

A. The group *Adelacantha* consists only of the suborder *Actinelida*, with the three families *Astrolophida*, *Litholophida*, and *Chiastolida* (p. 728, Pl. 129, figs. 1–3); the number of the radial spines is very different and variable, sometimes only from ten to sixteen, but usually from thirty to fifty, and often more than one hundred; they are generally irregularly distributed, and not as in the second main division. This latter, the *Icosacantha*, always possesses *twenty* radial spines, which are regularly disposed according to a constant law, the so-called “Müllerian” or “Icosacanthan” law; the twenty spines are always so placed between the poles of a spineless axis that they form five zones each of four spines; the four spines of each zone are equidistant from each other, and also from the same pole, and alternate with those of the neighbouring zones, so that the whole twenty lie in four meridian planes, which cut out an angle of 45° (compare pp. 717–722, Pls. 130–140). In spite of the manifold variations in form which are developed in the *Icosacantha*, they may all be derived from a common stem-form, *Acanthometron* (p. 742), since the law of distribution of the twenty spines is constantly inherited.

B. An exception is found in the peculiar family *Sphærocapsida* (p. 797, Pl. 133, figs. 7–11; Pl. 135, figs. 6–10). Here the shell is composed of innumerable small, perforated plates, which arise on the surface of the calymma independently of the spines.

111. *The Skeleton of the Nassellaria*.—The skeletons of the *NASSELLARIA* or *MONOPYLEA* consist of silica, and are never composed of separate portions, but constitute always a single continuous piece. The ground-form is originally monaxon, corresponding to that of the central capsule, with a constant difference between the two poles of the vertical main axis. The ground-form is never spherical or polyaxon as in the lattice-shells of the *SPUMELLARIA*, and the skeleton never consists of hollow tubes as in the *PHÆODARIA*. The legion *NASSELLARIA* may be divided into two orders; in the *Plectellaria* (three suborders *Nassoidea*, *Plectoidea*, *Stephoidea*) the skeleton does not form a complete lattice-shell; in the *Cyrtellaria*, on the other hand, which are derived from these, the siliceous skeleton forms a complete lattice-shell enclosing the central capsule. The number of forms thus developed is astonishingly great, so that among the *NASSELLARIA* no less than two hundred and seventy-four genera and sixteen hundred and eighty-seven species may be distinguished, almost as many as in the *Sphærellaria*. In spite of this great variety of forms the legion *MONOPYLEA* is probably monophyletic; at least all the different skeletal forms may be derived from three elements which are combined in the most manifold fashion; (1) the *sagittal ring*, a simple siliceous ring, which lies vertically in the sagittal plane of the body, encircles the central capsule and comes into contact with it at the basal pole of the main axis (§ 124); (2) the *basal or oral tripod*, composed of three diverging radial spines, which meet in the middle of the basal pole of the central capsule (or in the centre of the porochora) (§ 125); (3) the *cephalis*, or lattice-head, a simple ovoid or subspherical lattice-shell, which encloses the central capsule and stands in connection with it at the basal pole of its main axis. Any one of these three important structural elements of the *NASSELLARIAN* skeleton may possibly be the starting-point