

Genus 327. *Phractacantha*,¹ Haeckel, 1881, Prodrömus, p. 465.

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

The genus *Phractacantha* differs from its ancestral form, the preceding *Lithophyllum*, by the ramification of the apophyses, which are either forked or bear lateral branches. If the prolonged fork-branches of the neighbouring spines meet and form a lattice-shell, this genus passes over into *Phractaspis*, the common ancestral form of the Diporaspida.

1. *Phractacantha bifurca*, n. sp.

Spines cylindrical, thin, of equal breadth throughout their whole length. Apex simple. Base pyramidal, without leaf-cross. From the outer third arise two opposite, thin, forked apophyses; ends of the fork branches acute.

Dimensions.—Length of the spines 0·1, breadth 0·006.

Habitat.—Central Pacific, Station 274, surface.

2. *Phractacantha bipennis*, n. sp.

Spines compressed, two-edged, tapering from the broader middle towards the two ends. Apex simple. Base pyramidal, without leaf-cross. From the middle arise two opposite broad, forked apophyses; ends of the fork-branches broad and obtuse.

Dimensions.—Length of the spines 0·15, breadth in the middle 0·012.

Habitat.—Central Pacific, Station 266, surface.

Genus 328. *Doracantha*,² Haeckel, 1881, Prodrömus, p. 465.

Definition.—Astrolonchida with two latticed or fenestrated apophyses on each radial spine.

The genus *Doracantha* arises from the foregoing *Phractacantha* by union of the fork-branches of the apophyses on each spine. By this concrescence is formed a polygonal or roundish plate with two pores, pierced by the radial spine between them. *Doracantha* may be regarded as a *Dorataspis*, in which the twenty small fenestrated plates have not become united.

¹ *Phractacantha* = Spines enclosed by a hedge; φρακτός, ἀκανθα.

² *Doracantha* = Spear-like spine; δόρυ, ἀκανθα.