

these nuchal tentacles are quite separated from the so-called "tentacles." They are terminated by a small swelling, and although rather short, they are more projecting than in all other Gymnosomata, except *Clionopsis krohni*; they are more laterally inserted than in the other genera but are innervated in the same manner.¹ These tentacles are shown in Pl. III. figs. 7, 8.

2. *Buccal Appendages*.—They number one pair, are very long (nearly as long as the fins), flattened and extensible, and are inserted one on each side of the buccal orifice (3, fig. 4). They are the so-called tentacles of the majority of zoologists, less the "medial branch of their basis," which is, as we have seen, the true anterior tentacles (2, fig. 4). Souleyet calls them gills.² Ihering³ is the only one who considered them as corresponding to the buccal appendages of *Clione*, &c.; but he did not recognise the tentacles properly so-called.

Regarding the union by their bases of the anterior tentacles and buccal appendages, I explain it as follows. The genus *Halopsyche* is the only one among the Gymnosomata which does not possess the so-called cephalic hood, which covers the buccal appendages when these are retracted within the buccal cavity. The buccal orifice of *Halopsyche*, therefore corresponds to the "false lips" of *Clione*; the buccal appendages indeed are inserted on its sides, like the cephaloconi in *Clione*. The anterior tentacle not being therefore inserted on a cephalic hood in this genus, has been confounded, so far as the base is concerned, with the buccal appendage, because both have a common retractor muscle.

The structure of the buccal appendages of *Halopsyche* is not known, and I had no specimens sufficiently good for histological investigation.

Halopsyche,⁴ Bronn.

1825. *Pysche*, Rang (not Linné), Description d'un nouveau genre de la classe des Ptéropodes, Ann. d. Sci. Nat., sér. 1, t. v. p. 284.
 1827. *Euribia*, Rang (not Hübner, 1806), Description de deux genres nouveaux appartenant à la classe des Ptéropodes, Ann. d. Sci. Nat., sér. 1, t. xii. p. 328.
 1856. *Eurybia*, Woodward, A Manual of the Mollusca, p. 206.
 1862. *Halopsyche*, Bronn, Die Klassen und Ordnungen des Thierreichs, Bd. iii. p. 645.
 1862. *Theceurybia*, Bronn, Die Klassen und Ordnungen des Thierreichs, Bd. iii. p. 645.

Characters and Description the same as for the family Halopsychidæ. Rang established the genus *Pysche* in 1825 for a Pteropod without a shell that he called

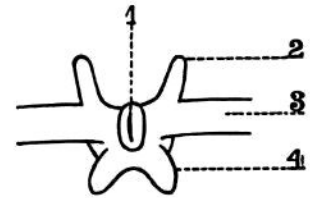


FIG. 4.—Head of *Halopsyche gaudichaudi*, front view; magnified about 10 diameters. 1, buccal orifice; 2, anterior tentacle; 3, buccal appendage; 4, anterior lobe of the foot.

¹ Pelseneer, Recherches sur le système nerveux des Ptéropodes, *Archives de Biologie*, t. vii. p. 110.

² Voyage de la Bonite, Zoologie, t. ii. p. 247.

³ Vergleichende Anatomie des Nervensystems und Phylogenie der Mollusken, p. 246.

⁴ From *ἅλς*, sea, and *ψύχη*, a mythological name.