

This species, of which the earliest available description and figures are those given by Batsch in 1791, is the best representative of the costate varieties of *Marginulina*. Individual specimens vary a good deal in contour, and also as to the number and degree of development of the superficial ribs; but the stout proportions of the shell, its sub-cylindrical form and comparatively slight curvature, the inflated character of the later chambers, and the marginal aperture, are generally sufficient to distinguish it from costate varieties of *Vaginulina* and *Cristellaria*. The test is often more or less compressed just at the commencement, and occasionally presents a sharp or even subcarinate edge at the aboral end, but more frequently the margin is rounded from the beginning.

Starved, thin-shelled specimens of *Marginulina costata* have been found from time to time in the British seas, though they are of rare occurrence. In its fully developed condition, the species has been obtained from various parts of the North Atlantic, at depths of from 370 fathoms to 1240 fathoms; from the South Atlantic at still greater depths; from the Mediterranean, and from the Adriatic. Except a few small ill-characterised examples, taken at a depth of 150 fathoms off the coast of New Zealand, it has not been observed in either the North or South Pacific, the Southern Ocean, or the Red Sea.

Fossil specimens have been described, under a number of different names, from the Liassic marls of England, Ireland, and France; the Kimmeridge Clay; the Cretaceous formations of Ireland and Germany; the Miocene beds of Austria; the later Tertiaries of Italy and Spain, and the Crag of the Eastern Counties.

#### *Vaginulina*, d'Orbigny.

“Cornu Hammonis,” Plancus [1739].

*Orthocera*, *Orthoceras*, seu *Orthoceratium*, pars, Gaultieri [1742], Soldani, Batsch, Lamarck, Defrance.

*Nautilus*, pars, Linné [1767], Batsch, Walker, Montagu, Dillwyn.

*Planularia*, Defrance [1824], Blainville, d'Orbigny, Cornuel, Parker and Jones, Brady, Blake, Walford.

*Vaginulina*, d'Orbigny [1826], Roemer, Michelotti, Philippi, Reuss, Bornemann, Neugeboren, Costa, Parker and Jones, Gümbel, Karrer, Seguenza, &c.

*Citharina*, d'Orbigny [1839], Reuss.

*Marginulina*, pars, Reuss [1851], Terquem.

*Dentalina*, pars, Williamson [1858], Parfitt.

The quasi-generic term *Vaginulina* may be conveniently adopted for those compressed and complanate varieties of *Nodosarinæ* which have oblique segments and a marginal aperture. Such forms are generally somewhat curved or arcuate, and taken collectively they are almost equally related to the Dentaline *Nodosariæ*, the *Marginulinæ*, and the ensiform modifications of *Cristellaria*. No sharp lines of demarcation can be drawn between these allied groups; but in general terms it may be said that *Vaginulina* is distinguished from *Marginulina* by its more or less flattened contour, from the curved