Subfamily HEXASTYLIDA,[1] Haeckel, 1881, Prodromus, pp. 449, 450.

Definition.—Cubosphærida with one single spherical lattice-shell.

Genus 72. *Hexastylus*,[2] Haeckel, 1881, Prodromus, p. 450.

Definition.—Cubosphærida with one simple lattice-sphere and six simple spines of equal size.

The genus *Hexalonche* is the most simple form of all Cubosphærida, and may be regarded as the common ancestral form of this family. It can be derived phylogenetically from *Cenosphæra*, by development of six radial spines on the surface of the simple spherical lattice-shell. These six simple spines are of equal size and opposite in pairs in the three dimensive axes, corresponding to the three equal axes of a cubic crystal.

Subgenus 1. *Hexastylanthus*, Haeckel.

Definition.—Pores regular or subregular, of nearly equal size and form; surface of the cortical shell smooth, without radial by-spines (other than the six main spines).

1. *Hexastylus phænaxonius*, n. sp. (Pl. **21**, fig. 3).

Shell thin walled, with smooth surface. Pores subregular, hexagonal, five to six times as broad as the bars; nine to ten on the radius. Six spines triangular pyramidal, as long as the radius of the shell, as broad at the base as one pore.

Dimensions.—Diameter of the shell 0·13, pores 0·008 to 0·01, bars 0·0015; length of the spines 0·07, basal breadth 0·008 to 0·012.

Habitat.—Central Pacific, Station 272, depth 2600 fathoms.

2. *Hexastylus sapientum*, n. sp.

Shell thin walled, with smooth surface. Pores regular, hexagonal, eight to ten times as broad as the bars; six to seven on the radius. Six spines bristle-shaped, longer than the diameter of the shell. (Lattice-work and spines similar to those of *Heliosphæra actinota*, Monogr. d. Radiol., Taf. ix. fig. 3.)

Dimensions.—Diameter of the shell 0·15, pores 0·016, bars 0·002; length of the spines 0·2, breadth 0·002.

Habitat.—North Atlantic, Station 354, surface.

[1] Hexastylida = Cubosphærida simplicia = Monosphærida hexacantha.

[2] *Hexastylus* = Shell with six styles; ἑξα, στῦλος.