

15. *Acanthonia serrulata*, n. sp.

Spines quadrangular pyramidal, with simple apex; the large basal leaf-cross nearly half as long as the prolonged distal part. The four prominent triangular edges of the latter are very thin and broad lamellæ, finely dentate or serrate.

Dimensions.—Length of the spines 0·2 to 0·3, greatest breadth 0·05 to 0·06.

Habitat.—Central Pacific, Station 272, surface.

Subgenus 3. *Acantholithium*, Haeckel.

Definition.—Spines in the basal part grown together, so that the whole skeleton is not composed of twenty separated pieces, but represents a single piece of acanthin—a star with twenty equal rays.

16. *Acanthonia stellata*, n. sp.

Spines quadrangular pyramidal, with simple distal apex, in the basal part grown perfectly together, so that the whole skeleton forms a single piece of acanthin—a starlet with twenty equal rays. The free pyramidal part of each spine is twice to four times as long as the basal part.

Dimensions.—Length of the spines 0·1 to 0·15, greatest breadth (on the surface of the central solid sphere) 0·02 to 0·04.

Habitat.—Central Pacific, Station 271, surface.

Subfamily 2. PHRACTACANTHIDA, Haeckel.

Definition.—Astrolonchida with twenty radial spines, each of which bears two opposite apophyses or lateral transverse processes; sometimes two longitudinal rows of opposite apophyses.

Genus 326. *Lithophyllum*,¹ J. Müller, 1858, Abhandl. d. k. Akad.
d. Wiss. Berlin, p. 52.

Definition.—Astrolonchida with two simple, not branched, opposite apophyses on each radial spine.

The genus *Lithophyllum* was founded by J. Müller for a single species (*Lithophyllum foliosum*), which we also here retain as the type of the genus. It is the first observed Astrolonchid, which bears two opposite lateral apophyses on each spine, and may therefore be regarded as the ancestral form of the subfamily Phractacanthida. The two opposite apophyses are here simple, whilst in the other genera of the subfamily they are branched or multiplied.

¹ *Lithophyllum* = With stony leaves; λίθος, φύλλον.