Subgenus Spongosphæromma, Haeckel.

Definition.—Radial spines on the surface of the spongy shell of two different kinds; large piercing main spines and small superficial by-spines.

3. Spongosphæra helioides, Haeckel.

Spongosphæra helioides, Haeckel, 1862, Monogr. d. Radiol., p. 456, Taf. xii. figs. 11-13.

Spongy shell spherical, with numerous curved, bristle-shaped by-spines on the surface, as long as the radius. Main spines ten to twenty, irregularly disposed, prismatic, with three dentated, spirally contorted edges, broader towards the distal end. Outer medullary shell three times as broad as the inner, with polygonal meshes (of the same size as those in the spongy framework) and fine bars.

Dimensions.—Diameter of the spongy shell 0.2, outer medullary shell 0.02, inner 0.007.

Habitat.—Mediterranean (Messina).

4. Spongosphæra quadricuspis, n. sp.

Spongy shell spherical, with numerous curved, bristle-shaped by-spines on the surface, half as long as the radius. Main spines twenty to thirty, irregularly disposed, prismatic, with three dentated, spirally contorted edges, and at the distal end four strong pyramidal divergent teeth (three as terminations of the edges, the fourth as end of the spine axis). Outer medullary shell twice as broad as the inner, both having circular, regular pores, twice to three times as broad as the bars.

Dimensions.—Diameter of the spongy shell 0.3, outer medullary shell 0.04, inner 0.013.

Habitat.—Central Pacific, Station 272, surface.

Genus 121. *Rhizosphæra*, Haeckel, 1860, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 840.

Definition.—Astrosphærida with two concentric latticed medullary shells, connected by radial beams; from the outer arise numerous radial spines, which at equal distances are connected by a latticed spherical cortical shell, surrounded by a spongy framework.

The genus Rhizosphæra exhibits the same relation to Spongosphæra that Rhizoplegma bears to Spongopila; but in the latter the latticed medullary shell is simple, in the two former double. The wall of the central capsule is pierced only by the radial spines connecting the medullary and the cortical shells.

1. Rhizosphæra trigonacantha, Haeckel.

Rhizosphæra trigonacantha, Haeckel, 1862, Monogr. d. Radiol., p. 452, Taf. xxv. figs. 1-7.

Central cavity of the spongy cortical shell twice as broad as the diameter of the outer medullary shell. Bars of all three shells of the same breadth as the thirty to fifty (or more) radial spines,

¹ Rhizosphæra = Root-sphere; ρίζα, σφαῖρα.