Fossil specimens corresponding with the forms under notice have been observed in the Eocene deposits of the Paris Basin (Terquem), and in the Upper Eocene of the Swiss Alps (Kaufmann); and they abound in the Miocene and Pliocene strata of Austria, the south of France, the south-east of Spain, Italy, Malta, Costa Rica, Jamaica, San Domingo, Trinidad, Maryland, Virginia, South Carolina, Alabama, Australia, and New Zealand.

## Operculina, d'Orbigny.

Nautilus, pars, Gronovius [1781], Schroeter, Gmelin.

Lenticulites, pars, Defrance [1822], Basterot.

Operculina, d'Orbigny [1826], Bronn, Michelotti, Reuss, Leymerie, Cornuel, Rütimeyer, d'Archiac and Haime, Carter, Parker and Jones, Carpenter, Brady, M. Sais, Kaufmann, Hantken, &c.

Amphistegina, pars, d'Orbigny [1826], Reuss. Nonionina, pars, Williamson [1852], Fischer. Nummulina, pars, Parker and Jones [1865].

The test of the typical Operculina is a thin complanate disk, composed of three or four broad convolutions, symmetrically arranged, and equally visible on both faces. central portion of the disk is usually somewhat thicker than the outer whorls, and not unfrequently almost umbonate; the earlier convolutions are more or less embracing, the later whorls evolute. The segments are usually very numerous, of gradually increasing size, and typically very short in the direction of growth as compared with their width radially; they are for the most part produced on a uniform plan, but near the finish are often irregular, both as to shape and size (Pl. CXII. figs. 3, 4, and 6). The exterior is sometimes smooth; but more frequently either the sutures, or the surface of the chambers, or both, are ornamented with exogenous granules, papillæ, or tubercles, which as a rule are more strongly developed near the centre than on the later whorls; and in the small, northern variety of the genus, the septal lines and periphery are distinctly The general aperture is a straight or slightly curved fissure at the inner margin of the final segment, close to the periphery of the previous convolution; but the test has frequently also a number of secondary orifices, in the form of small circular pores on the face of the terminal segment. The septa are double, and the skeleton is furnished with a system of canals, the general features of which are analogous to that of Nummulites.

Excepting the genus *Nummulites*, there is probably no foraminiferal type that has been the subject of so large an amount of careful investigation as *Operculina*, and a very complete exposition of what is known of its structure and organisation is given in the Introduction to the Study of the Foraminifera.

<sup>&</sup>lt;sup>1</sup> See Williamson, 1852, Trans. Micr. Soc. Lond. (1850), ser. 1, vol. iii. p. 105 [Nonionina.] Carter, 1852, Ann. and Mag. Nat. Hist., ser. 2, vol. x. p. 161. Carpenter, 1859, Phil. Trans. (1858), p. 12;—1862, Introd. Foram., p. 161.