## 9. Rhopalastrum triceros, n. sp. (Pl. 43, fig. 4).

Distance between the paired arms about two-thirds as large as their distance from the odd arm. All three arms club-shaped, three times as broad at the thickened distal part as at the base, and armed with one single, conical, terminal spine. Odd arm of the same breadth, but twice as long as the paired arms.

Dimensions.—Radius of the odd arm 0.35, of the paired arms 0.2; basal breadth 0.04, distal breadth 0.12.

Habitat.—Pacific, central area, Station 274, surface.

## 10. Rhopalastrum hexaceros, n. sp. (Pl. 43, fig. 3).

Distance between the paired arms equals four-fifths of their distance from the odd arm. All three arms nearly of the same size, about square, a little broader at the truncated distal end, which is armed at both corners with a strong, conical, radial spine.

Dimensions.—Radius of each arm 0.2, basal breadth 0.1, distal breadth 0.12.

Habitat.—Indian Ocean, Ceylon, Belligemma, Haeckel, surface.

## 11. Rhopalastrum arcticum, n. sp. (Pl. 43, fig. 6).

Distance between the paired arms half as large as their distance from the odd arm, which is a little larger. All three arms of the same form, lanceolate, twice to three times as long as broad, twice as broad in the middle as at either end. Each arm with twelve to fourteen transverse septa, at the distal end with a bunch of conical spines, and one single, very large, pyramidal, terminal spine.

Dimensions.—Radius of each arm (without spine) 0.17, greatest breadth of it 0.05 to 0.06. Habitat.—Arctic Ocean, lat. 83° 19′ N., North Polar expedition of the "Alert."

## Genus 229. Hymeniastrum, Ehrenberg, 1847, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 54.

Definition.—Porodiscida with three simple, undivided, chambered arms, connected by a patagium; triangular shell regular, with three equal arms and three equal angles.

The genus Hymeniastrum was founded by Ehrenberg (1847) with a very incomplete diagnosis, and hitherto known only by one single species, figured by him as Hymeniastrum pythagoræ (Mikrogeol., 1854, Taf. xxxvi. fig. 31). This form occurs in two different states, externally quite identical; in one state the central disk (as figured, loc. cit.), is a simple lens or hollow disk, containing a medullary shell or "central chamber"; in the other state the central disk is composed of two concentric rings surrounding the "central chamber." We retain here the name Hymeniastrum for this latter state,

<sup>1</sup> Hymeniastrum = Membranous star ; ὑμήν, ἄστρον.