

rod, irregularly bent and curved. (Differs from the similar *Thalassoxanthium octoceras*, Pl. 2, fig. 6, by slender, more curved shanks, and by the voluminous calymma, there entirely wanting.)

Dimensions.—Diameter of the capsule 0·5, of the nucleus 0·2, of the calymma 3·0.

Habitat.—South Atlantic, Station 331, surface.

Subgenus 3. *Lamproxanthura*, Haeckel.

Definition.—Spicula of two or three different kinds, simple, radiate, and geminate-radiate mixed.

4. *Lamproxanthium pandora*, n. sp. (Pl. 2, fig. 1).

Spicula mixed, of three different kinds—simple, radiate, and geminate-radiate; all three kinds partly smooth, partly thorny. The simple needles short, thin spindle-shaped, often curved. The radiate spicula commonly with three or four, rarely five or six, unequal rays, straight or curved. The radiate-geminate spicula commonly with three, rarely four, shanks on each end, often different on both ends of the middle rod. The size, number, and form of the irregular spicula are here quite as variable as in the social *Rhaphidozoum pandora*, of which it is the solitary representative. The wall of the large central capsule is very thick, with evident pore-canals, separated by a clear interval from the coagulated and vacuolated endoplasm, which contains no oil-globules. Nucleus with numerous nucleoli.

Dimensions.—Diameter of the central capsule 0·5 to 0·6, of the nucleus 0·1 to 0·2, of the calymma 2 to 4 mm.

Habitat.—North Pacific, Station 244, surface.

Family IV. SPHÆROZOIDA, Haeckel (Pl. 4).

Sphærozoida, Haeckel, 1862, Monogr. d. Radiol., p. 521.

Definition.—Beloidæa socialia.

The family Sphærozoida comprises all associated or colony-forming Radiolaria, which are provided with an imperfect skeleton, composed of numerous solid needles or spicula, scattered around the central capsule in the calymma. The structure and form of this skeleton is quite the same as in the preceding solitary Thalassosphærida, but on the other hand, the structure and form of the colonies and of the included numerous central capsules is the same as in the skeletonless Collozoida.

The oldest well-known form of Sphærozoida is the common cosmopolitan *Sphærozoum punctatum*, probably first observed in 1834 by Meyen, and called *Sphærozoum fuscum*, afterwards more accurately described by Huxley in 1851: