

are depressed at both umbilici (fig. 3), others are umbonate at one or both (fig. 2); sometimes the earlier convolutions are visible to a nearly equal extent on both faces; sometimes, on the other hand, they are nearly involute on the inferior side, though the shell retains its bilateral symmetry, as in Reuss's figure. The coarse perforation of the shell-wall is usually more conspicuous on the inferior than on the superior face.

Good recent examples of *Anomalina ammonoides* were taken at a single Station in the North Atlantic, off Bermuda, 435 fathoms; but with this exception, so far as the Challenger collections are concerned, the record of its occurrence is limited to the South Pacific. The list comprises two localities near the Fiji Islands, depth 210 and 1350 fathoms respectively; another off the west coast of New Zealand, 275 fathoms; and a fourth in Humboldt Bay, Papua, 37 fathoms. It has been observed by Parker and Jones in soundings from the Red Sea, 372 to 678 fathoms; in anchor-muds from Bombay and Hong Kong, in shore sands from Melbourne; and in material from the Abrolhos Bank, 260 to 940 fathoms. The *Rotalina lamarckiana* of d'Orbigny (Foram. Canaries, p. 131, pl. ii. figs. 13-15), which was obtained from sand collected on the shores of Teneriffe, is scarcely separable from the present species.

In the fossil condition it is common throughout the Cretaceous system; it is met with again in the London Clay, and identical or very closely allied forms occur in microzoic formations of almost every subsequent geological age.

*Anomalina grosserugosa*, Gümbel, sp. (Pl. XCIV. figs. 4, 5).

*Truncatulina grosserugosa*, Gümbel, 1868, Abhandl. d. k. bayer. Akad. Wiss., II. Cl., vol. x. p. 660, pl. ii. fig. 104, *a.b.*

„ „ Hantken, 1875, Mittheil. Jahrb. d. k. ung. geol. Anstalt, vol. iv. p. 74, pl. ix. fig. 6, *a.b.*

„ *granosa*, Id. Ibid., p. 74, pl. x. fig. 2, *a.b.c.*

The test of this species presents a smaller number of chambers in each convolution than that of its near ally *Anomalina ammonoides*; it is also relatively thicker and less regularly built. The walls are coarsely perforated, but have fewer pores on the superior than on the inferior side.

Recent specimens of *Anomalina grosserugosa* have been obtained at four Stations in the North Atlantic, the depths ranging from 450 to 1000 fathoms; at three Stations in the South Atlantic, 420 to 1415 fathoms; at two in the South Pacific, 610 and 2160 fathoms; and at two in the North Pacific, 345 and 2050 fathoms respectively.

As a fossil the form occurs in the Eocene of the Bavarian Alps (Gümbel), and of the London Basin (Brady); and in the *Clavulina-szabó* formation of Hungary (Hantken). D'Orbigny figures a very similar variety from the Miocene of Baden, near Vienna, under the name *Anomalina badenensis* (For. Foss. Vien., p. 171, pl. x. figs. 1-3).