Spirillina decorata, n. sp. (Pl. LXXXV. figs. 22–25).

Test free, discoidal, bilaterally symmetrical, or nearly so; composed of six or eight convolutions of a somewhat embracing tube. Lateral faces slightly concave, peripheral edge thin and subcarinate; perforations obscure in thick-walled specimens, the surfaces of which become pitted and furrowed; aperture of the adult test somewhat contracted and triangular. Diameter, $\frac{1}{30}$th inch (0·84 mm.) or more.

This form is distinguished from the other species of *Spirillina* by its thin subcarinate periphery. The contour of the test resembles that of *Cornuspira carinata*. As the shell-wall thickens with age, the perforations appear to be gradually filled up, and eventually have the aspect of minute superficial depressions. The surface is often also marked with short transverse furrows, especially near the margin of the coils.

Spirillina decorata affects deeper water than most of its congeners. It has been observed at three points in the North Atlantic,—off the Azores, 1000 fathoms; off the Canaries, 1125 fathoms; and off Culebra Island, 390 fathoms: at one point in the South Atlantic,—off Pernambuco, 675 fathoms: and at three in the South Pacific,—off Raine Island, 155 fathoms; off Booby Island, 6 fathoms; and off Kandavu, 610 fathoms.

Sub-family 2. **Rotalinæ.**

Patellina, Williamson.

Madreporites, Blumenbach [1805], (*fide* Bronn).
Orbulites, pars, Lamarck [1816], Lamouroux.
Orbitolites, pars, Defrance [1826].
Cyclolina, pars, d'Orbigny [1846].
Orbitolina, d'Orbigny [1852], Bronn, d'Archiac, Gras, Parker and Jones, Carter.
Patellina, Williamson [1858], Carpenter, Parker and Jones, Brady, Alcock, Parfitt, G. M. Dawson, Miller and Vanden Broeck, Robertson, Schulze, Terquem, Siddall, Berthelin, Shone, Wright, Fritsch.
Conulites, Carter [1861].

Broadly speaking, the genus *Patellina* is characterised by a conical or plano-convex test, consisting of an external or "cortical" layer of annular, semiannular, or spirally-arranged chambers, and a central enclosed portion or cavity, occupied either by a deposit of clear shell-substance or by a mass of minute chambers, more or less regularly disposed. The chambers of the outer layer are, as a rule, subdivided into chamberlets, the secondary septa being marked externally by transverse lines. Some of the small and imperfectly developed varieties have undivided chambers, either annular or spiral; and in certain