In point of internal structure the genus furnishes examples of two somewhat distinct modes of growth corresponding to the simple and complex types of *Orbitolites*. In the simple type, to which the small, spheroidal, recent form and most of the fossil species pertain, the long arched chambers are divided by vertical septa into chamberlets, and the normal aperture consists of a line of bordered pores on the outer face of the terminal segment, corresponding in number to the chamberlets into which the segment is partitioned. Occasionally there is a second or accessory row of smaller pores. This simple type is easily understood by its analogy to a nautiloid *Orbiculina* drawn out at the two umbilici.

In the complex type, of which the common recent *Alveolina boscii* furnishes the best example, the chambers are not only divided by vertical septa, as before described, but the individual chamberlets are subdivided by horizontal partitions into a number of parallel layers or storeys; and, instead of a single row of orifices, the face of the terminal segment is studded with numerous pores, disposed in more or less regular lines corresponding with the subdivisions of the chamber-cavities. A comparison of the longitudinal and transverse sections (Pl. XVII. figs. 14, 15, with figs. 11, 12), or still better, a reference to Dr. Carpenter's larger and more diagrammatic drawings, will show at a glance the distinctive features of the two types of structure.

Carter has described a Tertiary form, *Alveolina meandrina*, the shell of which exhibits traces of a canal system in the early stages of growth; but he suggests at the same time that the species is probably more nearly related to *Nummulites* than to *Alveolina*.[1]

So far as at present known, the geographical distribution of the genus is limited to the shallow water of tropical seas, and in such localities it is abundant and widely diffused.

From a geological point of view, *Alveolina* is best known by its Tertiary representatives; nevertheless d'Orbigny, in the Prodrome de Paléontologie, enumerates two species from the Cenomanian or Middle Cretaceous rocks of the south of France, and one from the Turonian or Upper Cretaceous beds of the same or an adjoining region. Fossil specimens are found in some abundance in the Nummulitic Limestones of France (Pyrenees), Spain, Persia, and Northern India; in the Eocene beds of the neighbourhood of Paris and of the south of England (Bracklesham), and in the Miocene of various parts of Austria and Transylvania.

Alveolina boscii, Defrance, sp. (Pl. XVII. figs. 7–12).

Alveolites larva, (?) Defrance, 1816, Dict. Sci. Nat., vol. i. p. 137.
Oryzaria boscii, Id. 1820, Ibid. vol. xvi. p. 104.
Alveolina boscii, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 306, No. 5;—Modèle, No. 50.
„ *elongata*, Id. Ibid. p. 307, No. 6.
„ *quoii*, Id. Ibid. p. 307, No. 7.
„ *longa*, Czjzek, 1847, Haidinger's Nat. Abhandl., vol. ii. p. 143, pl. xii. figs. 34, 35.
„ *boscii*, Moebius, 1880, Foram. Mauritius, p. 79, pl. iii. figs. 13–15; pl. iv. fig. 1.

[1] *Ann. and Mag. Nat. Hist.*, 1861, ser. 3, vol. viii. p. 381, pl. xvii. fig. 4.