2. Hymenactura pythagoræ, Haeckel.

Hymeniastrum pythagoræ, Ehrenberg, 1854, Mikrogeol., Taf. xxxvi. fig. 31; Abhandl. d. k. Akad. d. Wiss. Berlin, 1875, p. 76, Taf. xxx. fig. 5.

Phacoid shell three times as broad as the medullary shell, with six pores on its radius. Arms nearly trapezoidal, somewhat longer than the diameter of the central disk, at the truncated distal end nearly as broad, at the base two-thirds as broad. In each arm eight to nine transverse rows of square chambers, each chamber with one pore on the surface. Patagium enveloping the basal half of the arms, with four to five rectilinear parallel rows of chambers, forming together a regular triangle. Differs from the preceding species mainly in the quite different structure of the patagium, from the true Hymeniastrum pythagorae in the phacoid shell of the central disk, which encloses only one simple medullary shell.

Dimensions.—Diameter of the phacoid shell 0.11, of the medullary shell 0.04; length of the arms 0.13, basal breadth 0.07, distal breadth 0.12.

Habitat.—Fossil in the rocks of Barbados.

3. Hymenactura trigona, n. sp.

Astromma sp., Bury, 1862, Polycystins of Barbados, pl. xv. fig. 1.

Phacoid shell twice as broad as the medullary shell, with four to five pores on its radius. Arms slender, lanceolate, three times as long as the diameter of the phacoid shell and five times as long as broad in the middle part; distal ends blunt. Patagium enveloping only the basal half of the arms, forming a regular triangle with concave sides.

Dimensions.—Diameter of the phacoid shell 0.08, of the medullary shell 0.035; length of the arms 0.2, greatest breadth 0.04.

Habitat.—South Atlantic, Station 332, depth 2200 fathoms; fossil in the rocks of Barbados.

Hymenactura hexagona.

Hymeniastrum sp., Bury, 1862, Polycystins of Barbados, pl. xv. fig. 3.

Phacoid shell twice as broad as the medullary shell, with four to five pores on its radius. Arms nearly equilateral triangular, three times as long as the diameter of the phacoid shell, at the truncated distal end nearly three-fourths as broad as long, at the narrow base only one-fourth as broad. Patagium complete, enveloping the arms completely, so that the whole body represents a regular hexagonal disk.

Dimensions.—Diameter of the phacoid shell 0.08, of the medullary shell 0.04; length of the arms 0.18, basal breadth 0.04, distal breadth 0.16.

Habitat.—Fossil in the rocks of Barbados and Nicobar.