bristle-shaped radial by-spines. Radial main spines with three smooth edges. (Differs from the first species of the other three genera of Diplosphærida in the presence of by-spines on the outer, and their absence on the inner shell.)

Dimensions.—Diameter of the outer shell 0.32, inner 0.16.

Habitat.—Central Pacific, Station 274, surface.

2. Drymosphæra polygonalis, n. sp. (Pl. 19, fig. 1).

Diplosphæra polygonalis, Haeckel, 1879, Atlas.

Inner shell with irregular, polygonal meshes and very thin thread-like bars; outer shell one and a half times as broad, with simple triangular meshes and thicker bars, which bear numerous bristle-shaped radial by-spines (in the figure the majority of these are broken off). Radial main spines with three smooth edges. (Similar to Leptosphæra polygonalis and Diplosphæra polygonalis, but differs from both in the presence of by-spines on the outer, and their absence on the inner shell.)

Dimensions.—Diameter of the outer shell 0.33, inner 0.22.

Habitat.-North Pacific, Station 236 south of Japan, surface.

Subgenus 2. Drymosphæromma, Haeckel.

Definition.—Radial by-spines forked or branched (main spines simple).

3. Drymosphæra furcata, n. sp.

Inner shell with irregular, polygonal meshes and thin bars, the former five times as broad as the latter; outer shell two and a half times as broad, with simple triangular meshes and smooth bars, bearing numerous long smooth bristle-shaped by-spines, which in the distal half are forked. Radial main spines with three smooth edges.

Dimensions.—Diameter of the outer shell 0.4, inner 0.16.

Habitat.—Indian Ocean, Ceylon, surface, Haeckel.

4. Drymosphæra cladophora, n. sp.

Inner shell with irregular, polygonal meshes, three to six times as broad as the smooth bars; outer shell twice as broad, with simple triangular meshes and very thin smooth bars, bearing numerous curved, irregularly branched, smooth by-spines. Radial main spines with three serrated edges.

Dimensions.—Diameter of the outer shell 0.4, inner 0.2.

Habitat.—Central Pacific, Station 276, surface.

5. Drymosphæra dendrophora, n. sp. (Pl. 20, figs. 1, 1a, 1b).

Inner shell with irregular, polygonal meshes and very thin thread-like bars; outer shell one and a half times as broad, with simple triangular meshes and thicker bars, which bear a forest of