

the restricted sense of *Heterofusus*), principally on the ground of the transverse striæ (at right angles to the axis), which are found in *Limacina helicina*. But this character cannot be regarded as of the value of a generic distinction. If we turn for instance to a group but slightly removed from the Limacinidæ, the species of *Clio* of the subgenus *Creseis*, we see that *Clio chierchiæ*, Boas, also possesses these transverse striæ which are wholly absent in the other three species of the same subgenus. Yet one would not on that account dream of establishing a generic distinction on that simple fact, and *a fortiori* one cannot separate *Limacina* (*s. str.*) from "*Spirialis*."

As to the genus *Peracelis*, Forbes, it is so distinct that it must be retained, although d'Orbigny has referred its typical species to *Heliconoides*, Souleyet and A. Costa to *Spirialis*, and Gray, Jeffreys, and Boas to *Limacina*.

Peracelis differs indeed from the genus *Limacina* (as this has been defined above) in having a shell which is not umbilicate, has a few whorls ascending very rapidly, a larger aperture, a columella prolonged into a rostrum twisted into a spiral, and, further, in possessing a subcircular operculum, with a multispiral, left-handed coil. To this operculum neither d'Orbigny, Souleyet, nor Boas have attached the degree of importance demanded by its peculiar structure. But even if we do not take account of these differences, the structure of certain portions of the animal of *Peracelis* separates it markedly from all other Limacinidæ, as we shall afterward see, and necessitates the formation of a distinct group, opposed to all the rest of the family.

From the foregoing it results that there are among the living Limacinidæ only two different genera, *Limacina* and *Peracelis*, which may be readily distinguished by turning to the synoptic table of genera (p. 8).

Limacina,¹ Cuvier.

- 1817. *Limacina*, Cuvier, Le Règne animal, t. ii. p. 380.
- 1823. *Heterofusus*, Fleming, On a reversed species of *Fusus*, Mem. Wern. Soc., p. 498.
- 1824. *Spiratella*, de Blainville, Mollusques, Dict. d. Sci. Nat., t. xxxii. p. 284, iv. p.
- 1836. *Heliconoides*, d'Orbigny (*pars*), Voyage dans l'Amérique méridionale, t. v. p. 174.
- 1840. *Spirialis*, Eydoux et Souleyet (*pars*), Description sommaire de plusieurs Ptéropodes nouveaux ou imparfaitement connus, Rev. Zool., t. iii. p. 235.
- 1842. *Helicophora*, Gray, Synopsis of the contents of the British Museum, p. 59.
- 1844. *Scæa*, Philippi, Fauna Molluscorum utriusque Siciliæ, p. 164.
- 1861. *Protomedea*, G. O. Costa (*pars*), Microdoride Méditerranæa, p. 73.
- 1869. *Embolus*, Jeffreys, British Conchology, vol. v. p. 114.

Shell umbilicate, with turns gradually increasing; with a fairly large aperture; and with a columella not prolonged into a rostrum; surface smooth or striated. The height of the spire, the form of the surface and that of the aperture, and the size of the

¹ Diminutive of *Limax*.