

having presented itself which did not bear some evidence of injury of this kind. Where only small portions of the margin are broken away, the next-formed annuli extend themselves along the fractured edge; and thus the cyclical mode of growth is completely maintained, with only a temporary irregularity. In Pl. I. fig. 6, is shown a disk of which more than one-half, together with the "nucleus," had been lost before the production of the last two zones. These have not only been formed, as ordinarily, round the unbroken margin, but have extended themselves along the fractured edge, and have even filled up the space originally occupied by the "nucleus"; and the annuli being thus completed, the disk will continue to grow on the cyclical plan, and even (as is shown in the like examples of *Orbitolites complanata*, Pl. VIII.) may recover in great degree its circular shape. But even a mere fragment broken away from the margin of a disk may suffice to originate a new one, as shown in Pl. I. fig. 7; the form characteristic of the type being completely restored. Owing to the transparence of this specimen, I have been able to assure myself that *every part* of the margin of this fragment—whether broken or unbroken, peripheral, central or lateral—has contributed to the formation of the first new complete annulus, by which the foundation was laid of the subsequent regular series of concentric zones; thus clearly indicating that a sarcodic extension took place from every chamberlet laid open by the fracture, as well as from the normal pores of the last septal plane, and that these extensions coalesced to form a continuous ring, as in the formation of the ordinary succession of concentric annuli. It is most interesting to observe that the zone of chamberlets to which this sarcodic ring gave origin is formed upon the *perfected* type, without any reversion to the earlier "peneropline" stage.

*Geographical and Bathymetrical Distribution.*—So far as is at present known, *Orbitolites tenuissima* inhabits only the North Atlantic Ocean and the seas in communication with it. The first complete specimens of this type were obtained in the "Porcupine" dredgings of 1869, at depths of from 630 to 1443 fathoms, between the north-west of Ireland and Rockall Bank. In the "Porcupine" expedition of 1870, however, it was brought up from a bottom of only 64 fathoms, in Setubal Bay on the coast of Portugal, and afterwards from a shallow bottom within the Mediterranean, near Carthage. That it is an inhabitant of other parts of the Mediterranean I then inferred from having detected fragments of it in the Foraminiferal dredgings made at 250 fathoms' depth by Prof. Edward Forbes and Lieut. (now Admiral) Spratt in the *Ægean*, in 1842; and it is stated by the Rev. A. M. Norman, in Dr. J. Gwyn Jeffreys's Report on the "Valorous" cruise, that it has been dredged by the Marquis da Monterosato, at from 100 to 200 fathoms' depth, off the coast of Sicily. That it might extend far to the north, would be expected from its capability of bearing the low temperature of 37° Fahr., which prevails over the deep bottom from which it was first brought up; and this expectation was verified by its presenting itself in one of the