

number, and all visible from either side of the shell, nearly globular in shape, the last sometimes smaller than the penultimate; aperture a large arched opening on the umbilical face of each segment. Diameter, $\frac{1}{30}$ th inch (0.84 mm.), more or less.

Globigerina æquilateralis is the type of the planospiral as distinct from the Rotaliform varieties of the genus. It approaches *Hastigerina* in general contour, but the arrangement of the chambers is usually if not invariably evolute instead of involute, and the shell-wall is relatively much thicker than in the latter genus. The test is somewhat finely porous, the perforations measuring about $\frac{1}{6000}$ th to $\frac{1}{5000}$ th inch (0.0042 to 0.005 mm.) in diameter. So far as has been observed, the surface specimens do not manifest to the same extent as those of many other species the tendency to assume a spinous condition.

Globigerina æquilateralis occurs amongst the surface-microzoa from the North Atlantic and the North and South Pacific. It has also been found in the South Atlantic but only in bottom-dredgings. Its area of distribution appears to extend from off the south-west corner of Ireland, lat. 50° N., to the Cape of Good Hope, about lat. 35° S.

There can be little doubt that one of the specimens figured by Egger under the name *Cassidulina globulosa* belongs to the present species, so that its geological history dates back at least as far as the Miocene period. Ehrenberg gives a drawing of a very similar form, possibly the same (*Phanerostomum asperum*, Mikrogeologie, pl. xxx. fig. 26, *a.b.*) from the Chalk of the Island of Rügen.

Orbulina, d'Orbigny.

Orbulina, d'Orbigny [1839], Reuss, Bailey, Costa, Williamson, Parker and Jones, Karrer, Carpenter, Wallich, Seguenza, Terquem, Brady, Alcock, Dawson, Fischer, &c.

Miliola, pars; *Monocystis*, Ehrenberg [1854].

Globigerina, pars, d'Orbigny [1846], Pourtales, Reuss, Alcock, Owen, Brady, Seguenza.

The genus *Orbulina* was first brought into notice by d'Orbigny in his memoir on Cuban Foraminifera, but the author appears to have been previously well acquainted with the typical species from specimens collected on the shores of the Adriatic and elsewhere.

The original generic description runs as follows:—"Shell free, regular, spherical, globular, interior hollow; pierced in every part by a large number of minute pores only visible when highly magnified; aperture small, rounded, placed at a point of the circumference;" to which is appended the remark "it is possible that under certain circumstances the animal is able to close the aperture of the shell, at any rate it is not always visible, and it is only open in one-sixth of the freshly collected specimens" (Foram. Cuba, p. 34).

Williamson states that "the septal aperture of *Orbulina universa* is small; normally