

irregular, polygonal pores; twenty to thirty on the radius. Radial spines very numerous, bristle-shaped, twice to three times as long as the diameter of the pores.

Dimensions.—Diameter of the shell 0·3, pores 0·01 to 0·02; length of the spines 0·02 to 0·05.

Habitat.—Central Pacific, Station 274, surface.

31. *Acanthosphæra reticulata*, n. sp. (Pl. 26, fig. 5).

Rhaphidosphæra reticulata, Haeckel, 1881, Prodr. Mus.

Shell thick walled, with irregular, roundish pores, twice to four times as broad as the bars; six to eight on the radius. Surface of the bars covered with a peculiar delicate network of very fine crests. Twenty to forty radial spines, angular, pyramidal, scarcely one-third as long as the radius of the shell, as broad at the base as the bars.

Dimensions.—Diameter of the shell 0·22, pores 0·02 to 0·04, bars 0·01; length of the spines 0·04, basal breadth 0·01.

Habitat.—Central Pacific, Station 271, depth 2425 fathoms.

Genus 89. *Heliosphæra*,¹ Haeckel, 1862, Monogr. d. Radiol., p. 350
(*sensu emendato*).

Definition.—Astrosphærida with one simple lattice-sphere, covered with simple radial spines of two different kinds: larger main spines and smaller by-spines.

The genus *Heliosphæra* (in the mended definition here employed) differs from the foregoing *Acanthosphæra* in the possession of two different kinds of radial spines: larger main spines scattered on the surface or disposed regularly in limited numbers (twelve to twenty, sometimes forty to fifty or more), and smaller by-spines in much larger numbers, arising from all the nodal-points of the network (or sometimes also from its bars).

Subgenus 1. *Heliosphærella*, Haeckel.

Definition.—Pores of the shell regular or subregular, all of nearly equal size and similar form.

1. *Heliosphæra hexagonaria*, n. sp. (Pl. 26, fig. 2).

Shell very thin walled, about twenty times as broad as one pore. Meshes or pores subregular, hexagonal, with thread-like bars; fifteen to seventeen on the radius. Radial spines at the nodal-points of the network; about forty main spines three-sided pyramidal, half as broad at the base as one pore, and twice as long as the bristle-shaped by-spines, which are very numerous, and as long as the diameter of one pore.

¹ *Heliosphæra* = Sun sphere; ἡλιος, σφαῖρα.