

Bolivina beyrichi, Reuss (Pl. LIII. fig. 1).

- Bolivina beyrichi*, Reuss, 1851, Zeitschr. d. deutsch. geol. Gesellsch., vol. iii. p. 83, pl. vi. fig. 51.
 " " Hantken, 1875, Mittheil. Jahrb. d. k. ung. geol. Anstalt, vol. iv. p. 64, pl. vii. fig. 11.
 " " Terrigi, 1880, Atti dell' Accad. Pont., ann. xxxiii. p. 198, pl. ii. fig. 44.

The *Bolivina beyrichi* of Reuss is closely allied to *Bolivina gramen* (*Vulvulina gramen*, d'Orbigny,—Foram. Cuba, p. 139, pl. i. figs. 30, 31). The principal grounds of distinction are the somewhat narrower, more slender contour of Reuss's species, and the greater depth and subtriangular outline of its later chambers, but these are at best very variable characters. In both organisms the inferior peripheral angles of the segments project, and are drawn out into sharp points which are directed towards the initial end of the test. This peculiarity constitutes their most striking feature; and it may be a question whether it is worth while to preserve a "specific" separation between two forms so similar in their salient characters.

Bolivina beyrichi occurs at the following Stations:—off the Canaries, 600 fathoms and 1125 fathoms; off Sydney, 410 fathoms; off the Ki Islands, 129 fathoms and 580 fathoms; off the Philippines, 95 fathoms; on the *Hyalonema*-ground, south of Japan, 345 fathoms; and on the Pacific shores of Patagonia, 120 fathoms and 345 fathoms.

In the fossil condition, it is a frequent constituent of the Septaria-clays of Germany (Reuss), and of the lower *Clavulina-szabói* beds of Hungary (Hantken), as well as of the later Tertiary sands of the neighbourhood of Rome (Terrigi).

Bolivina beyrichi, var. *alata*, Seguenza (Pl. LIII. figs. 2-4).

- Vulvulina alata*, Seguenza, 1862, Atti dell' Accad. Gioenia, ser. 2, vol. xviii., p. 113, pl. ii. figs. 5, 5a.
Bolivina beyrichi, var. *carinata*, Hantken, 1875, Mittheil. Jahrb. d. k. ung. geol. Anstalt, vol. iv. p. 64, pl. vii. fig. 12.
 " " " Terrigi, 1880, Atti dell' Accad. Pont., ann. xxxiii., p. 198, pl. ii. figs. 43, 45.

As the name implies, this is a modification of *Bolivina beyrichi*, characterised by the thinning out of the lateral margins of the test, so as to form a well-defined peripheral wing or keel. The entire test is somewhat broader proportionately than that of the type, and the wing is of variable form and dimensions.

Such shells are often met with, both in the recent and fossil condition, wherever the typical form is plentiful. Good specimens have been noticed at the following amongst other localities:—off Aru Island, 800 fathoms; off the Philippine Islands, 95 fathoms; off Raine Island, 155 fathoms; off Kandavu, 210 fathoms; and off Cezimbra, south of Lisbon, 50 fathoms.