in Astrosphæra stellata, Pl. 19, fig. 5, but without radial by-spines); outer shell twice as broad, with simple triangular meshes. Radial spines with serrated edges and three rows of simple lateral branches (four branches on each edge).

Dimensions.—Diameter of the outer shell 0.44, inner 0.22.

Habitat.—Tropical Atlantic (Ascension Island), Station 343, surface.

7. Leptosphæra reticulum, n. sp.

Inner shell with irregular, polygonal meshes and very thin thread-like bars; outer shell four times as broad, also with irregular, polygonal meshes, the sides of the triangular main meshes being connected by irregular lateral ramules, forming an extremely delicate reticulum.

Dimensions.—Diameter of the outer shell 0.64, inner 0.16.

Habitat.—South Pacific, Station 291, surface.

Genus 98. *Diplosphæra*, Haeckel, 1860, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 804.

Definition.—Astrosphærida with two extracapsular cortical shells, connected by long, prismatic, radial spines; inner shell with thin radial by-spines.

The genus Diplosphæra differs from its ancestral form Leptosphæra in the development of radial by-spines on the surface of the inner shell, the outer shell being smooth.

Subgenus 1. Diplosphærella, Haeckel.

Definition.—Radial main spines simple, without lateral branches.

1. Diplosphæra hexagonalis, n. sp. (Pl. 19, fig. 3).

Inner shell with regular, hexagonal meshes and very thin thread-like bars; at each nodal-point one bristle-shaped by-spine; outer shell twice as broad, with simple triangular meshes. Radial spines with three smooth edges. (The radially striped central capsule, enclosed in the inner shell, envelops a large central nucleus one-third its size, fig. 3.)

Dimensions.—Diameter of the outer shell 0.36, inner 0.18.

Habitat.—Central Pacific, Stations 265 to 274, surface.

2. Diplosphæra ornata, n. sp.

Inner shell with regular, hexagonal meshes, four times as broad as the bars; outer shell three times as broad, with simple triangular meshes. Radial main spines as well as the bars of both

¹ Diplosphæra = Double sphere; διπλόος, σφαίρα.