

aperture, and the shape of the valvular tooth, as well as in the degree of angularity of the outer margin of the shell, has been dwelt upon by many writers; and the case has been so fully stated by Williamson (Rec. For. Gt. Br., p. 80) that there is little left to be said on the subject. It is sufficient to repeat that in the genus *Biloculina* neither the shape of the aperture nor the roundness or irregularity of the margin furnishes any character sufficiently distinctive to be of more than comparative value to the systematist. It is convenient to recognise certain forms that may be roughly distinguished from each other by their general contour, such as *Biloculina bulloides*, the typical *Biloculina ringens*, and *Biloculina depressa*, together with a few others that appear to be somewhat more definite local varieties; but the fact remains, that from end to end of the generic series the variation is one of degree only. With slight exception in the matter of surface ornamentation, no new character makes its appearance, and the successive links in the chain only differ amongst themselves in the greater or less development of a few features common to the whole.

*Biloculina ringens* abounds in almost every sea, and at almost every depth hitherto explored, from shore-pools between tide-marks to nearly 3000 fathoms.

As a fossil it is found with other *Miliolæ* in Tertiary deposits as far back as the Eocene of the Paris Basin.

*Biloculina ringens*, var. *denticulata*, nov. (Pl. III. figs. 4, 5).

General contour proportionately longer and margin somewhat more angular than in the typical *Biloculina ringens*. The inferior portion of the peripheral margin of the last chamber more or less toothed. Length,  $\frac{1}{3}$ rd inch (0.75 mm.).

The dentate condition of the inferior portion of the margin of the test varies much in degree; otherwise the specimens are very uniform, not only in general contour, but in the shape of the aperture, in size, and in other minor characters. The distribution is limited to certain comparatively narrow areas, and the distinctive features appear to be those of a tolerably well-marked local variety rather than of a species, even in the lax interpretation of the term permissible in speaking of Foraminifera.

*Biloculina denticulata* belongs to the coral-reef fauna. The best specimens have been obtained from the Honolulu Reefs, 40 fathoms; off Tongatabu, Friendly Islands, 18 fathoms; and off the Admiralty Islands, 15 to 20 fathoms. A very similar variety, but without the indentations of the margin, occurs off St. Vincent, Cape de Verde Islands, 11 fathoms; and off Kandavu, Fiji, 610 fathoms.

*Biloculina ringens*, var. *striolata*, nov. (Pl. III. figs. 7, 8).

General characters the same as those of var. *denticulata*, but having in addition a surface ornamentation of slightly irregular, raised, longitudinal striæ over the inferior portion of the shell, especially of the penultimate chamber. Length,  $\frac{1}{3}$ rd inch (0.75 mm.).