

*Gaudryina rugosa*, d'Orbigny (Pl. XLVI. figs. 14-16).

*Gaudryina rugosa*, d'Orbigny, 1840, Mém. Soc. géol. France, vol. iv. p. 44, pl. iv. figs. 20, 21.

” ” Reuss, 1855, Sitzungsab. d. k. Ak. Wiss. Wien, vol. xviii. p. 244, pl. vi. fig. 61, *a. b.*

” ” Hantken, 1875, Mittheil. Jahrb. d. k. ung. geol. Anstalt, vol. iv. p. 13, pl. i. fig. 4.

*Gaudryina rugosa* is sufficiently distinguished by the large development and triangular contour of the triserial portion of the test, and by the rough arenaceous texture of the walls.

In the living condition it has been noticed at seven localities, namely:—Vigo Bay, Spain, 11 fathoms; off Pernambuco, 675 fathoms; Simon's Bay, South Africa, 150 fathoms; and four Stations in the South Pacific, 38 to 210 fathoms, the finest specimens being from off Raine Island, Torres Strait, 155 fathoms.

It is a common fossil of the later Mesozoic formations, occurring in various deposits of the Cretaceous period, in France, Germany, Bohemia, England, and Ireland (d'Orbigny, Reuss, Wright). It is found also in beds of Middle Tertiary age in Germany and Hungary (Reuss, Hantken).

*Gaudryina scabra*, n. sp. (Pl. XLVI. fig. 7, *a. b.*).

*Gaudryina pupoides*, Brady, 1870, Ann. and Mag. Nat. Hist., ser. 4, vol. vi. p. 300, pl. viii. fig. 5.

Test elongate, tapering, somewhat compressed; oral end broad and rounded, aboral extremity narrow, and obtusely pointed; lateral edges thick and rounded. Triserial portion small but distinct; biserial segments numerous, about five in each row, slightly inflated; aperture a simple arched fissure at the inner margin of the final segment, on its line of union with the penultimate. Texture arenaceous; colour brown. Length,  $\frac{1}{2}$ th inch (2 mm.).

This, when well developed, is a large and striking variety, not differing materially in general contour from *Gaudryina pupoides*, but readily distinguished by the brown colour and rough arenaceous structure of the walls. The aperture is a simple Textularian fissure, without lip or border.

In a paper on brackish-water Foraminifera, published several years ago (*loc. cit.*), I figured, under the name *Gaudryina pupoides*, a minute thin-shelled arenaceous specimen obtained from Montrose Basin, which there can be little doubt is a starved example of the present species.

*Gaudryina scabra* has only been taken at two Challenger Stations, not far apart, namely:—off Sombrero Island, 450 fathoms, and off Culebra Island, 390 fathoms.