

*The Central Capsule* of the Plectoidea constantly exhibits the peculiar characters of the MONOPYLEA or NASSELLARIA. It is commonly ovate, more rarely ellipsoidal or even spherical, sometimes conical or lentelliptical. The lower or basal pole of its vertical main axis constantly exhibits the characteristic "porochora" (or the area porosa) of the MONOPYLEA, and upon this rests the peculiar "podoconus" (or the pseudopodial-cone) of this legion. On this porochora the central capsule is in immediate connection with the central point of the skeleton, or the horizontal common central rod, from which the radial spines arise. The endoplasm, or the protoplasm of the central capsule (besides the podoconus), contains commonly one large alveole or several small vacuoles, and often pigment-granules. The nucleus is large, spherical or ovate, and exhibits the same character as in all the other MONOPYLEA; it encloses usually a single nucleolus.

The position of the central capsule and its topographical relation to the skeleton offers in the different Plectoidea some important and as yet unsolved problems, which can be answered only by fresh and accurate observations on living specimens. In *Triplagia* and *Triplecta*, where the triangular skeleton lies in a horizontal plane, the vertical main axis of the central capsule is perpendicular to the central point of that supporting triangle. In *Plagiacantha* and *Plectophora*, where the three radial spines correspond to the edges of a flat pyramid, the capsule is enclosed in the pyramidal space of the latter, its basal pole touching the apex; therefore in the normal position of the body the three divergent rays are directed upwards. In *Tetraplagia* and *Tetraplecta* probably the same position is retained, and therefore the fourth free spine, here developed, is probably directed vertically downwards. In *Plagoniscus* and *Plectaniscus*, however, and, moreover, in the closely allied *Plagiocarpa* and the corresponding *Periplecta* (Pl. 91, figs. 5, 10) the position of the central capsule, relative to the skeleton, seems to be inverse, and to agree with that of the Stephoidea (*Cortina*, *Cortiniscus*, &c.) and the Cyrtoidea (*Pteroscenium*, *Clathrocorys*, &c.); the three divergent spines are here directed downwards (as basal feet), whilst the opposite fourth spine is vertically directed upwards (as an apical horn); the capsule rests here upon the tripod, which lies below it, and is inclined with its dorsal face to the apical spine. In the majority of the other Plectoidea the position of the central capsule and its relation to the skeleton are not yet sufficiently observed, and require further accurate researches. Its position seems to be very different in the several genera. The capsule is never perforated by parts of the skeleton; this latter is constantly extra-capsular.

The physiological value of the skeleton, with regard to the central capsule, is different in the Plagonida and Plectanida; in the former it supports, in the latter it encloses the capsule like a shell. In the Nassellida, where no skeleton is developed, the central capsule is quite free and naked, enveloped only by the calymma.