

The *Oryzaria boscii* of DeFrance, as rendered by d'Orbigny in Model No. 50, is a better representative of the common recent forms of *Alveolina* than either the ovoid *Miliolites sabulosus* of Montfort or the somewhat attenuated *Alveolina quoyi* of the "Tableau Méthodique"; but between the stout form with rounded extremities and the elongate subcylindrical varieties, every gradation of contour is to be met with. Under favourable conditions recent specimens of this species attain a length of half an inch (12 or 13 mm.), and shells but little smaller than this are not uncommon. As previously stated, the internal structure of recent specimens is of the complex type, whilst fossil shells with the same external characters have for the most part undivided chamberlets.

The geographical distribution of *Alveolina boscii* is confined to seas of warm latitudes, and scarcely exceeds the limits of the tropical zone; but at certain depths within that area, whether in the Eastern or Western Hemisphere, it is one of the most plentiful and most generally diffused of the larger Foraminifera. It most affects the shallow water of coral-reefs, and becomes rare at greater depths than thirty fathoms. It nevertheless occurs in two deeper Challenger dredgings, namely, at Stations 260A, Honolulu Reefs, and 185, off Raine Island, depth 40 fathoms and 155 fathoms respectively, but in both cases the specimens are of very small size.

In the fossil state *Alveolina boscii* is found from time to time throughout the Tertiary epoch, its earliest appearance being in the Eocene of the Paris Basin and in the Bracklesham Beds of Sussex and Hampshire.

Alveolina melo, Fichtel and Moll, sp. (Pl. XVII. figs. 13–15).

Nautilus melo, Fichtel and Moll, 1803, Testac. Micr., p. 118, pl. xxiv.

Borelis melanoïdes, Montfort, 1808, Conch. Systém., vol. i. p. 171, genre xliii^o.

Clausulus indicator, Id. Ibid. p. 178, genre xlv^o.

Melonites sphaerica, Lamarck, 1816, Encycl. Méth., pl. cccclxix. fig. 1, a.-f.

„ *sphaeroïdea*, Id. Ibid. pl. cccclxix. fig. 1, g, h.

Alveolina melo, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 306, No. 2.

Melonia costulata, Eichwald, 1830, Zool. Spec., vol. ii., pl. ii. fig. 1.

Alveolina pulchra, d'Orbigny, 1839, Foram. Cuba, p. 85, pl. viii. figs. 19–22.

„ *hauerii*, d'Orbigny, 1846, For. Foss. Vien., p. 148, pl. vii. figs. 17, 18.

„ *costulata*, Erchwald, 1853, Leth. Rossica, Dern. Période, p. 8, pl. i. fig. 4.

Borelis melo, Ehrenberg, 1854, Mikrogeologie, pl. xxxvii. (sect. x. 10), fig. 1, a.-f.

Alveolina melo, Parker and Jones, 1861, Ann. and Mag. Nat. Hist., ser 3, vol. viii. p. 164.

„ „ Moebius, 1880, Foram. Mauritius, p. 79, pl. iv. figs. 2, 3.

The spheroidal or broadly elliptical forms of *Alveolina*, typified by *Alveolina melo*, are much less common in the recent state than the elongate varieties. As already described, their internal structure is simpler than that of their living congeners, and in this respect they more nearly resemble some of the fossil species, especially those abounding in the limestones of the Nummulitic period or somewhat later.