The genus Astrosestrum differs from the foregoing Heliosestrum by the duplication of the medullary shell. The eight marginal spines in the majority of individuals are regularly formed and disposed, of equal size and equidistant. But there are frequent exceptions to this rule, either the angles between the eight spines being more or less different, or the number amounting to seven or nine, instead of eight. Here also in some species four larger (perradial) spines alternate regularly with four smaller (interradial spines), after the same law of symmetry, which is common in the Medusæ.

Subgenus 1. Astrosestantha, Haeckel.

Definition.—Surface of the disk smooth, without radial spines. Bases of the marginal spines free, not connected by an equatorial girdle.

1. Astrosestrum ephyra, n. sp. (Pl. 32, figs. 4, 4a).

Disk with smooth surface, three times as broad as the outer and nine times as broad as the inner medullary shell. Pores subregular, circular; seven to eight on the radius of the disk. Eight marginal spines (sometimes seven or nine) more or less irregularly disposed, of variable size, commonly as long as the radius of the disk, twice as long as broad, pyramidal, sulcate, without a connecting equatorial girdle.

Dimensions.—Diameter of the disk 0·12, of outer medullary shell 0·04, of the inner 0·014; length of the marginal spines 0·05 to 0·07, basal breadth 0·03.

Habitat.—Central Pacific, Stations 270 to 274, depths 2350 to 2925 fathoms.

2. Astrosestrum nauphanta, n. sp. (Pl. 32, fig. 5).

Disk with smooth surface, two and a half times as broad as the outer and five times as broad as the inner medullary shell. Pores regular, circular; eight to nine on the radius of the disk. Eight marginal spines (often seven or nine) more or less regularly disposed, of equal size, half as long as the radius of the disk, and quite as broad at the base, compressed triangular, sulcate, without a connecting equatorial girdle.

Dimensions.—Diameter of the disk 0·15, of the outer medullary shell 0·06, of the inner 0·03; length of the marginal spines 0·04, basal breadth 0·04.

Habitat.—Pacific, central area, Stations 266 to 268, depth 2700 to 2900 fathoms.

3. Astrosestrum octacanthum, Haeckel.

Haliomma octacanthum, Ehrenberg, 1872, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 295, Taf. viii. fig. 11.

Disk with smooth surface, twice as broad as the outer and six times as broad as the inner medullary shell. Pores regular, circular; six to seven on the radius of the disk. Eight marginal spines