

the diameter of the central disk and at the base half as broad, slowly decreasing in breadth towards the distal end, which is armed with a strong pyramidal spine.

*Dimensions.*—Diameter of the phacoid shell 0·1, of the medullary shell 0·05; length of the arms 0·12, basal breadth 0·07.

*Habitat.*—Pacific, central area, Station 268, depth 2900 fathoms; also fossil in Barbados.

7. *Trigonactura trixiphos*, n. sp.

Phacoid shell circular, twice as broad as the medullary shell, without a completely surrounding chambered ring, with four pores on its radius. Arms club-shaped, about as long as the diameter of the central disk, at the base half as broad as long, at the rounded distal end broader, and armed with a strong pyramidal terminal spine, nearly as long as the arm itself.

*Dimensions.*—Diameter of the phacoid shell 0·08, of the medullary shell 0·04; length of the arms (without terminal spine) 0·08, basal breadth 0·04, distal breadth 0·06.

*Habitat.*—Fossil in the rocks of Barbados.

Genus 207. *Hymenactura*,<sup>1</sup> Haeckel, 1881, Prodrömus, p. 459.

*Definition.*—Coccodiscida with three chambered arms on the margin of the circular or triangular disk, connected by a spongy patagium.

The genus *Hymenactura* differs from the foregoing *Trigonactura* in the spongy patagium between the arms, and bears therefore to it the same relation that among the Porodiscida *Hymeniastrum* does to the simpler *Dictyastrum*. The oldest known species of this genus is *Hymenactura pythagoræ*, described by Ehrenberg as *Hymeniastrum pythagoræ*, but differing from this in the structure of the central disk.

Subgenus 1. *Hymenacturium*, Haeckel.

*Definition.*—Distal end of the arms blunt or truncated, without terminal spines.

1. *Hymenactura archimedis*, n. sp. (Pl. 38, fig. 8).

Phacoid shell three times as broad as the medullary shell, with eight 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 only half as broad. In each arm eleven to twelve transverse rows of square chambers, each of which exhibits on the surface one large pore. Patagium enveloping the basal half of the arms, with four to five convex rows of chambers, forming together a circular concentric disk.

*Dimensions.*—Diameter of the phacoid shell 0·11, of the medullary shell 0·035; length of the arms 0·12, basal breadth 0·05, distal breadth 0·1.

*Habitat.*—Western Tropical Pacific, Station 225, depth 4475 fathoms.

<sup>1</sup> *Hymenactura* = Star-shaped shell with membrane between the rays; ἕμην, ἀκτίς, ὀστέα.