to have been confounded with *Miliolina agglutinans*. It was first noticed by Prof. Costa, and his figures in the Paleontologia del Regno di Napoli, though roughly executed and wanting in texture, are tolerably characteristic. In addition to the drawings of the exterior of the test, he gives an imperfect diagram of a longitudinal section, in order to demonstrate its supposed Spiroloculine affinity. There is no foundation for this view, beyond the fact that many of the thinner specimens resemble certain varieties of *Spiroloculina* in general contour, though easily distinguished by other characters.

In the common typical form of *Planispirina celata* (Pl. VIII. figs. 1, 2), the disposition of the segments is practically identical with that of *Planispirina sigmoidea*, as may be seen by the comparison of the transverse sections (Pl. II. fig. 3, and Pl. VIII. fig. 4); and though the alar prolongations of the chambers are more difficult to trace, owing to the composite nature of the test, there is sufficient evidence of the same general plan of growth. Indeed, the species appears to represent the arenaceous condition of *Planispirina sigmoidea*, just as *Miliolina agglutinans* and *Spiroloculina asperula* represent the sandy modifications of the typical forms of their respective genera.

The external characters of *Planispirina celata* are generally sufficient to distinguish it from *Miliolina agglutinans*, the only species with which it is likely to be confused. The test is oblong or oval with produced and pointed ends; the lateral surfaces are convex and the periphery thin and angular or slightly rounded. The curves of the peripheral margin at the two edges have a tendency to become sigmoid, one side being gibbous near the apex the other near the base of the shell. The end view has a very similar outline that is to say, unequally biconvex, the gibbous portion of one surface opposing the less convex portion of the other. The aperture is small and arched, and placed transversely nearly on the median line.

Planispirina celata occurs in all the great oceans; but out of a list of thirty localities, fifteen are in the North Atlantic. Compared with *Miliolina agglutinans* it is a deep-water species, and finds its most congenial home at depths of from 300 to 1500 fathoms, though its recorded range extends from 28 to 1630 fathoms.

In the fossil condition it has been found in the later Tertiaries of Italy (Costa, Seguenza) and of the Nicobar Islands (Schwager).

Sub-family 4. **Peneroplidinæ.**

Cornuspira, Schultze

(?) *Soldania*, pars, d'Orbigny [1826].
Orbis, pars, Philippi [1844].
Operculina, pars, Reuss [1845], Czjzek, Costa.
Cornuspira, Schultze [1854], Parker and Jones, Reuss, Carpenter, Seguenza, Stache, Brady, Schwager, Terquem, Karrer, Gümbel, Hantken, Norman, Tate and Blake, &c.
Spirillina, pars, Williamson [1858], Parfitt, Terquem.