

ten to fifteen in each rank, compactly fitted; sutures even, marked by fine lines with little or no external depression. Aperture, in the earlier stages, a curved slit, in the normal Textularian position; in the adult shell, a round perforation situated in a depression on the distal face of the terminal chamber. Texture finely arenaceous, surface nearly smooth. Length,  $\frac{1}{10}$ th inch (2.5 mm.).

This is a tolerably well-marked species, both in respect of general contour and the mode of combination of the chambers; but it derives its chief interest from the tendency of the aperture in the later segments to assume a terminal instead of a lateral position. The importance of this occasional feature of the *Textulariæ* has been much exaggerated, and it has even been employed as the distinctive character of a separate genus, *Proroporus*. The structural change involved is in reality very slight, as may be seen from the sectional drawing (fig. 8), in which the transition from one position to the other is clearly shown.

*Textularia luculenta* has been obtained at five localities, three of which are in the North Atlantic, namely:—off Sombrero Island, 450 fathoms; off Culebra Island, 390 fathoms; and off Bermuda, 435 fathoms; and at two in the South Atlantic, near the coast of South America, a little south of Pernambuco, 675 fathoms and 350 fathoms respectively.

*Textularia gramen*, d'Orbigny (Pl. XLIII. figs. 9, 10).

*Textularia gramen*, d'Orbigny, 1846, For. Foss. Vien., p. 248, pl. xv. figs. 4, 6.

The *Textularia gramen* of d'Orbigny forms a good central type of the broad, stout varieties of the genus, which have subangular or rounded lateral edges and coarsely constructed tests. From this species, *Textularia hauerii* (For. Foss. Vien., p. 250, pl. xv. figs. 13–15), and *Textularia abbreviata* (Id., p. 294, pl. xv. figs. 7–12) differ only in slight modifications of outline, the former having less angular edges, the latter being of somewhat shorter and thicker contour.

*Textularia gramen* is found at almost all latitudes, but is commoner on shallow bottoms than at great depths.

It is difficult to identify the various common forms of fossil *Textulariæ* described under different names by successive authors, but it is probable that the present species has a wide range amongst Tertiary microzoa. D'Orbigny's specimens were from the Miocene of Baden, near Vienna.

*Textularia conica*, d'Orbigny (Pl. XLIII. figs. 13, 14; Pl. CXIII. fig. 1, a.b.).

*Textularia conica*, d'Orbigny, 1839, Foram. Cuba, p. 135, pl. i. figs. 19, 20.

D'Orbigny's term, *Textularia conica*, may be conveniently employed for the very short, more or less compressed varieties of the genus, common in shallow-water sands, especially