may be united as Cyrtellaria. The former correspond to the Acanthodesmida, the latter to the Cyrtida in my Monograph.

The character common to all MONOPYLEA or NASSELLARIA, which separates them from all other Radiolaria, was first recognised by Richard Hertwig in 1879, and consists in the singular structure of the monaxonian central capsule, bearing on the basal pole a peculiar porous area or operculum, the "Porenfeld;" we call it shortly the "porochora." It represents a circular or elliptical porous plate on the basal pole of the vertical main axis of the central capsule, and bears a peculiar "podoconus" or "Pseudopodien-Kegel," a conical body of singular structure, protruding inside the membrane into the capsule. The pseudopodia arising from this peculiar "podoconus" proceed from the capsule piercing the "porochora," whilst the other parts of the capsule are not perforated.

The MONOPYLEA are therefore "Merotrypasta," like the following fourth legion, the PHÆODARIA or CANNOPYLEA. But in these latter we find on the basal pole of the monaxonian capsule only one single large main opening, prolonged into a peculiar tube, and there is no trace of the typical "podoconus," characteristic of all NASSELLARIA. The latter agree, however, with the former in the possession of a basal opening, serving for the emission of the pseudopodia, and in the monaxonian fundamental form, arising from this structure. Therefore these two legions of "Merotrypasta" exhibit a wider divergence from the ACANTHARIA and SPUMELLARIA, the two legions of "Holotrypasta," in which the central capsule is everywhere perforated by innumerable small pores (compare above, pp. 5, 6, 716).

The Skeleton in all NASSELLARIA consists either of pure silica, or of a peculiar silicate; never of acanthin (as in all ACANTHARIA). The siliceous bars and beams constituting it are invariably solid (as also in the SPUMELLARIA); never hollow (as in the PHÆODARIA). In the small family of Nassellida alone (with the two genera *Cystidium* and *Nassella*) the skeleton is entirely absent. In all other genera of NASSELLARIA the siliceous skeleton is more or less developed; imperfect, or quite rudimentary in the Plectellaria (Plectoidea and Stephoidea), but perfect and forming a regular lattice-shell in the Cyrtellaria (Spyroidea, Botryodea, and Cyrtoidea). The different forms of this skeleton exhibit an extraordinary variety, but may be reduced to a few very simple fundamental forms, or even to a single, most simple original form. The comparative morphology is more interesting, but also more difficult to understand than in any other Radiolaria.

The geometrical fundamental form of the skeleton is in all NASSELLARIA monaxonial, the vertical main axis of the body, which is already indicated by the axis of the central capsule with two different poles, being also expressed constantly in the form of the skeleton. The lower or basal pole of the latter always exhibits a different shape from that of the upper or apical pole. This difference is so striking in nearly all MONOPYLEA, that the two poles may be determined on the first view.