Subgenus 3. Heliosestomma, Haeckel.

Definition.—Surface of the disk smooth, without radial spines. Bases of the marginal spines connected by a solid equatorial girdle.

10. Heliosestrum octangulum, n. sp.

Disk with smooth surface, octagonal, twice as broad as the medullary shell. Pores regular, circular; nine to ten on the radius. Equatorial girdle narrow, radially striped, connecting the points of the eight short, regularly disposed, marginal spines in such a manner that the whole shell forms a regular octagon with rectilinear sides.

Dimensions.—Diameter of the disk 0.11 to 0.12, of the medullary shell 0.05 to 0.06; length of the sides of the octagon 0.06.

Habitat.—Central Pacific, Station 268, depth 2900 fathoms.

11. Heliosestrum octogonium, n. sp.

Disk with smooth surface, octagonal, four times as broad as the medullary shell. Pores irregular, roundish; eight to nine on the radius. Equatorial girdle broad, smooth, connecting the points of the eight short, triangular, flat marginal spines in such a manner that the whole shell forms a subregular octagon with concave, nearly equal sides. (Sometimes seven or nine spines instead of eight are developed.)

Dimensions.—Diameter of the disk 0.16 to 0.18, of the medullary shell 0.04 to 0.05; length of the radial spines 0.02 to 0.04, basal breadth 0.03.

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

12. Heliosestrum craspedotum, n. sp.

Haliomma humboldti, var., Bury, 1862, Polycystins of Barbados, pl. viii. fig. 4 (below).

Disk with smooth surface, three times as broad as the medullary shell. Pores subregular, circular; ten to twelve on the radius. Eight marginal spines (sometimes seven or nine) triangular, deeply sulcated, half as long and one-third as broad as the radius of the disk, connected by a narrow, radially striped equatorial girdle.

Dimensions.—Diameter of the disk 0.18, of the medullary shell 0.06; length of the radial spines 0.05, basal breadth 0.03.

Habitat.—Central Pacific, Stations 271 to 274, at various depths, also fossil in Barbados.

Genus 192. Astrosestrum, Haeckel, 1881, Prodromus, p. 457.

Definition.—Phacodiscida with double medullary shell and with eight radial spines on the margin of the disk (more or less regularly disposed, sometimes seven or nine).

1 Astrosestrum = Stellated sieve; ἄστρον, σῆστρον.