ment of the radial tubes in most PHÆODARIA is indefinite and very variable; only in a few families is the number constant in each species and genus, and the disposition regular. The Medusettida (Pls. 118–120) resemble the NASSELLARIA, inasmuch as equal radial feet diverge from the base of their shell, sometimes three in number (*Cortinetta*, Pl. 117, fig. 9), sometimes four (*Medusetta*, Pl. 120, figs. 1–4), sometimes six (*Gazelletta*); *Gorgonetta* is specially distinguished by the possession of six ascending and six descending spines regularly alternating (Pl. 119). The Tuscarorida (Pl. 100) usually have three or four equidistant feet. The Circoporida (Pls. 115–117), on the other hand, rather approach the Sphæroidea, their spherical or regular polyhedral shell having a definite number of tubular radial spines, which arise at regular intervals from their angles; *Circoporus* has six, *Circospathis* nine, *Circogonia* twelve, and *Circorrhegma* twenty radial tubes. Very rarely the tubes of the PHÆODARIA are angular, usually they are round, more or less cylindrical, though they are often bifurcated or even ramified, and exhibit a great wealth of the most delicate appendages; siliceous hairs, bristles, spines, barbed or anchor-like hooks, spathillæ, brushes, circlets, &c. (compare Pls. 99–128).

140. *Main-Spines and Accessory Spines.*—As accessory spines (Paracanthæ) we oppose to the main-spines (Protacanthæ), just described, all those processes which have no determining influence upon the formation of the skeleton as a whole, but are to be regarded as secondary constituents of the skeleton, or appendicular organs of inferior significance. They are developed in the utmost variety, sometimes as hairs or bristles, sometimes as thorns or clubs, either straight or curved (often zigzag), smooth or barbed; sometimes standing vertically upon the shell, or directed towards the centre, sometimes obliquely, or rising at a definite angle. In those SPUMELLARIA whose lattice-shell consists of several concentric spheres, the accessory spines generally arise from the outermost, the main-spines, on the contrary, from the innermost. In the NASSELLARIA, multifarious forms of accessory spines are especially developed in the order Plectellaria. In the PHÆODARIA they are often furnished with delicate appendages, *e.g.*, anchor-hooks, spathillæ, coronets, &c. Among the ACANTHARIA the accessory spines which arise from the surface of the shell in the Acanthophracta are very characteristic. They are not radially disposed (like the similar superficial spines of the SPUMELLARIA), but parallel to the radial main-spines from whose transverse processes they arise. Since in all these Acanthophracta the twenty radial main-spines are opposite to each other in pairs, all the accessory spines (often several hundred) are parallel to ten different regularly disposed axes of the lattice-shell (Pls. 134–138).

The skeletons of the Radiolaria, in addition to the general relations which have been discussed above, present numerous and important special differences in the various larger and smaller groups. These are indicated in detail in the descriptions of the legions, orders, and families in the systematic portion of this Report.