

catulina and *Anomalina*, which are only conceived as subordinate divisions of a single group, is therefore completely justified."¹

It is impossible from these definitions to draw any accurate idea as to what forms should be included in the sub-genus; nevertheless, from the figures of the various species that have been described, a series may be selected of which *Anomalina rotula*, d'Orb. (For. Foss. Vien., p. 172, pl. x. figs. 10-12) represents the extreme modification in one direction, and *Anomalina coronata*, P. and J., that in the other; the distinctive features of which are the nearly equilateral development of the test, and the more or less evolute character of both faces of the spire. In shape the forms referred to are either somewhat biconvex, nearly flat, or more or less biconcave; and in point of habit the shell is never adherent. It appears better that the term *Anomalina* should be restricted to the sub-symmetrical, partially evolute varieties, leaving to *Truncatulina* all those which are involute on either one or both sides. The most important additions to the series that this arrangement entails are *Planorbulina ammonoides*, a near approach to which is found in d'Orbigny's *Anomalina austriaca*, and *Planulina ariminensis*, which exemplifies the complanate modification of the same typical structure.

Anomalina ammonoides, Reuss, sp. (Pl. XCIV. figs. 2, 3).

- Rosalina ammonoides*, Reuss, 1845, Verstein. böhm. Kreid., pt. 1, p. 36, pl. xiii. fig. 66; pl. viii. fig. 53.
- „ „ Id. 1850, Haidinger's Naturw. Abhandl., vol. iv. p. 36, pl. iv. fig. 2.
- Nonionina bathyomphala*, Id. 1862, Sitzungsab. d. k. Ak. Wiss. Wien, vol. xlvi. p. 95, pl. xiii. fig. 1, a, b.
- Rosalina weinkauffi*, Id. 1863, Ibid. vol. xlvi. p. 68, pl. viii. fig. 97.
- „ *maorica*, Stache, 1864, Novara-Exped., geol. Theil, vol. i. p. 282, pl. xxiv. fig. 32.
- „ *orbiculus*, Id. Ibid. p. 285, pl. xxiv. fig. 34.
- Planorbulina ammonoides*, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 379.
- Discorbina ammonoides*, Reuss, 1865, Sitzungsab. d. k. Ak. Wiss. Wien, vol. lii. p. 456, No. 5.
- Rotalia capitata*, Gümbel, 1868, Abhandl. d. k. bayer. Akad. Wiss., II. Cl., vol. x. p. 653, pl. ii. fig. 92.
- Rotalia ammonoides*, Id., 1870, Sitzungsab. d. k. bayer. Akad. Wiss., p. 283.
- Planorbulina (Anomalina) ammonoides*, Jones and Parker, 1872, Quart. Journ. Geol. Soc., vol. xxviii. p. 106; table, p. 109.
- „ *ammonoides*, Reuss, 1874, Das Elbthalgebirge in Sachsen, 2^{ter} Theil, p. 114, pl. xxiii. fig. 9.

The nautiloid aspect of the test is perhaps a more constant and more noticeable feature of *Anomalina ammonoides* than of any other member of the group. The shell is generally much compressed, and nearly equally convex on the two sides; the peripheral edge is round, and the aperture is placed almost symmetrically in the median line. In certain characters, however, the species betrays a tendency to variation. Some specimens

¹ Das Elbthalgebirge in Sachsen, 1874, 2^{ter} Theil, p. 113.