

diameter of Lamarck's specimens is stated by him at only 2 mm., or about 0.08 inch; but that of the Fijian specimens ranges to 0.2 inch, or somewhat more. The form of the complete disks (Pl. III. fig. 1), when their growth has not been interrupted by injury, is very regularly circular; and their surface, in all but their central portion, is marked by concentric circles that divide it into annuli having a pretty constant breadth of  $\frac{1}{100}$ th inch, each of them marked at regular intervals by dark punctations. When the surface of a peripheral portion of the disk is viewed by reflected light under a higher magnifying power (Pl. III. fig. 3), each of these punctations shows itself as a dark spot surrounded by a lighter space, which is often somewhat elevated; and if the margin of the disk is viewed obliquely, as at *a*, these circles are seen to be the summits of rows of short cylindrical columns, whose projection gives a slight "fluting" to the edge of the disk. When the edge of the disk is turned directly towards the eye (as at fig. 4, *a*), a single marginal pore is seen in each of the depressions between the columnar projections: this pore is usually elongated vertically, so as to form a fissure; and sometimes, when the margin of the disk is unusually thick, as at *b*, the fissure is crossed by a shelly bridge, dividing it into two pores. This, however, is not a real duplication of the pores, such as that which is seen at the margin of the species to be presently described (fig. 13). The central portion of the disk (fig. 2) resembles that of *Orbitolites tenuissima* in the excentricity of its "nucleus," and the incompleteness of the rows of chamberlets first developed around it; presenting in this stage of its growth exactly that conformity to the *spiral* plan, which is shown in the third or "orbicoline" stage of the preceding, and the same early approach to the *cyclical*, which is made by the extension of each new row of chamberlets beyond its predecessor, so that the two ends of the eighth or ninth row meet on the opposite side of the nucleus, forming the first complete annulus.

Although the "nucleus" itself shows more conformity to the Orbitoline than to the Milioline type,—consisting of a rather large primordial chamber nearly surrounded by a circumambient chamber,—yet its character will be presently seen to be most singularly intermediate between the two. Not unfrequently the "orbicoline" centre of the disk is somewhat thicker than the annular portion by which it is immediately surrounded, so as to form a marked projection from its surface. As new annuli are added-on, however, to the exterior of those first formed, and as the vertical thickness of each is usually rather greater than that of its predecessor, the disk as a whole becomes somewhat biconcave.

The marginal thickness of the largest disks I have seen of this species is about 0.006 inch, or about one thirty-fifth of their diameter. The calcareous lamellæ which cover in the ends of the columnar chamberlets, are so thin as to be translucent, and are very easily abraded; so that specimens of this type picked out from shore-sands often have the cavities of their chamberlets laid open, as shown in Pl. III. fig. 7. The amount of solid