

margin blunt or rounded. The ornament likewise varies with age, being more distinctly linear and geometric in the early stage (fig. 15), thicker and less regular in old specimens (fig. 16).

So far as at present known, *Pulvinulina favus* is exclusively a Pacific species; indeed, but for a few specimens obtained at Station 224, about eight degrees north of the equator, it might be said to be peculiar to the South Pacific, inasmuch as the remaining nine Stations at which it has been found lie between the equator and lat. 42° 43' S. It is a deep-water organism, with a bathymetrical range extending from 1375 fathoms to 2600 fathoms.

Rotalia, Lamarck.

Nautilus, pars, Linné [1767], Walker and Boys, Adams, Montagu, Maton and Rackett, Parkinson, Pennant, Dillwyn, Turton, &c.

Rotalia, Lamarck [1804], d'Orbigny, Fleming, Bronn, Michelotti, Hagenow, Macgillivray, Thorpe, Parker and Jones, Reuss, Carpenter, Sowerby, Brady, M. Sars, Schwager, Karrer, Schulze, &c.

Discorbula, Lamarck [1816].

Streblus, Fischer [1819].

Gyroidina, d'Orbigny [1826], Bronn.

Turbinulina, pars, d'Orbigny [1826].

Calcarina, pars, d'Orbigny [1826], Carpenter, Parker and Jones, Brady.

Rotalites, DeFrance [1827].

Asterigerina, pars, d'Orbigny [1839].

Rotalina, pars, d'Orbigny [1839], Reuss, Czjzek, Bornemann, Williamson, Karrer, Seguenza, Alcock, Hantken, Parfitt, Schlicht, Stewart, Terquem, Norman, Martonfi, &c.

Rosalina, pars, d'Orbigny [1839], Reuss, Costa, Egger, Karrer, Schlicht.

Discorbis, Macgillivray [1843].

Faujasina, Williamson [1853].

As compared with the collateral genera, *Planorbulina* and *Pulvinulina*, the true *Rotaliæ* form but a small series; and the range of morphological variation which they exhibit, so far as the more conspicuous features of the test are concerned, is embraced within much narrower limits.

The general conformation of the shell is that of a turbinoid spire, which in its typical phase (*Rotalia beccarii*) is nearly equally convex on the two faces. Some varieties, however, present a convex, or even conical, superior face, whilst the inferior side is flat (*Rotalia nitida*); and on the other hand, there is a more important set of forms, in which the superior face is approximately flat and the inferior highly convex (*Rotalia soldanii*, *Rotalia schroeteriana*, &c.)—between the two extremes every gradation of contour is exemplified in the series.

The normal "Rotaliform" arrangement of the chambers, by which the whole of the segments are visible on the superior side of the test, those of the final convolution only on the inferior, is tolerably constant throughout the genus, the only marked