Subgenus 2. Astrophacilla, Haeckel.

Definition.—Surface of the disk covered with radial spines. Bases of the marginal spines free, without a connecting equatorial girdle.

4. Astrophacus phacodiscus, n. sp. (Pl. 32, fig. 3).

Disk with spiny surface, two and a half times as broad as the outer and seven times as broad as the inner medullary shell. Pores subregular, circular; ten to twelve on the radius. Marginal spines twelve to sixteen, conical, stout, nearly as long as the radius of the disk, and as broad at the base as the inner medullary shell. The numerous bristle-shaped spines of the surface are scarcely half as long. (Similar to Heliodiscus phacodiscus, Haeckel, Monogr. d. Radiol., Taf. xvii. figs. 5-7, but differing in the double medullary shell.)

Dimensions.—Diameter of the disk 0·18, of the outer medullary shell 0·07, of the inner 0·025; length of the marginal spines 0·08 to 0·09, basal breadth 0·03.

Habitat.—South Pacific, Station 300, surface.

Subgenus 3. Astrophacomma, Haeckel.

Definition.—Surface of the disk smooth, without radial spines. Bases of the marginal spines connected by a solid equatorial girdle. (Perhaps = Chilomma(?) Ehrenberg, 1847, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 54.)

5. Astrophacus cingillum, n. sp.

Haliomma humboldti, var., Bury, 1862, Polycystins of Barbados, pl. viii. fig. 3 (at right).

Disk with smooth surface, three times as broad as the outer and eight times as broad as the inner medullary shell. Pores regular, circular; eleven to thirteen on the radius. Equatorial girdle about as broad as the inner medullary shell, in the proximal half radially striped, on the margin with eighteen to twenty-four short, flat, triangular spines, about as long as the breadth of the girdle. (Similar to Heliodiscus cingillum, but with double medullary shell.)

Dimensions.—Diameter of the disk 0.2, of the outer medullary shell 0.07, of the inner 0.025; length of the spines 0.02, basal breadth 0.02.

Habitat.—Western Tropical Pacific, Station 225, depth 4475 fathoms; also fossil in Barbados.

6. Astrophacus saturnus, Haeckel.

- ? Chilomma saturnus, Ehrenberg, 1861, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 297; 1872, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 286, Taf. ii. fig. 5.
- ? Chilomma saturnus, Haeckel, 1862, Monogr. d. Radiol., p. 447.

Disk with smooth surface, two and a half times as broad as the outer, six times as broad as the inner medullary shell. Pores large, irregular, roundish; five to seven on the radius (?). Equatorial girdle very broad, radially striped, nearly as broad as the outer medullary shell, perforated by