

umbilicus vary according to the species. *Operculum* semilunar, with a right-handed spiral of a few whorls.

Animal with an indistinctly defined head, which is only marked externally (1) by the lips on the border of the mouth and (2) by the tentacles.

1. *Lips*: two dorso-ventral folds on the cephalic surface of the fins, united dorsally, diverging ventrally, where they are continued by a fold of the cephalic surface of the fins, and extend laterally to the edge of the fins. They thus enclose a ciliated area which plays an important part in alimentation.¹ The mouth, split dorso-ventrally, is situated between these lips, in the angle formed by their union.

2. *Tentacles*, asymmetrical, the left always less developed and further back than the right. The latter is very long and retractile into a sheath. The tentacles thus exhibit absolutely the same form as those of the Cavoliniidæ. Souleyet² noted that in *Limacina helicina* the right tentacle seemed to be situated in a sheath, and³ that in his "*Spirialis*" the minuteness of the organs did not permit him to observe whether this was again true. I have been able to convince myself that this sheath exists, not only in *Limacina helicina*, but in all the small species in which I have been able to study the animal, viz., *Limacina inflata*, *Limacina lesueuri*, *Limacina australis*, *Limacina trochiformis*.

Fins elongated, enlarged, truncated at their free end. In certain species—*Limacina helicina* (where the structure has been noted by P. J. van Beneden under the name of tentacles), *Limacina antarctica* and *Limacina australis* (where it was equally distinct)—the fins exhibit, towards the middle of their dorsal margin, a small narrow projecting lobe of a special structure. A similar structure exists in *Clio* in the subgenus *Creseis*. I have assured myself that in *Limacina inflata*, *Limacina lesueuri*, and *Limacina trochiformis* this small lobe is not present, and Boas vouches for its absence in *Limacina bulimoides*. In the other species the animal has not yet been examined.

I cannot attach any great systematic importance to the presence or absence of this minute lobe, or regard it as furnishing basis for generic or subgeneric distinction, for otherwise the entire organisation is so absolutely analogous in all the species of *Limacina*, and the lobe is present in *Limacina australis*, and absent in *Limacina retroversa*, species so closely allied that some authorities have doubted whether they were really distinct.

On turning to the table of species of Limacinidæ, it will be seen that there are only ten species which belong to the genus *Limacina* properly so called. Of these, seven are well known by their shell, their animal, and their operculum, while the other three are sufficiently well known to enable one to judge with some certainty in regard to their systematic position.

¹ See Boas, *Spolia atlantica*, p. 191.—An identical disposition is found in the Cavoliniidæ.

² *Histoire naturelle des Mollusques Ptéropodes*, p. 60.

³ *Voyage de la Bonite, Zoologie*, t. ii. p. 209.