Whether such disks constitute a distinct *race*, or are merely *individuals* which have begun life as "starvelings" that do not inherit the characteristic vigour of the species, it can scarcely, I think, be doubted that they represent an ancestral form in which the "simple" *Orbitolites* was undergoing evolution into the "complex"; the early growth of *every* disk in that stage having probably been simple, as we still find it to be in *some*. In those, on the other hand, in which the perfected type has fully established itself, the earlier "simple" Orbitoline stage drops out, as the Peneropline and Orbiculine stages had previously done; so that the "complex" plan of Orbitoline growth now immediately succeeds the Milioline, in all those forms in which the primordial segment carries with it the full developmental capacity of its predecessor. It is not a little curious, however, that in the marginal annuli of even this highest type, a *reversion* to the undivided Peneropline condition should not unfrequently show itself, in an almost entire want of subdivision of the annular zones into chamberlets; the interzonal septa, however, being formed as usual, and being marked by multiple ranges of pores.

Geographical and Bathymetrical Distribution.—So far as is at present known, *Orbitolites complanata* inhabits only the shallow waters near shores, or on the slopes of reefs, in tropical or sub-tropical seas. It has been met with abundantly in such situations on the coast of Australia, on the Fiji and other reefs in the Pacific Ocean, and in the Philippine Sea; but, notwithstanding the abundance of *Orbitolites marginalis* and *Orbitolites duplex* in the Red Sea, this most highly developed type has not hitherto been found there. As already stated, its largest and most exuberant forms are found in surface-water; whilst it is among those brought up by the dredge from a deeper part of the littoral zone, that those "sub-typical" specimens occur in largest proportion which in the earlier stage of their growth present the "simple" type of formation.

Geological Distribution.—As already stated, the specimens upon which not only the *species* but the *genus* is constituted belong to the early Tertiary period: the Calcaire Grossier of the Paris basin, and corresponding (Middle Eocene) formations elsewhere, containing *Orbitolites complanata* in such abundance, that the rock in some situations is chiefly composed of its disks. These are often found 0·8 inch in diameter, thus equalling in size all save the very largest of those brought from the Fiji reefs. *Orbitolites complanata* seems also to occur in the Nummulitic Limestone of the north-west of India; but from the external similarity of its disks to those of *Orbitoides*, which genus also flourished at the same period, they cannot be certainly distinguished by the imperfect descriptions of them hitherto given. This difficulty of identification, which applies also to the genus *Orbiculina*, prevents it from being certainly stated at what Geological period *Orbitolites complanata* made its first appearance. It is reported as