

their very close alliance to the fossil genus *Orbitolites*, originally established by Lamarck in his *Système des Animaux sans Vertèbres* (1801), on the basis of a well-known fossil of the Calcaire Grossier, which he placed among his "Polypiers Foraminés," between *Lunulites* and *Millepora*, giving the following as its diagnostic characters:—"Polypiarium lapideum, liberum, orbiculare, planum seu concavum, utrinque vel margine porosum, nummulitem referens. Pori minimi, adamussim dispositi, conferti, interdum vix conspicui." These bodies, he says, are distinguished from Nummulites by the opening of their marginal pores, and by the absence of any spiral arrangement in their minute chambers or cells. In his *Histoire Naturelle des Animaux sans Vertèbres* (1816-1822), which ranks as a second edition of the preceding, Lamarck altered the name of this type from *Orbitolites* to *Orbulites*; but as the latter designation had been previously applied to a Molluscan genus, the original one was restored by M. Milne-Edwards, in the posthumous edition of Lamarck's great work which he edited in conjunction with M. Deshayes. Under one or the other of these names, the genus was accepted by almost every systematist of repute as a Zoologist or a Palæontologist; but no one gave any account either of the internal structure of the calcareous disk, or of the animal that forms it; or made any essential modification in Lamarck's definition of the genus, which all left in the place he had assigned to it:—even Dujardin, who first recognised the true zoological position of the FORAMINIFERA (which had been ranked, up to his time, as a peculiar group of Cephalopod Mollusks), speaking unhesitatingly of the Orbitolite-disk as a polypary, and of the animals which formed it as polypes. It seems to have been by Defrance (*Dict. des Sci. Nat.*, tom. xxxvi., 1825, pp. 294, 295) that the existence, on the coast of New Holland, of a recent type closely resembling the fossil *Orbitolites* of the Paris basin, was first publicly stated, probably on information obtained from MM. Quoy and Gaimard.

The existence of a recent form of *Orbitolites* of far smaller size and much simpler structure than the fossil *Orbitolites complanata* had, however, been previously indicated by Lamarck in his second edition; where he defines it under the specific name *marginalis*, as *Orbitolites utrinque plana, margine poroso*, speaking of it as found attached to fuci, corallines, &c., in the Mediterranean. This type was carefully studied by M. de Blainville, who expressed himself (*op. cit.*, p. 412) as almost convinced that these small calcareous disks are not true polyparies, but internal pieces, increasing at their circumference. It is evident, he says, that there are no true polype-cells; but he speaks of "deux plans de locules qui occupent le bord," and says that "tout le reste est couvert d'une légère crôte crétacée, qui ferme les anciens pores." Being well acquainted with the Mediterranean specimens to which these remarks apply, I can well understand how M. de Blainville came to overlook the single row of true *marginal* pores, and to regard as genuine "les deux plans de locules" which they very frequently present, but which are the result of the abrasion of their edges. That Lamarck's little *Orbitolites marginalis*