

different kinds of central junction are found. In the simpler case all six radial spines arise from a common central point (*Hexaplagia* and *Hexaplecta*). In the other case the six radial spines arise from the two poles of a short horizontal common central rod, opposed in two groups, each of three spines (*Plagonium* and *Plectanium*, Pl. 91, figs. 6, 11). In this latter case the single corresponding spines of the two opposite groups are usually parallel, and exhibit therefore exactly the same characteristic "geminate-triradiate" form which is found in many *Beloidea* (e.g., in the common *Sphærozoum punctatum* and the similar *Lampoxanthium punctatum*).

The fourth and last group of this suborder contains the multiradiate *Plectoidea*, the *Polyplagida* and *Polyplectida*. Here the number of radial spines, diverging from the common centre, exceeds six, and is commonly seven to nine, at other times ten to twelve or more (*Polyplagia* and *Polyplecta*, Pl. 91, fig. 12). When these two genera are better known from further accurate observations, they may probably be divided into several different genera (as already proposed in my *Prodromus*, 1881), since not only the number, but also the central junction and the arrangement of the numerous radial spines in the few observed species seems to be very different. In some seven-radiate species (e.g., *Polyplecta heptacantha*) four larger spines seem to be true "cortinar spines," the three smaller secondary productions of the former. In the nine-radiate species the nine spines seem to be sometimes basal branches of three primary spines, at other times six secondary intercalated between the three primary (like *Enneaphormis*, Pl. 57, fig. 9). In those multiradial *Plectoidea*, in which the number of spines amounts to ten or twelve or more, the laws of disposition are not yet recognised.

Comparing these different productions of the skeleton in the numerous *Plectoidea*, we find expressed two remarkable and very different affinities. On the one hand many *Plectoidea* exhibit exactly the same peculiar forms, which are only found besides in the *Beloidea* (as many species of *Triplagia*, *Plagiacantha*, *Tetraplagia*, *Plagonidium*, *Hexaplagia*, and *Plagonium*). On the other hand many *Plectoidea* bear the same characteristic composition of the skeleton (or the "cortinar structure") which is found in the *Cortinida* among the *Stephoidea*, and in numerous *Spyroidea* and *Cyrtoidea*, which all agree in the possession of three divergent basal feet and a vertical apical horn. A most important argument for the close affinity of all these "cortinar *NASSELLARIA*" seems to be given by the fact that the sagittal ring, which in *Cortina* is combined with the quadriradial structure, exhibits in the *Cyrtellaria* the most different stages of development; in one group it is complete, in the second incomplete, and in the third it has completely disappeared.

The form of the radial spines composing the skeleton is usually three-sided prismatic, gradually tapering from the thicker central base towards the distal apex; sometimes they are slender pyramidal. More rarely the spines are cylindrical or slender conical. In the majority of species the spines are straight, in the minority more or