- I. Spumellaria.—(A) In many of the Sphæroidea, the central capsule of which is originally enclosed by a simple lattice-sphere, it puts out protrusions through the meshes of the shell, thus forming club-shaped processes, corresponding in number with the meshes of the lattice (Pl. 11, figs. 1, 5; Pl. 20, fig. 1α ; Pl. 27, fig. 3, &c.). The whole surface of the spherical capsule may thus be covered with numerous independent radial clubs of equal size, but usually they unite again outside the shell to form a simple sphere with smooth surface. (B) In many Prunoidea whose originally ellipsoidal body has become cylindrical by the marked prolongation of the main axis, the central capsule is divided by a series of constrictions into segments, which correspond with the annular constrictions of the skeleton (Pls. 39, 40). (C) In most Discoidea whose lentiform or discoidal shell develops radial arms at its margin, the central capsule sends out processes into these arms, and adapts itself to the stellate form of the skeleton (p. 409, Pl. 43, fig. 15; Pl. 47, &c.) (D) In many Larcoidea whose growth is originally lentelliptical, but later spiral or irregular, the central capsule follows the mode of growth and develops irregular protuberances.
- II. Acantharia.—Whilst the central capsule of most Acantharia retains its primitive spherical form, in a minority of the group it passes over into various secondary forms, which are directly determined by the growth of the skeleton; especially common are lappet or club-shaped prominences which follow the larger radial spines. Hence the central capsule may assume the form of a violin, with two lobes corresponding to the two poles of the elongated main axis, as in many Amphilonchida (p. 782, Pl. 132, fig. 10), and the Diploconida (p. 884, Pl. 140). On the other hand the central capsule becomes cruciform, with four lobes disposed at right angles, as in Lithoptera and other Quadrilonchida (p 768, Pl. 131, fig. 10, &c.).
- III. NASSELLARIA.—The primitive ellipsoid or ovoid form of the central capsule persists only in a few Nassellaria, such as the simplest and most archaic forms, the Nassellida, many Plectoidea, Stephoidea, Monocyrtida, &c. In the great majority of the Nassellaria, on the contrary, the ellipsoid or ovoid form passes over into a secondary form which is usually characterised by the presence of lobes, and is obviously dependent upon the previous development of the skeleton. In many Stephoidea and Spyroidea (probably the majority), a bilobed central capsule is formed (with symmetrically equal right and left lobes), since the primary vertical sagittal ring interferes with the growth in the median plane (Pl. 90, figs. 7-10). In other