these Sphæroidea the typical ground-form is usually indicated by six equal radial spines, which are opposed to each other in pairs, and lie in three similar axes perpendicular to each other; these are the three axes of the tesseral crystallographic system; one of them is vertical, whilst the other two cross each other at right angles in its centre. Occasionally, too, the spherical form of the lattice-shell passes over into that of the regular octahedron (Pl. **22**, figs. 8, 10). The same form recurs in *Circoporus* (Pl. **117**, fig. 6) among the PHÆODARIA. In the vegetable kingdom it is exhibited by the antheridia of *Chara*. It is not found in the NASSELLARIA and ACANTHARIA. (See Gener. Morphol., Bd. i. p. 412.)

29. *The Regular Cubic Ground-Form.*—The ground-form whose geometrical type is that of a die or cube, is actually presented in a very striking manner by various Radiolaria. Among the SPUMELLARIA it occurs in certain Sphæroidea, *e.g.*, in the Astrosphærid genera *Centrocubus* and *Octodendrum* (Pl. **18**, figs. 1–3); in these the central medullary shell is a complete cube, bounded by six equal squares, from the eight angles of which eight equal radial spines project. This form can also be regarded as present in those Sphæroidea whose spherical lattice-shell bears eight equal and equidistant radial spines (many Astrosphærida). Besides these the cubic ground-form is to be seen in certain NASSELLARIA of the family Tympanida, especially in *Lithocubus* (Pl. **82**, fig. 12; Pl. **94**, fig. 13), in many species of *Acrocubus*, *Microcubus*, &c.; the twelve bars of its lattice-skeleton correspond often exactly to the edges of the cube. (See Gener. Morphol., Bd. i. p. 413.)

30. *The Regular Tetrahedral Ground-Form.*—The ground-form whose geometrical type is the regular tetrahedron, bounded by four equilateral triangles, occurs less frequently in the Radiolaria than the other four regular polyhedra. Among the SPUMELLARIA it is found in the Beloidea, and especially in those members of the Thalassosphærida and Sphærozoida whose spicules bear four equal branches, diverging at equal angles from a common centre. Precisely the same structure is seen also among the NASSELLARIA in some Plectoidea, as in *Tetraplagia* among the Plagonida, and *Tetraplecta* among the Plectanida. The skeleton of both these genera consists of four equal rods, which radiate at equal angles from a common centre, just as do the axes of the regular tetrahedron. The tetrahedral form of these Plectoidea is the more important and interesting since on the one hand it is related to the similar spicular form of the Beloidea, and on the other perhaps furnishes the starting point from which *Cortina* among the NASSELLARIA may be derived (*Plagoniscus*, *Plectaniscus*). (See Gener. Morphol., Bd. i. p. 415.)

31. *The Isopolar-Monaxon or Phacotypic Ground-Form.*—The isopolar uniaxial or phacotypic ground-form is characterised by the possession of a vertical main axis with