Genus 160. Cyphinidium, n. gen.

Definition.—Cyphinida with simple cortical shell and double medullary shell, with two opposite polar spines (or bunches of polar spines) on the poles of the main axis.

The genus Cyphinidium differs from Cyphinus only in the duplication of the medullary shell, which is composed of two concentric spheres or somewhat compressed lenticular spheroids. It exhibits therefore the same relation to Cyphinus that Stylatractus in the Druppulida bears to Lithatractus. Possibly the two former genera are derived from the two latter by an annular constriction in the equatorial plane.

Subgenus 1. Cyphinidoma, Haeckel.

Definition.—On both poles of the cortical shell one single polar spine or a bunch of polar spines.

1. Cyphinidium amphistylium, n. sp.

Cortical shell thick walled, with smooth surface, and subregular, circular pores, twice to three times as broad as the bars; eight to ten on the half meridian, sixteen to eighteen on the half equator of each chamber. Both medullary shells spherical. The cortical shell resembles very much that of Cannartiscus amphiconiscus (Pl. 39, fig. 19), but exhibits instead of the hollow polar tubes two strong solid polar spines of conical form, half as long as the main axis, and as broad at the base as the inner medullary shell.

Dimensions.—Main axis of the cortical shell (without polar spines) 0.14, greatest breadth 0.1; pores 0.008, bars 0.004; length of the polar spines 0.08, basal thickness 0.02.

Habitat.—North Pacific, off Japan, Station 241, depth 2300 fathoms.

2. Cyphinidium apicatum, Haeckel.

Ommatospyris apicata, Ehrenberg, 1872, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 317.

Cortical shell thin walled, with thorny surface, and irregular, polygonal pores, three to five times as broad as the thin bars; eight to nine on the half meridian, thirteen to fifteen on the half equator of each chamber. On both poles a bunch of four to eight strong conical spines, the central of which (in the main axis) is much larger than the others, and twice as long as the diameter of the outer spheroidal medullary shell; size and number of the polar spines is very variable (commonly five to six).

¹ Cyphinidium = Small Cyphinus; πυφινίδιον.