

The upper or distal apophyses (nearly in the middle of the spine) are flat, leaf-shaped, broadened in the periphery, often lobed, and sometimes branched or even fenestrated. (Transition to *Phractaspis* and *Dorataspis*, or to *Phractopelta*?) The lower or proximal apophyses are thick, simple, all slightly curved; they are equidistant from the former and from the centre.

Dimensions.—Length of the spines 0·2 to 0·3, greatest breadth 0·01.

Habitat.—Mediterranean (Cette on the French shore), surface, J. Müller.

3. *Astrolonche pectinata*, Haeckel.

Acanthometra pectinata, J. Müller, 1858, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 48, Taf. x. figs. 1, 2.

Xiphucantha pectinata, Haeckel, 1862, Monogr. d. Radiol., p. 386.

Spines compressed quadrangular, with short, simple or bifid apex, pyramidal on the base, without leaf-cross. From the two broader edges of the proximal half arise two longitudinal rows of opposite apophyses; three to four slender teeth in each row.

Dimensions.—Length of the spines 0·2, breadth 0·08.

Habitat.—Mediterranean, Cette (French shore), surface, J. Müller.

4. *Astrolonche pinnata*, n. sp.

Spines in the distal half compressed, linear, two-edged, with bifid apex; in the proximal half three times as broad, lanceolate, at the base pyramidal, without leaf-cross. From the two broader edges of the proximal half arise two longitudinal rows of opposite apophyses; four to six broad triangular teeth in each row.

Dimensions.—Length of the spines 0·3 to 0·4, breadth in the outer half 0·012, in the inner half 0·03 to 0·04.

Habitat.—South Atlantic, Station 332, surface.

Subgenus 2. *Astrolonchidium*, Haeckel.

Definition.—Each spine with three parallel double rows of opposite apophyses.

5. *Astrolonche serrata*, Haeckel.

Xiphacantha serrata, Haeckel, 1862, Monogr. d. Radiol., p. 386, Taf. xvii. fig. 3, Taf. xviii. figs. 14a, 14b.

Xiphacantha serrata, R. Hertwig, 1879, Organismus d. Radiol., p. 11, Taf. ii. fig. 4.

Acanthometra serrata, Haeckel, 1860, Monogr. d. Radiol., p. 807.

Spines in the distal half thin, nearly cylindrical or a little compressed, thinned towards the short simple or bifid apex; in the proximal half three to six times as broad, four-winged, with six longitudinal rows of opposite apophyses. From the edges of the two broader (lateral) wings arise three