

the necessity of forming new genera for some Gymnosomatous forms which I consider undoubtedly to belong to the genus *Clione*.

Gegenbaur, indeed, unfortunately confounding the tentacles and buccal appendages under the same name, divided *Clione* into two groups¹:—(1) those with more than two “tentacles”—“*Clio borealis*” and “*Clio australis*”; (2) those with two tentacles—“*Clio capensis*, *Clio longicaudata*, *Clio limacella*, *Clio flavescens*, and *Clio mediterranea*”; and he says that if he had treated the question from the systematic point of view, he should have created a new genus for these last species.

But there are two species among these which do not belong to the family Clionidæ, namely, *Clio capensis*, Rang (= *Notobranchæa* sp.), and *Clio mediterranea*, Gegenbaur (= *Clionopsis krohni*, Troschel). “*Clio*” *longicaudata*, Souleyet, besides its true tentacles, which number two pairs as in *Clione limacina* (= *Clio borealis*), possesses two pairs of buccal cones of the same nature as the three pairs in the latter species. *Clio limacella*, Rang (which has never been described, but only figured), is a species very closely allied to *Clione longicaudata*, if not identical with it, and it very probably also possesses two pairs of buccal cones. Finally, respecting “*Clio*” *flavescens*, Gegenbaur, we shall see further on that our knowledge of its larva shows that it also possesses two pairs of buccal cones, as in *Clione longicaudata*. Thus, these latter species do not differ from the type of the genus *Clione*, except by having two pairs of buccal cones instead of three; and I think that this difference is not at all a generic one.

Macdonald also thought that one might generically separate the forms with three pairs of buccal cones from those which only possess two.² In his group with two pairs of buccal appendages, Macdonald includes two forms; one very close to *Clione longicaudata*, the other with a posterior gill, which thus does not belong to the family Clionidæ, and which must be removed from the *Clione* with two pairs of buccal appendages as well as from those which possess three pairs, and will be placed in the genus *Notobranchæa*.

It is quite as inadmissible for me to generically separate forms of Gymnosomata so nearly resembling one another, because they have two or three pairs of buccal cones, as to place in the same genus a Gymnosomatous Pteropod with a gill (*Notobranchæa*) and another without a gill (*Clione*). All the Gymnosomata with an elongated body, without a gill and with buccal cones (two or three pairs), must be placed in a single genus *Clione*.

Lastly, Fol, on account of the species he has called “*Clio*” *aurantiaca*, also thought that he should establish a new genus.³ As we shall show further on, “*Clio*” *aurantiaca* must be considered as the old larva of a previously known species of the genus *Clione*.

¹ Untersuchungen über Pteropoden und Heteropoden, p. 212.

² On the Zoological Characters of the living *Clio caudata*, *Trans. Roy. Soc. Edin.*, vol. xxiii. p. 187.

³ Sur le développement des Pteropodes, *Archives d. Zool. expér.*, sér. 1, t. iv. p. 172.