Die Klassen und Ordnungen des Thierreichs, Bd. iii. p. 645.  
 1873. *Clionopsidei*, Costa, Pteropodi della Fauna di Napoli, p. 24.

*Characters*.—Proboscis very long. Buccal appendages absent. A jaw. A quadri-radiate posterior gill. No lateral gill. Skin not pigmented.

*Description*.—*Body* voluminous, rather transparent, barrel-shaped, a little contracted at both extremities; posterior extremity rounded; visceral mass extending to this extremity, forming an axial mass. Skin without pigment, showing generally a great many small spots due to fatty glands; dorsal spot rounder than in *Pneumonoderma*.

*Head* small, neck rather short; labial tentacles thick, but short and shrunk at their extremity.

*Foot* lying far forward, and without posterior lobe; anterior lobes like those of *Pneumonoderma*, connected in all their length; between these two lobes, on the posterior part of the foot, there is a plicated tubercle. Fins small in proportion to the body.

*Posterior Gill*.—Membranous posterior crest rather short, forming a hexagon elongated in the dorso-ventral diameter, and the four ventral and dorsal angles of which each give rise to a small membranous crest which is turned forwards. These crests (the hexagonal and the four radiating ones) show different degrees of specialisation in the different species, and may bear at their base fringes or foldings like those of *Pneumonoderma* and *Spongiobranchæa*.

*Proboscis* or evaginable anterior portion of the digestive tract (penis, Troschel) excessively long; it is about three times the length of the body, while in *Spongiobranchæa* (which of all the other Gymnosomata possesses the longest proboscis), it is not a third of this length. When the proboscis of *Clionopsis* is invaginated, the horny parts, the radula, jaw, and hook sacs are placed very far from the buccal aperture.

*Radula* always with median tooth (tricuspid) in the adult.

*Hook-sacs* (whose true signification Krohn was the first to make known<sup>1</sup>) very short, possessing strong hooks, rather numerous, short, of nearly uniform length, slightly bent and mostly arranged in a bunch.

<sup>1</sup> Beiträge zur Entwicklungsgeschichte der Pteropoden und Heteropoden, p. 40.