

If we restrict our attention to *Cymbulia peroni* and *Gleba cordata*, the questions are indeed simplified. We see then, in *Gleba*, a free elongated proboscis, a fin with a continuous margin, without ventral lobe, and a "shell" of considerable delicacy, almost without cavity, and with a nearly smooth surface; while in *Cymbulia*, on the contrary, we find a fin with a ventral lobe, a short proboscis, not at all free, and a thick "shell" with a marked cavity and with a spiny surface. Thus we understand how the differentiating characters of the two genera are given with so much definiteness by the authors¹ who establish their generic diagnosis according to these two forms.

But these two forms (*Cymbulia peroni* and *Gleba cordata*) are precisely the two extremes of the series of Cymbuliidæ, and if we turn from these to the four other forms already enumerated, we find:—

1. In *Tiedemannia chrysosticta* and in *Corolla spectabilis*, which belong to the genus *Gleba*, the proboscis is very short, as is also the case in a form from the Atlantic, figured by Boas (pl. iii. fig. 31, *Spolia atlantica*).

2. In "*Cymbulia*" *ovata* and in "*Cymbulia*" *calceola*, the fin presents a continuous margin and no ventral lobe. In these respects they thus resemble *Gleba*, while the proboscis, which is indeed short, is free, and resembles that of *Tiedemannia chrysosticta* and *Corolla spectabilis*. The "shell," on the other hand, is altogether different, both from that of *Cymbulia* and that of *Gleba*, for it is rather thin, with a tuberculated surface, and with a very large cavity.

J. D. Macdonald also figures² a *Cymbulia* from the Indian Ocean without a ventral lobe to the fin. I have unfortunately been unable to see his specimens, but I entertain much doubt as to the form of this fin, since the "shell" of this form is very like that of *Cymbulia peroni* from the Mediterranean, and the latter, like one of the Challenger forms from the Western Pacific, exhibits a well-developed ventral lobe on the fin.

On the other hand, "*Cymbulia*" *calceola* and "*Cymbulia*" *ovata*, which are entirely destitute of the above lobe, agreeing in this particular with the *Cymbulia* of Macdonald, possess a shell quite different from *Cymbulia peroni*, the *Cymbulia* figured by Macdonald, and *Cymbulia parvidentata*, n. sp., from New Zealand. This shell is not pointed dorsally, and does not exhibit ventrally the special truncation seen in the three forms above mentioned. It has a distinct slipper-like form, with thin walls, with a deep cavity, and without spines along its aperture.

From the above it must be evident that the genera *Cymbulia* and *Gleba* are nearer one another than might be inferred from the contrast between *Cymbulia peroni* and *Gleba cordata*. It also becomes obvious that it is impossible to refer to these two genera alone all the forms which have been referred to the family Cymbuliidæ. "*Cymbulia*" *ovata* and "*Cymbulia*" *calceola* cannot be placed within either genus,

¹ See Gegenbaur, *Untersuchungen über Pteropoden und Heteropoden*, p. 40, note 1.

² On the General Characters of the genus *Cymbulia*, *Proc. Roy. Soc.*, vol. xxxviii. p. 252.