surface, and are in general rather fluid, exhibiting a considerable tendency to ramify, anastomose, and form networks. The movement of granules is commonly lively. In the Polycyttaria all capsules of one colony or "cœnobium" are connected by the dense variable network of anastomosing pseudopodia.

## Synopsis of the Orders and Suborders of Spumellaria.

I. COLLODARIA.	Skeleton entirely wanting,	1. Colloidea.
Skeleton wanting or quite imperfect, not latticed.	Skeleton represented by numerous scattered spicules, .	2. Beloidea.
	Lattice-shell spherical or composed of concentric spheres,	3. Sphæroidea.
II. SPHÆRELLARIA.	Lattice-shell ellipsoidal or prolonged in one axis,	4. Prunoidea.
Skeleton a perfect shell of lattice work, or spongy and resembling wicker-work.	Lattice-shell discoidal or shortened in one axis,	5. Discoidea.
	Lattice-shell lentelliptical, with different extent of growth in three axes,	6. Larcoidea.

## Order I. COLLODARIA, Haeckel, 1881.

Collodaria, Haeckel, Prodromus, 1881, p. 469. Collida et Sphærozoida, Haeckel, 1862, Monogr. d. Radiol., pp. 246, 522.

Definition.—Spumellaria without latticed shell.

The order Collodaria, the first order of Radiolaria, comprises all those Spumellaria in which the skeleton is either entirely wanting, or represented by numerous single, solid, siliceous needles or spicules, loosely scattered in the calymma around the central capsule. Never in this order is there any trace of the latticed or fenestrated shell, which characterises the second order, Sphærellaria. The skeleton exhibits no trace of phylogenetic connection in the two orders.

In my monograph (1862) two families appertaining to this order are described, the Collida (p. 244) and the Sphærozoida (p. 521). Both families contain forms with and without a skeleton. Of the solitary or monozous Collida the Thalassicollida are devoid of a skeleton, whilst the Thalassosphærida are provided with a skeleton. Of the social or polyzous Sphærozoida the Collozoida are without a skeleton, the Rhaphidozoida provided with one. As the special form in both skeletophorous subfamilies is exactly the same, I prefer now to associate them in the suborder Beloidea, and to oppose them to the other two skeletonless subfamilies, which are united under the name of Colloidea.