

Diameter of the outer shell five times as large as that of the inner. Six radial spines very long, arising from the six corners of the inner and piercing the spongy mass of the outer shell, considerably exceeding it at the free distal end, three-sided prismatic, with elegantly denticulate edges.

Dimensions.—Diameter of the outer shell 0·2, inner 0·04; total length of the spines 0·3 or more, breadth 0·02.

Habitat.—Central Pacific, Station 266, depth 2750 fathoms.

Genus 87. *Hexadoridium*,¹ Haeckel, 1881, Prodrömus, p. 455.

Definition.—Cubosphærida with spongy spherical shell and two concentric latticed medullary shells in its centre, having six simple spines of equal size.

The genus *Hexadoridium* differs from *Hexadoras* in the duplication of the medullary shell, and exhibits therefore the same relation to it that *Spongodictyon* bears to *Spongoplegma*. In the only known species the six spines are opposite, arranged quite regularly in pairs in the three dimensive axes, and consequently represent the three axes of a regular crystal or cube.

1. *Hexadoridium streptacanthum*, n. sp. (Pl. 25, figs. 1, 1a).

Both medullary shells spherical, with small regular, circular pores, twice as broad as the bars; outer twice as broad as the inner. Spongy cortical shell enclosing it with dense framework, five times as broad as the outer medullary shell, regular octahedral. Six radial spines, arising from the latter, are thinned at the inner end, three to five times as long as the diameter of the cortical shell, and nearly as broad as the inner medullary shell, with three dentated and spirally contorted edges. (Very similar to the common *Spongosphæra streptacantha*, with irregular and variable number and disposition of spines; possibly its ancestral form?).

Dimensions.—Diameter of the cortical shell 0·2, of the outer medullary shell 0·04, inner 0·02; length of the spines 1 mm. and more, breadth 0·02.

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

Family X. ASTROSPHÆRIDA (Pls. 11, 18–20, 26–30).

Astrosphærida, Haeckel, 1881, Prodrömus, p. 449.

Definition.—Sphæroidea with numerous (eight to twelve or more, commonly between twenty and sixty) radial spines on the surface of the spherical shell; living solitary (not associated in colonies).

The family *Astrosphærida*, the largest and most varied of all *Sphæroidea*, is distinguished from the other members of this group by the possession of numerous

¹ *Hexadoridium* = Shell with six small spears; derivation from *Hexadoras*.