

*Vaginulina margaritifera*, Batsch, sp. (Pl. LXVI. fig. 16).

*Nautilus (Orthoceras) margaritiferus*, Batsch, 1791, Conchyl. des Seesandes, p. 3, pl. iv. fig. 12, a-c.

*Vaginulina elegans*, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 257, No. 1;—Modèle, No. 54.

„ *ligata*, Reuss, 1864, Sitzungsber. d. k. Ak. Wiss. Wien, vol. 1. p. 457, pl. i. fig. 11.

„ *italica*, Costa, 1855, Mem. Accad. Sci. Napoli, vol. ii. p. 145, pl. ii. fig. 15.

Batsch's *Nautilus margaritiferus* leaves nothing to be desired as a representative of those varieties of *Vaginulina legumen* which have the septal lines thickened and embossed by exogenous deposit of clear shell-substance. The group is equally well typified by d'Orbigny's Modèle No. 54, *Vaginulina elegans*, but the former name has the priority. The primordial chamber of such specimens is frequently armed with a stout spine, as shown in Costa's figure (*loc. cit.*)

Neither in the recent nor the fossil condition are the limbate varieties of the genus so common as those with non-limbate sutures. The former seldom occur except in company with the typical *Vaginulina legumen*, and there are no data by which their separate distribution can be satisfactorily determined.

*Vaginulina bruckenthali*, Neugeboren (Pl. LXVI. figs. 18, 19).

*Vaginulina bruckenthali*, Neugeboren, 1856, Denkschr. d. k. Akad. Wiss. Wien, vol. xii. p. 98, pl. v. fig. 10, a-d.

The broad compressed specimens, figs. 18, 19, with thick clear septal lines, and with one or, more frequently, two short pointed spines at the primordial end, correspond well with Neugeboren's drawings of this strikingly distinct variety.

*Vaginulina bruckenthali* has only been found living at a single locality,—off Raine Island, Torres Strait, 155 fathoms.

The fossil specimens which serve as the basis of the original description were obtained from the Miocene of Ober-Lapugy, in Transylvania.

*Vaginulina linearis*, Montagu, sp. (Pl. LXVII. figs. 10-12).

*Nautilus linearis*, Montagu, 1808, Test. Brit., Suppl., p. 87, pl. xxx. fig. 9.

*Marginulina vaginella*, Reuss, 1851, Zeitschr. d. deutsch. geol. Gesellsch., vol. iii. p. 152, pl. viii. fig. 2.

*Vaginulina striata*, Costa, 1856, Atti dell' Accad. Pont., vol. vii. p. 182, pl. xvi. fig. 17.

*Dentalina legumen*, var. *linearis*, Williamson, 1858, Rec. For. Gt. Br., p. 22, pl. ii. figs. 46-48.

*Vaginulina linearis*, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 343, pl. xiii. figs. 12, 13.

„ *eocena*, Gümbel, 1868, Abh. d. k. bayer. Akad. d. Wiss., II. Cl., vol. x. p. 632, pl. i. fig. 48, a. b.

*Cristellaria dilute-striata*, Id. Ibid., p. 639, pl. i. fig. 69.

*Vaginulina linearis* has the same morphological characters as the typical *Vaginulina legumen*, but the surface of the test is more or less decorated with raised longitudinal