Legion III. NASSELLARIA,

vel Monopylea, vel Monopylaria (Pls. 51-98).

Nassellaria (inclusis Spyridinis), Ehrenberg, 1875.

Monopylea, Hertwig, 1879.

Monopylaria, Haeckel, 1881.

Cyrtida et Acanthodesmida, Haeckel, 1862.

Definition.—Radiolaria with simple membrane of the central capsule, which is monaxon or bilateral, and bears on one pole of the main axis a porous area (porochora), forming the base of a peculiar intracapsular cone (podoconus). Extracapsulum without phæodium. Skeleton siliceous, very rarely wanting. Fundamental form originally monaxon, often dipleuric or bilateral.

The legion Nassellaria vel Monopylea, in the extent here defined, was constituted in 1879 by Richard Hertwig in his work Der Organismus der Radiolarien (pp. 133-137). He gave to this large group the rank of an order, and united in it the two families Acanthodesmida and Cyrtida, which I had constituted first in 1862 in my Monograph (pp. 237, 265, 272); but he added, too, as a third family the Plagiacanthida, united by me with the former. In the first system of Ehrenberg (1847, loc. cit., pp. 53, 54), four families belonging to the Monopylea were enumerated, the Halicalyptrina, Lithochytrina, Eucyrtidina, and Spyridina. He united the three former under the name "Polycystina solitaria," which he afterwards changed into Nassellaria (1875, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 157).

In my Monograph of the Radiolaria (1862, pp. 265-345) forty-four genera of Nassellaria were enumerated (six Acanthodesmida and thirty-eight Cyrtida), whilst the total number of genera in the whole class of Radiolaria at that time amounted to one hundred and thirteen. But owing to the astonishing number of new and interesting forms of this legion which I afterwards detected in the collection of the Challenger, in 1881 I distinguished in my Prodromus not less than three hundred and seventeen genera. These were disposed in five large main groups, retained in the present Report, with twenty-six families, viz., (1) Plectoidea (with three families), (2) Stephoidea (with four families), (3) Spyroidea (with four families), (4) Botryodea (with three families), and (5) Cyrtoidea (with twelve families). The first two groups have an incomplete or rudimentary skeleton, and may be united in the order Plectellaria, whilst the other three families possess a complete latticed shell, and