Subfamily 1. Zygacanthida, Haeckel.

Definition.—Astrolonchida with twenty simple radial spines, without apophyses or lateral transverse processes.

Genus 323. Acanthometron, J. Müller, 1855, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 229.

*Definition.—Astrolonchida with simple cylindrical or needle-shaped radial spines, without edges and without apophyses; their transverse section is circular.

The genus Acanthometron, with the restricted definition here given, is the most simple form of all Acanthonida, and may be regarded as the common ancestral form not only of this suborder but also of all Acanthoph hacta, in general of all Icosacantha, or all Acantharia in which twenty radial spines are regularly disposed after the Müllerian law (p. 717). In the wider sense, given originally to Acanthometra by Johannes Müller, its discoverer, this genus comprised all Acantharia constituting here our order "Acanthometra" (Radiolaria without lattice-shell, with radial spines united in the centre). In my Monograph (1862, p. 375) I restricted this genus to those "Acanthometrida" in which twenty simple spines of equal size (and without apophyses) are supported one upon another in the centre, and I separated as Astrolithium those forms in which they are grown together in the centre. But this difference now appears not so important, and I restrict here the genus Acanthometron (not Acanthometra) to those most simple forms in which the simple radial spines are cylindrical or conical, without edges.

Subgenus 1. Acanthometrella, Haeckel.

Definition.—Spines at the central base without leaf-cross, united by the opposed triangular faces of their pyramidal bases, resting one upon another.

1. Acathometron elasticum, Haeckel.

Acanthometra elastica, Haeckel, 1862, Monogr. d. Radiol., p. 376, Taf. xv. fig. 1, Taf. xviii. fig. 1. Acanthometra elastica, R. Hertwig, 1879, Organismus d. Radiol., Taf. i. figs. 2, 2a, 2b.

Spines cylindrical, very thin and long, needle-shaped, at the central base four-sided pyramidal, without leaf-cross. Distal apex conical. The spines are very elastic, of nearly equal thickness in their whole length. Central capsule quite pellucid, colourless, with a variable number of yellow pigment-bodies (xanthellæ?).

Dimensions.—Length of the spines 0.3 to 0.6, breadth 0.001 to 0.002.

Habitat.—Cosmopolitan, very common in all warmer seas; Mediterranean, Atlantic, Indian, Pacific, surface.

¹ Acanthometron = Spine proportion ; ἄκανθα, μέτρον.