opposite transverse processes, the former four crossed ones. By ramification and union of these apophyses arise the lattice-shells of the Acanthophracta (excepting the Sphærocapsida).

138. *Radial Spines of the Nassellaria.*—The radial spines in this legion show as great a variety in their form as in the SPUMELLARIA, and, as in them, are solid, siliceous bars, usually three-edged (prismatic or pyramidal), or round (cylindrical or conical); more seldom they are polygonal in section. The great majority of the NASSELLARIA are, however, distinguished by a triradial structure, three primary radial bars diverging from the base of the central capsule (usually from the centre of the porochora); there is usually in addition a fourth apical spine, which passes upwards vertically or obliquely on the dorsal aspect of the central capsule. These three or four typical radial spines of the NASSELLARIA may be derived with great probability from the basal tripod of the Plectoidea (*Plagoniscus*, *Plectaniscus*, &c., Pl. **91**); and since this tripod is very characteristically combined in *Cortina* and *Cortiniscus* with the primary sagittal ring of the Stephoidea, the three typical rays may be generally designated "cortinar feet," in contradistinction to the other radial processes of the NASSELLARIAN skeleton. One of the three descending basal feet ("pes caudalis," Pls. **91–95**, c) is always unpaired, and lies in the vertical median plane (or sagittal plane), just as does the vertically directed apical spine, which originally forms the dorsal bar of the sagittal ring, and is produced upwards into the "apical horn," marked *a* on the plates). The other two basal feet are paired, and diverge right and left, forwards and downwards ("pedes pectorales," *p.p.*). Six-rayed NASSELLARIA, in which three secondary (interradial) feet are intercalated between the three primary (perradial) cortinar feet, are less common than the three-rayed forms. In some groups the number rises still higher, nine, twelve, or even more secondary feet being intercalated between the three primary. Besides, accessory radial spines may be developed on different parts of the shell, which have sometimes a definite relationship to the typical radial spines, sometimes not. Their form and ramification are very various (Pls. **51–98**).

139. *Radial Spines of the Phæodaria.*—The radial spines of the PHÆODARIA are very clearly distinguished from those of other Radiolaria by the fact that they are usually hollow tubes, rarely solid bars. As a rule, the tubes are cylindrical, often slightly fusiform or conical, their siliceous wall is very thin, and their lumen filled with jelly; a fine thread of silica usually runs in the axis, and in several families is connected by fine transverse threads with the wall of the tube (Pl. **110**, figs. 4, 6; Pl. **115**, figs. 6, 7). The peculiar family Medusettida is characterised by a very remarkable segmentation of the hollow spines (Pls. **118–120**). Each tube is divided by a series of septa into chambers, which communicate by a central or excentric opening in each septum, an arrangement resembling the siphuncle of the chambered Cephalopod shells. The number and arrange-