

distinct traces of the sagittal ring. Hence the skeletons of all NASSELLARIA may be derived monophyletically (Hypothesis A, p. 893) from a simple sagittal ring (*Archicircus* and *Lithocircus*, Pl. 81). This theory, however, encounters the great difficulty that in many Stephoidea (*Cortina*, *Cortiniscus*, &c.) it is combined in a remarkable manner with the basal tripod of the Plectoidea, whilst in these latter it is entirely wanting (compare p. 894).

125. *The Plectoid Skeleton*.—Those forms are distinguished as Plectoid in which three, four, or more radial siliceous spines proceed from a common point, which lies excentrically outside the central capsule and at the basal pole of its vertical allopolar main axis. This peculiar type of skeletal formation only occurs in the legion NASSELLARIA, and is specially characteristic of the order Plectoidea (p. 898, Pl. 91). But since the essential elements of this remarkable skeleton also occur in many other NASSELLARIA, sometimes combined with the Cirroid, sometimes with the Cyrtoid skeleton, it perhaps has a fundamental significance in this legion; at all events it is possible to derive monophyletically all the other forms of this legion from it. (Hypothesis B, p. 893). The simplest form of the Plectoid skeleton is a tripod, the three feet of which either lie in a horizontal plane (*Triplagia*, Pl. 91, fig. 2), or correspond to the three edges of a low pyramid (*Plagiacantha*). A fourth ray is sometimes added, which stands vertically upon the summit of the pyramid (*Plagoniscus*, *Plagiocarpa*, Pl. 91, figs. 4, 5). In other Plectoidea three secondary rays are intercalated between the three primary (Hexaplagida, &c.); seldom the number is greatly increased (Polyplagida, &c.). The rays are rarely simple, but usually branched; in the Plagonida (Pl. 91, figs. 2–6) the branches remain free; in the Plectanida (Pl. 91, figs. 7–13) they are united to form a loose wicker-work. From such a web a perfect Cyrtoid shell may arise. Several forms of Plagonida may also be readily confounded with the isolated triradiate or quadriradiate spicula of many Beloid skeletons (*Sphærozoum*, *Lampoxanthium*, &c.).

126. *The Spongoid Skeleton*.—From the simple lattice-skeleton which the majority of Radiolaria possess, some of them develop a spongy shell; the trabeculæ of the lattice-work, situated in one plane in the former, are developed in the latter in different planes and cross irregularly in all directions; thus arises a kind of wicker-work of more or less spongy structure, usually with very thin trabeculæ and irregular meshes. Such Spongoid shells are most common among the SPUMELLARIA, especially in the Sphæroidea (Spongosphærida, Pl. 18) and Discoidea (Spongodiscida, Pls. 41–47), more rarely in the Prunoidea and Larcoidea. Lattice-work of similar spongy structure occurs very seldom among the NASSELLARIA, e.g., in some Plectoidea (Pl. 91) and Cyrtoida (*Spongocyrtis*, *Spongopyramis*, *Spongomelissa*, &c., Pl. 56, fig. 10; Pl. 64, figs. 5–10, &c.). Among the PHÆODARIA spongy skeletons are very rare; they