

The siliceous bars which bound these regular and subregular meshes are at first exceedingly thin and filiform; afterwards they become thicker or spread out laterally, whence the meshes often become round with a hexagonal frame (Pl. 12, fig. 5; Pl. 28, fig. 1). If the latter vanish, a lattice-shell with simple circular meshes is formed. Very commonly the regular form of the meshes or pores becomes more or less irregular, polygonal, or roundish. Hence, in general, four different principal forms of dictyosis may be distinguished among the SPUMELLARIA; viz. (1) regular or subregular *hexagonal* meshes; (2) regular or subregular *circular* meshes; (3) irregular *polygonal* meshes; (4) irregular *roundish* meshes. The three latter forms are to be regarded as secondary, derived from the primary first form. In those SPUMELLARIA which possess several concentric lattice-shells enclosed one within another, either these have all the same form of dictyosis, or the lattice-work of the innermost primary shell is different from that of the outer secondary shells (Pls. 19, 20); sometimes these latter also differ more or less among themselves (§ 129).

132. *Dictyosis of the Acantharia*.—The lattice-structures of the ACANTHARIA differ essentially from those of other Radiolaria in several particulars. Firstly, they consist not of silica but of acanthin (§ 102); secondly, they are always secondary formations, usually developed from transverse processes of the primary centrogenous radial spines; thirdly, their formation is not simultaneous (at the same time over the whole shell), but successive (proceeding from the individual radial spines tangentially towards the middle of the intervals); fourthly, the configuration of the network is due to the relative position of the spines and the mode of union of their transverse apophyses. Since these are at right angles to the spines, and since the branches of the apophyses are at right angles to them, the original ground-form of their dictyosis is a lattice-work with quadrangular meshes; these are often quite regular and square (Pl. 130, figs. 5, 6; Pl. 136, figs. 2, 9, &c.); more commonly they are rectangular or irregularly quadrangular (Pl. 131, fig. 10; Pl. 133, figs. 2, 3, &c.). In the majority of the ACANTHARIA the quadrangular form of the meshes passes over into an irregularly polygonal or roundish one (Pls. 137, 138). Very often the primary meshes of the lattice-shells, which immediately surround the radial spines, are larger and more regular ("aspinal pores"), whilst the numerous secondary meshes between them are smaller and irregular ("coronal pores"; Pl. 135, figs. 1-4, &c.).

133. *Dictyosis of the Nassellaria*.—The siliceous lattice-structures of the NASSELLARIA are formed on the whole like those of the SPUMELLARIA, with which they were formerly united under the name "Polycystina." In this group also there may be distinguished as two main forms the regular and the irregular. In the NASSELLARIA the regular lattice-structures generally exhibit hexagonal or circular meshes, whilst the irregular are either polygonal or roundish; the irregular forms are, however, much more abundant than the