cylindrical forms, such as fig. 32, and those of subglobular shape, like figs. 34 or 35, every variety is to be found.

Well-developed specimens of Clavulina cylindrica closely resemble Haplostiche soldanii (Pl. XXXII. figs. 12–18), not only in contour but in shell-texture. These two species often abound in the same localities, especially amongst the coral-sands of the tropics, and very frequently the orifice furnishes the only external characters by which they can be distinguished the one from the other. In the Lituoline test the aperture is either simple or labyrinthic, whilst in perfect specimens of Clavulina cylindrica it is always valvular. The longitudinal section of either organism at once reveals its affinity; but the external character referred to is of interest from a morphological point of view, and of value as affording a ready means of diagnosis.

The walls of the test are thick, and in the ovate and rounded forms the septation is entirely concealed by their massive development; but in the more elongate cylindrical varieties, the thickening is less conspicuous, and the septation of the uniserial line of segments is indicated by slight external depressions.

Von Hantken's drawings of the species represent a test of similar contour to fig. 32, but the aperture has no valvular tongue, a feature often wanting in fossil specimens.

Clavulina cylindrica has been collected at four Stations in the North Atlantic,—off Gomera, Canaries, 620 fathoms; off Sombrero Island, West Indies, 450 fathoms; off Bermuda, 435 fathoms, and off the Azores, 450 fathoms: at one in the South Atlantic,—east of Buenos Ayres, 1900 fathoms: and at three in the South Pacific,—west coast of New Zealand, 275 fathoms; off Kandavu, Fiji Islands, 210 fathoms; and off Raine Island, Torres Strait, 155 fathoms.

Von Hantken gives a considerable list of localities for the species in the Lower Clavulina-szabói formation of Hungary, and states that it also occurs in the Bryozoamarl of Priabona in Italy.

## Sub-family 2. Bulimininæ.

## Bulimina, d'Orbigny.

Bulimina, d'Orbigny [1826], Römer, Reuss, Alth, Bailey, Costa, Bornemann, Parker and Jones, Egger, Williamson, Karrer, Carpenter, Brady, M. Sars, Schwager, Gümbel, Hantken, &c. Robertina, d'Orbigny [1846], Reuss.

Rotalina, pars, Reuss [1851].

Cucurbitina, pars, Costa [1856].

Ataxophragmium, Reuss [1861], Karrer.

Pulvinulina, pars, Jones and Parker [1872].

Cassidulina, pars, Brady [1881].

In the typical condition, the shell of Bulimina takes the form of an elongated spire, of which the final convolution is conspicuously large. The segments are numerous