Genus 95. Heliosoma, Haeckel, 1881, Prodromus, p. 452.

Definition.—Astrosphærida with one medullary (intracapsular) and one cortical (extracapsular) shell, the two being connected by radial beams piercing the central capsule. Shell surface covered with simple radial spines of two different kinds; larger main spines and smaller by-spines.

The genus *Heliosoma* differs from the preceding *Haliomma* in the possession of two different kinds of radial spines, and exhibits therefore the same relation to it that *Heliosphæra* bears to *Acanthosphæra* among the Coscinommida. The smaller byspines are much more numerous than the larger main spines.

Subgenus 1. Heliosomantha, Haeckel.

Definition.—Pores of the cortical shell regular, of nearly equal size and similar form.

1. Heliosoma radians, n. sp. (Pl. 28, figs. 3, 3a).

Cortical shell very thin walled, with thread-like bars and regular, hexagonal meshes; twenty to twenty-two on the radius. Medullary shell only one-fifth as large, of the same structure. The two shells connected by twenty very thin radial beams, which are prolonged outside into twenty stout, three-sided pyramidal main spines, as long as the diameter of the inner shell. Between these, arising from the surface, numerous bristle-shaped by-spines.

Dimensions.—Diameter of the outer shell 0.25, inner 0.05, pores 0.012; length of the main spines 0.05, basal breadth 0.012.

Habitat.—Central Pacific, Stations 266 to 274, surface.

2. Heliosoma elegans, n. sp.

Cortical shell thick walled, with regular, circular, hexagonally framed pores, twice as broad as the bars; ten to twelve on the radius. Medullary shell half as large, with simple, regular, circular pores, twice as broad as the bars. The two shells connected by twenty very thin radial beams, which are prolonged outside into twenty slender, three-sided pyramidal main spines as long as the radius. In each corner of the surface hexagons a bristle-shaped by-spine one-fourth as long.

Dimensions.—Diameter of the outer shell 0·12, inner 0·06; outer pores 0·006, bars 0·003; length of the main spines 0·05, basal breadth 0·01.

Habitat.—Central Pacific, Station 271, surface.

3. Heliosoma echinaster, Haeckel.

Haliomma echinaster, Haeckel, 1862, Monogr. d. Radiol., p. 429, Taf. xxiv. figs. 1-3.

Cortical shell thin walled, with regular, circular, hexagonally framed pores, twice as broad as the bars; ten to twelve on the radius. Medullary shell one-fourth as large, with few irregular, large,

1 Heliosoma=Sun-1 ody; "λιος, σωμα.