

## Family PHYLLIROIDÆ.

*Psilosomata*, Blainville, Manuel de Malacol., 1825, p. 484.

*Phylliroidæ*, Bergh, Malacolog. Untersuch. (in Semper, Reisen im Archip. d. Philipp., Th. II. Bd. ii.), Heft v., 1873, pp. 210-246.

Corpus magnopere compressum, altum; postice nonnihil humilius in caudam compressam apice truncatam, vel gradatim attenuatam abiens; antice collo cum capite quasi boviformi conjunctum. Caput sat magnum, rhinophoriis contractilibus, pro parte vaginis retractilibus, simplicibus, elongatis instructum; tentacula nulla.

Bulbus pharyngeus fortis, illi *Pleurophyllidiarum* non dissimilis, ita quoque mandibulæ fortes. Linguae radula non pauciseriata; dens medianus utrinque denticulatus; dentes laterales non multi, utrinque denticulati.

Glandulæ hermaphrodisiacæ discretæ 3; glans penis conulis armata.

These remarkable pelagic animals were placed among the Pteropoda by the earlier observers (Péron, Lesueur, Blainville); by other systematists (Lamarck, Cuvier, A. d'Orbigny, Cantraine, van der Hoeven, H. and A. Adams) they were incorporated with the Heteropoda; they were transferred to the Salpæ by Rang. Eydoux and Souleyet first clearly showed them to be "nudibranchiate" Gasteropoda, though their affinity with the Gasteropoda had been previously hinted at by Eschscholtz.

This Family contains two genera, *Phylliroë* and *Acura*, if indeed these be really distinct. Numerous memoirs have been published upon the former genus, but the structure of *Acura* was first made known through my Monograph.

The Phylliroidæ have a very remarkable form. The body is high and laterally very compressed; at the posterior end it is lower and passes into a tail, which is either long and filiform (*Acura*), or similar in shape to the body and truncated at its extremity (*Phylliroë*); the head, which is separated from the body by a more or less strongly pronounced "neck," is large and strong and somewhat high; its shape is peculiar, owing to the presence (*Phylliroë bucephala*) of elongated simple *rhinophoria*, which can be retracted into their wide sheaths; there is no trace of any tentacula.

The *bulbus pharyngeus* is very strong and rather high, resembling closely the bulbus of the Pleurophyllidiadæ; the mandibles are rather powerful, somewhat resembling those of the Pleurophyllidiadæ, the cutting edge is densely covered with fine prominences like the teeth of a comb. The small "tongue" is entirely enclosed within the buccal cavity; the radula is made up of an inconsiderable number of thin teeth. On either side of the median tooth, which is finely denticulated on both sides, are usually six lateral teeth, unsymmetrically denticulated on both sides. The *liver* consists of four long cœca, two superior and two inferior. The *kidney* is a long sac, opening internally into the pericardium through the renal syrx, and externally by a short ureter on the middle of the body. The *hermaphrodite gland* consists of several—usually three—isolated lobes. The *penis*