

## Order VI. CYRTELLARIA, Haeckel, 1881.

*Definition.*—NASSELLARIA with a complete lattice-shell enveloping the central capsule.

## Suborder I. SPYROIDEA, Haeckel.

*Spyridina*, Ehrenberg (*pro parte*), 1847, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 54.

*Zygocyrtida*, Haeckel, 1862, Monogr. d. Radiol., p. 291.

*Zygocyrtida*, Bütschli, 1882, Zeitschr. f. wiss. Zool., vol. xxxvi. p. 501.

*Acanthodesmida*, R. Hertwig, 1879, Organismus der Radiol., p. 68.

*Spyrida* vel *Spyroidea*, Haeckel, 1881, Prodrömus, p. 440.

*Definition.*—NASSELLARIA with a complete lattice-shell, exhibiting constantly a bilocular cephalis with a sagittal constriction.

The suborder Spyroidea, and the two following closely allied suborders, Botryodea and Cyrtodea, represent together that large group of Radiolaria which I first described in my Monograph (1862, pp. 272, 280) as the family Cyrtida, but afterwards as a separate order (or subregion) under the name Cyrtellaria (1883, Jena. Sitzungsber., Feb. 16, p. 18). This group comprises all those MONOPYLEA or NASSELLARIA which possess a complete lattice-shell, whilst the preceding Plectellaria never develop a perfect fenestrated shell enveloping the central capsule. The Spyroidea differ from the other Cyrtellaria (Botryodea and Cyrtodea) in the bilocular shape of the cephalis, which is bisected by the sagittal ring and a corresponding longitudinal constriction into two symmetrical halves.

The Spyroidea appear in the first system of Polycystina of Ehrenberg (1847, *loc. cit.*, pp. 53, 54) as the fourth of his seven families, under the name Spyridina, with the following definition:—"Testæ nucleo destitutæ (associatæ et coalitæ); cellulæ binæ clathratæ, nucis forma amplæ, strictura longitudinali levius discretæ." Ehrenberg united them with his "Polycystina composita or SPUMELLARIA" and separated them from the closely allied "Polycystina solitaria or NASSELLARIA." He distinguished among them five genera, two of which have no external appendages (*Dictyospyris* and *Pleurospyris*), whilst the other three possess spiny or lamellar appendages (*Ceratospyris*, *Cladospyris*, and *Petalospyris*). These five genera and the accompanying definitions were also repeated in the same terms in the last system of Ehrenberg (1875, *loc. cit.*, p. 157). In my Monograph (1862, pp. 280, 291) the Spyroidea are enumerated as a sub-