

composed of a double tier of chamberlets, one above, the other below, and the free inter-communication of the sub-segments of each annular chamber is still maintained by a single annular gallery; but there are two series of radial passages (instead of one) given off from it, which lead respectively to the upper and lower tier of chamberlets of the succeeding annulus. The double row of marginal pores, already alluded to as visible on the outermost segment, are the openings of these radial passages. This arrangement of the parts will be readily understood by reference to the annexed diagram of the transverse section of the shell. (Woodcut, fig. 7, b.)

The principal external features by which *Orbitolites duplex* may be distinguished from *Orbitolites marginalis* are the annular form and concentric arrangement of the segments from the commencement, and the double row of peripheral orifices; whilst the latter character, together with the rounded outline of the chamberlets as seen on the two faces of the disk, affords a ready means of separation from *Orbitolites complanata*. In the complex type, as will presently be explained, the chamberlets, especially those of the later annuli, are more or less elongated in the radial direction, and the marginal pores are multiplied indefinitely.

It is almost impossible with our present knowledge to lay down the area of the geographical distribution of *Orbitolites duplex*, as distinct from that of the allied forms with which it has hitherto been specifically associated, and equally difficult to ascertain accurately the limits of its occurrence in the fossil condition. To do either would necessitate the re-examination of specimens from all the various localities at which the genus is known to exist. The species is found most plentifully in the shallow water of tropical seas. It is a prominent form in the Red Sea, where it was originally discovered by Ehrenberg, and it occurs in the Mediterranean, at least as far north as the coast of Sardinia. Well-marked specimens have also been obtained from shore-pools in the Cape de Verde Islands.

If, as Dr. Carpenter supposes, the *Orbulites macropora* of Lamarck (*Orbitolites macropora*, Goldfuss), is referrible to the same species, it is probable that its geological range in Tertiary times is analogous to that of *Orbitolites complanata*.

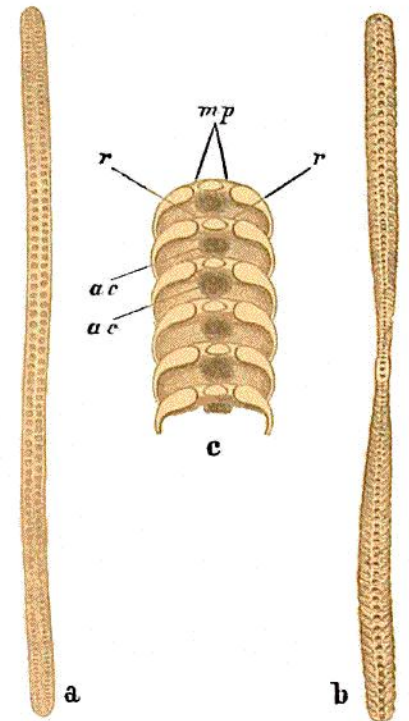


FIG. 7.—*Orbitolites duplex*, Carpenter.
 a. Peripheral aspect, showing the double row of marginal pores; magnified 12 diam.
 b. Transverse section; magnified 12 diam.
 c. Portion of the same; magnified 50 diam.
 m.p. Marginal pores.
 r.r. Radial stolon passages.
 ac, ac, Annular canals.