

*Miliolina insignis*, H. B. Brady (Pl. IV. figs. 8, 10).

*Miliolina insignis*, Brady, 1881, Quart. Journ. Micr. Sci., vol. xxi., N. S., p. 45.

This species has the same general contour as *Miliolina trigonula*, and the arrangement of the segments is in all respects similar, but the surface of the shell instead of being smooth is ornamented by delicate, closely set, longitudinal costæ. Some of the Atlantic specimens attain considerable dimensions and are relatively shorter and more stoutly built than the typical form. Length,  $\frac{1}{17}$ th inch (1.5 mm.).

*Miliolina insignis* has been met with at two of the Challenger Stations in the North Atlantic, namely, off Sombrero Island and off Culebra Island, West Indies, at 390 fathoms and 450 fathoms respectively; in the South Atlantic at Station 346, near the Equator, 2350 fathoms, and off Pernambuco, 350 fathoms; in Simon's Bay, Cape of Good Hope, 15 to 20 fathoms; in Bass Strait, 38 fathoms; and at one point in the deep area of the North Pacific (Station 244) 2900 fathoms. The species also occurs in shallow water on the coast of Ceylon, and Mr. Robertson's cabinet contains specimens from the coast of Java.

*Miliolina tricarinata*, d'Orbigny, sp. (Pl. III. fig. 17, *a.b.*).

*Triloculina tricarinata*, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 299, No. 7;—Modèle, No. 94.

*Cruciloculina triangularis*, Id. 1839, Foram. Amér. Mérid., p. 72, pl. ix. figs. 11, 12.

*Triloculina gibba*, Id. 1846, For. Foss. Vien., p. 274, pl. xvi. figs. 22-24.

*Miliola gibba*, Egger, 1857, Neues Jahrb. für Min., &c., p. 271, pl. vi. figs. 1-3.

*Triloculina tricarinata*, Brady, 1864, Trans. Linn. Soc. Lond., vol. xxiv. p. 446, pl. xlvi. fig. 3.

*Miliola (Triloculina) tricarinata*, Parker and Jones, 1835, Phil. Trans., vol. clv. p. 409, pl. xv. fig. 40.

*Triloculina tricarinata*, Reuss, 1867, Sitzungsber. d. k. Ak. Wiss. Wien, vol. lv. p. 71, pl. ii. fig. 4.

This species presents the extreme development of Triloculine characters. It bears the same morphological relation to *Miliolina trigonula* that *Biloculina depressa* bears to *Biloculina ringens*; that is to say, the peripheral margin of the segments is in the one case angular or carinate, and in the other rounded. In *Biloculina depressa* the carina is formed by the free edge of the ultimate segment; in *Miliolina tricarinata* two of the angles are formed by the outermost segment and the third by the free margin of the penultimate.

The genus *Cruciloculina* was founded by d'Orbigny for a *Miliolina* with exactly the same disposition of segments, but with a cruciate aperture instead of one of the ordinary Milioline type. It is needless to say that the aperture is too variable a feature amongst the Porcellanea to be accepted by itself as a specific, still less as a generic distinction. The *Triloculina gibba* of the "Vienna Basin" monograph only differs from *Miliolina tricarinata* in its slight irregularity of contour and somewhat blunt chamber-margins.

*Miliolina tricarinata* has a far wider geographical distribution than its near ally