

Globigerina, as well as in those of *Pullenia*, and also in the genus *Hastigerina*, the aperture is a broad curved fissure, symmetrically placed at the inner margin of the segments. In some turbinoid species the aperture is single, and only differs from that of the *Rotalinæ* in its relatively large size; in others it is divided, and takes the form of a number of smaller orifices, part of which are situated on the superior face of the test; whilst in *Orbulina*, there is no general orifice in the ordinary sense of the term, its place being supplied by a set of abnormally large perforations.

As already stated, the constituent genera of the GLOBIGERINIDÆ do not arrange themselves in a continuous series like those of the MILIOLIDÆ or the LAGENIDÆ, but form several collateral groups, of which the corresponding modifications exhibit to a limited degree the sort of isomorphism that is so conspicuous a feature of the ROTALIDÆ. Thus *Globigerina bulloides* finds an isomorph in *Candeina nitida*; *Globigerina conglobata*, *Sphæroidina bulloides*, and *Pullenia obliquiloculata* are in like manner parallel modifications of their respective types; as are also *Globigerina æquilateralis*, *Hastigerina pelagica*, and *Pullenia quinqueloba*. In connection with this subject it is of interest to note that similar isomorphisms may be traced between the *Globigerinæ* and the *Rotalinæ*, though the number of corresponding forms is relatively small.

The most noteworthy characteristic of the GLOBIGERINIDÆ as a Family is the pelagic habit of most of the species. Certain genera, like *Hastigerina*, are exclusively pelagic; and of others a great majority of the known varieties have been found in the free-swimming condition. Even *Pullenia* and *Sphæroidina*, of which the reputed typical species have only hitherto been met with in bottom-dredgings, have well-marked pelagic representatives.

Globigerina, d'Orbigny:

- Globigerina*, d'Orbigny [1826], Roemer, Reuss, Bailey, Ehrenberg, Costa, Parker and Jones, Egger, Williamson, Pourtales, Karrer, Carpenter, Wallich, Brady, Owen, Schwager, &c.
Rosalina, pars, d'Orbigny [1839], Ehrenberg, Reuss, Rupert Jones.
Rotalia, pars, Ehrenberg [1854], Kübler and Zwingli.
Phanerostomum, pars; *Ptygostomum*, pars; *Planulina*, pars, Ehrenberg [1854].
Rhynchospira, Ehrenberg (?), Reuss, MS., Karrer [1877].
Pylodexia, Ehrenberg [1859].
Rotalina, pars, Seguenza [1862].
Aristerospira, pars, Ehrenberg [1873].

The distinctive characters of the genus *Globigerina* are stated by d'Orbigny in the "Tableau Méthodique" in the following terms:—"Test libre, trochoïde, irrégulier; spire confuse, formée par des loges sphériques plus ou moins distinctes; ouverture en forme d'échancrure plus ou moins profonde, située vers l'axe de la spire à l'angle ombilical."¹ The genus is described at considerable length by Dr. Carpenter and his colleagues in the

¹ *Ann. Sci. Nat.*, 1826, vol. vii. p. 277.