

mass of different and often very complicated forms is derived; this order is by far the largest, and in morphological respects the most important and most interesting, of all Radiolaria. It contains not less than twenty-eight different families, three hundred and five genera, and more than sixteen hundred species.

In my Monograph (1862) seven families appertaining to this group are described—the Ethmosphærida, Cladococcida, Ommatida, Spongurida, Discida, Lithelida, and Collosphærida. The astonishing increase of this group by the detection of a large series of new and interesting forms, and particularly of important connecting forms between very different branches of it, now enables me to give a much better arrangement. I discern now four suborders or sections of Sphærellaria, according to the different geometrical form of the central capsule and of the latticed shell enveloping it. The first of these, and the common ancestral group of the whole order, is the Sphæroidea, with spherical capsule; in the Prunoidea it becomes ellipsoidal or cylindrical by prolongation of one axis; in the Discoidea lenticular or discoidal by shortening of one axis; in the Larcoidea lentelliptical, or triaxon-ellipsoid, by different growth of the capsule in three different “dimensive axes.”

Synopsis of the Four Suborders of Sphærellaria.

Central capsule spherical.	Shell a simple sphere or a system of concentric spheres,	1. Sphæroidea.
Central capsule ellipsoidal or cylindrical.	Shell a simple ellipsoid or a cylinder with annular transverse constrictions,	2. Prunoidea.
Central capsule lenticular or discoidal.	Shell a biconvex lens or a flat disk,	3. Discoidea.
Central capsule lentelliptical or triaxon.	Shell a triaxon-ellipsoid, with three different axes,	4. Larcoidea.

Suborder I. SPHÆROIDEA, Haeckel.

Sphæroidea, *Sphæridea*, *Sphærida*, Haeckel, 1878, Protistenreich, p. 103.

Sphæridea, R. Hertwig, 1879, Organismus der Radiol., p. 39.

Definition.—SPUMELLARIA with spherical central capsule (very rarely somewhat modified, or allomorphic); with spherical fenestrated siliceous shell (often an endospherical polyhedron, very rarely of more modified, subspherical form or allomorphic). Growth of the shell in the three dimensive axes equal.

The suborder Sphæroidea, the first and most important of the four of the Sphærellaria, comprises those SPUMELLARIA in which the original geometrical