Sub-family 3. Polymorphininæ.

Polymorphina, d'Orbigny.

Polymorphium, Soldani [1781].
Serpula, Walker [1784], Kanmacher.
Vermiculum, Montagu [1803], Fleming, Macgillivray.
Arethusa, Montfort [1808], Bowditch, Fleming, Thorpe.
Misilus, *Cantharus*, Montfort [1808].
Polymorphina, d'Orbigny [1826], Ehrenberg, Roemer, Macgillivray, Philippi, Reuss, Parker and
  Jones, Egger, Williamson, Terquem, Karrer, Carpenter, Gümbel, &c.
Globulina, d'Orbigny [1826], Sander Rang, Roemer, Reuss, Alth, Bornemann, Costa, Egger,
  Karrer, Schwager, Schlicht, Kübler, &c.
Guttulina, d'Orbigny [1826], Sander Rang, Roemer, Reuss, Alth, Bornemann, Costa, Egger,
  Karrer, Stache, Schlicht, Terquem, &c.
Pyrulina, d'Orbigny [1826], Sander Rang, Reuss, Morris and Jones, Ehrenberg, Schlicht.
Renoidea, pars, Brown [1827].
Raphanulina, pars; *Apiopterina*, pars, Zborzewski [1834].
Proroporus, pars, Ehrenberg [1844], Reuss.
Aulostomella, Alth [1850].
Grammostomum, pars; *Bigenerina*, pars; *Loxostomum*, pars; Ehrenberg [1854].
Pleurites, Ehrenberg [1854], Kübler and Zwingli.
Onchobotrys ? Ehrenberg [1856].
Rostrolina, *Atractolina*, pars, Schlicht [1869].

The genus *Polymorphina*, as its name implies, embraces a series of Foraminifera presenting great diversity of form. The typical shell is rounded and inequilateral in contour, its segments are few in number, obliquely set, and arranged in a more or less distinctly spiral manner, and the aperture is central and terminal. The various modifications of the type were arranged by d'Orbigny in four subgeneric groups, with the following characters.[1]

I. POLYMORPHINA (proper), having a large number of chambers visible, alternating on two sides almost equally.

II. GUTTULINA, having but few of the chambers visible, alternating upon three faces; chambers embracing.

III. GLOBULINA, alternating on three faces, chambers embracing; three chambers only visible.

IV. PYRULINA, alternation irregular or somewhat obscurely spiral, formed of half-embracing chambers.

It will be seen that, so far as external features are concerned, the foregoing sub-division depends on the number of segments in each convolution of the spire, whether

[1] *Ann. Sci. Nat.*, 1826, vol. vii. pp. 265–267.