

1. *Heterofusus*, Fleming (1823), and *Scæa*, Philippi (1844); the former based on *Heterofusus retroversus*, Fleming, the latter on *Scæa stenogyra*, Philippi. But as these two species are identical, the two generic titles are absolutely synonymous, and the more recent ought to disappear.

2. *Protomedea*, O. G. Costa (1861), and *Embolus*, Jeffreys (1859); the former based on *Protomedea elata*, O. G. Costa, and the latter on *Atlanta inflata*, d'Orbigny. But as the two species are synonymous, the two generic titles are equally so; and since the name *Protomedea* was applied in 1834, by de Blainville, to a Cœlenterate, it ought to disappear.

3. *Peracle*, Forbes (1844), *Campylonaus*, Gray (1847), and *Euromus*, A. and H. Adams (1858); the two last based on *Atlanta reticulata*, d'Orbigny (= *Spirialis clathrata*, Eydoux and Souleyet), and the first on *Peracle physoides*, Forbes. But as these two specific types are now recognised to be identical, the three generic titles are obviously so too, and the two more recent ought to be disused.

Having reached this stage of our critical review, we see that the maximum number of generic titles which can be adopted for the Limacinidæ does not exceed those four—*Limacina*, *Heterofusus*, *Embolus*, and *Peracle*—since we may abstract *Heliconoides* (= *Spirialis* = *Helicophora*), this genus being succeeded by the three generic titles referring to the three forms of shell which it includes.

But are *Heterofusus* and *Embolus* really distinct, with this simple difference, that in the second the spire is depressed and the lip rostrate? This can hardly be, for in almost all the genera of Gastropods there are species with short and others with elongated spirals, and the same is true of the rostrate lip. Thus in a group adjacent to the Limacinidæ, the important genus *Clio* (= *Cleodora*) exhibits nearly related species, some with a rostrum on the dorsal surface and others without. Nevertheless these forms are much too closely allied to be generically separated, and ought not the same to apply to *Heterofusus* and *Embolus*? Both exhibit in fact an umbilicate shell, with whorls increasing somewhat gently, and a semilunar operculum, with a right-handed spiral of few turns; nor do the animals exhibit any difference in their structure.

But besides having these characters in common, they share them with *Limacina*, from which they do not differ in any character sufficient to establish a generic distinction, although, as I have already noted, the reverse has been maintained by Gray, Gould, Boas, and to a certain extent by Jeffreys. It must be remarked on the other hand that Souleyet, who created the genus *Spirialis* (including *Heterofusus* and *Embolus*), recognised that it ought to be united with *Limacina* if there were an operculum in the latter.¹ But it is now sufficiently demonstrated that in *Limacina* an operculum does exist.

It is true that Sars maintains the generic distinction of *Limacina* and *Spirialis* (in

¹ Voyage de la Bonite; Zoologie, t. ii. p. 211.