

8. *Sphærozoum trigeminum*, n. sp.

Spicula all (or nearly all) geminate-triradiate, composed of a short simple axial middle rod and three simple needle-like shanks on each end of it. Shanks curved or bent, very thin, smooth, commonly much longer than the middle rod. (Often few quadriradiate or few thorny tri-radiate spicules are interspersed among the others.)

*Dimensions*.—Length of the middle rod of the spicula 0·02 to 0·04, of its shanks 0·03 to 0·09.

*Habitat*.—North Pacific, Stations 244 to 248, surface.

9. *Sphærozoum punctatum*, J. Müller.

*Sphærozoum punctatum*, J. Müller, 1858, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 54, Taf. viii. figs. 1, 2.

*Sphærozoum punctatum*, Haeckel, 1862, Monogr. d. Radiol., p. 528, Taf. xxxiii. figs. 7-9.

*Sphærozoum fuscum*, Meyen, 1834, Nova Acta Acad. Nat. Cur., vol. xvi. Taf. xxxviii. fig. 7.

*Thalassicolla punctata*, Huxley, 1851, Ann. and Mag. Nat. Hist., ser. 2, vol. viii. p. 434, pl. xvi. figs. 1, 2, 3.

Spicula all (or nearly all) geminate-triradiate, composed of a long simple axial middle rod and three simple needle-like shanks on each end of it. Shanks straight, pointed, thorny, with many small spines, commonly somewhat shorter than the middle rod. (Often few furcate or four-rayed spicula are intermingled, or some of the spicula are smooth.) This cosmopolitan species is extremely variable, and produces interesting transitional forms to many other species of the genus. Compare also the general remarks on the genus, and the chapter on "Transformation" in the general introduction.

*Dimensions*.—Length of the middle rod of the spicula 0·02 to 0·06, of its shanks 0·01 to 0·05.

*Habitat*.—Cosmopolitan, common in nearly all warmer seas, Mediterranean, Atlantic, Indian Ocean, Pacific; surface.

10. *Sphærozoum armatum*, n. sp. (Pl. 4, figs. 1, 9).

Spicula all geminate-triradiate, with a stout and short middle rod and three arborescent shanks on each end of it. Shanks longer than the middle rod, very stout, straight, pine-shaped, with six to twelve irregular, spinulated, lateral branches.

*Dimensions*.—Diameter of the central capsules 0·04 to 0·08, length of the middle rod of the spicula 0·02 to 0·03, of its shanks 0·05 to 0·08.

*Habitat*.—North Pacific, Japan, Station 239, surface.

11. *Sphærozoum alveolatum*, n. sp. (Pl. 4, figs. 2, 3).

Spicula all together geminate-triradiate, with a simple stout middle rod and three arborescent shanks on each end of it. Shanks more or less curved, slender, pine-shaped, with four to eight short, thorny lateral branches. In all cœnobia of this remarkable species the central capsules are enclosed in large thick-walled alveoles (of three times their breadth), and in each alveole is placed besides