6. Zygacantha complanata, n. sp.

Spines compressed, two-edged, linear, of equal breadth throughout their whole length. Apex bifid. Base thickened, with a large leaf-cross. (Similar to Amphilonche complanata, but different in the equal size of all twenty spines, which are somewhat broader.)

Dimensions.—Length of the spines 0.12 to 0.18, breadth 0.002.

Habitat.—North Pacific, Station 244, surface.

7. Zygacantha semicompressa, Haeckel.

Acanthometra hemicompressa, Car, 1884, Zool. Anzeiger, p. 94, with woodcut.

Spines in the proximal half compressed, two-edged, linear, three to four times as broad as in the needle-shaped cylindrical distal half. Apex simple. Base pyramidal, with a small leaf-cross. Central capsule transparent.

Dimensions.—Length of the spines 0.1 to 0.2, breadth in the proximal half 0.02, in the distal half 0.006.

Habitat.-Mediterranean (Genoa), Haeckel; Adriatic Sea (Trieste), Czar, surface.

8. Zygacantha foliacea, n. sp.

Spines lanceolate, tapering from the broader middle part towards the two ends, with two dentated or serrated edges and a prominent middle rib. Apex simple. Base with a small leaf-cross. The spines like the leaves of Agave americana.

Dimensions. -- Length of the spines 0.15 to 0.2, middle breadth 0.02 to 0.03.

Habitat.-Indian Ocean, near the Island of Socotra, Haeckel.

Subgenus 3. Zygacanthonium, Haeckel.

Definition.—Spines in the centre grown perfectly together and forming a single star-shaped piece of acanthin.

9. Zygacantha dicopa, Haeckel.

Astrolithium dicopum, Haeckel, 1862, Monogr. d. Radiol., p. 400, Taf. xx. figs. 3, 4.

Spines compressed, two-edged, linear, of nearly equal breadth throughout their whole length, with a prominent middle rib, which in the distal third is cleft into two divergent teeth, ending in the two corners of the broad, obliquely truncated apex. All twenty spines with their central bases grown together and forming one single piece of acanthin—a star with twenty rays.

Dimensions.—Length of the spines 0.12 to 0.2, breadth 0.01 to 0.02.

Habitat.—Cosmopolitan; Mediterranean, Atlantic, Pacific, many Stations, surface.