2. *Acantholonche peripolaris*, n. sp. (Pl. 132, fig. 8).

Two principal spines quadrangular prismatic, with four broad prominent lamellar wings, of increasing breadth towards the pyramidal distal apex. Both ends of each spine four-sided pyramidal, base without leaf-cross. Two transverse and eight tropical spines about two-thirds as long as the former, four-sided pyramidal in the basal half, conical in the distal half, often curved. Eight polar spines very small, about one-fourth as long as the latter, short conical or pyramidal. Central capsule four-sided prismatic, enveloping both principal spines.

Dimensions.—Length of the two principal spines 0·2, of the ten smaller spines 0·12, of the eight rudimentary polar spines 0·04.

Habitat.—Central Pacific, Station 274, surface.

Order IV. ACANTHOPHRACTA, Richard Hertwig, 1879.

Acanthometræ cataphractæ, Johannes Müller, 1858, Abhandl. d. k. Akad. d. Wiss. Berlin, pp. 12, 22, 49.

Dorataspida et Diploconida, Haeckel, 1862, Monogr. d. Radiol., pp. 404, 412.

Acanthophractida, Richard Hertwig, 1879, Organismus d. Radiol., pp. 25, 137.

Dorataspida, Diploconida, et Sphærocapsida, Haeckel, 1881, Prodromus, p. 467.

Definition.—ACANTHARIA with complete latticed shell.

The order Acanthophracta, the fourth order of Radiolaria, comprises all those ACANTHARIA in which the acanthinic skeleton is a complete latticed or fenestrated shell, supported by radial spines arising from one common central point. By the possession of such a complete shell the Acanthophracta differ from their ancestral group, the nearly allied Acanthometra, which represent the older and simpler, first order of ACANTHARIA. All Acanthophracta are Icosacantha (like the Acanthonida, their ancestral group), and possess twenty radial spines disposed according to the Müllerian law (compare above, p. 717).

Johannes Müller, who first observed five representatives of this order, called a part of them "*Acanthometræ cataphractæ*," and united these with the true Acanthometra (*Acanthometra costata* and *Acanthometra cataphracta*; Abhandl. d. k. Akad. d. Wiss. Berlin, 1858, pp. 12, 49). Another part was united by him with the true *Haliomma* (*Haliomma echinoides*, *Haliomma hystrix*, *Haliomma tabulatum*; Abhandl. d. k. Akad. d. Wiss. Berlin, 1858, pp. 36, 37). He supposed that these latter formed the immediate transition from the true Acanthometra to the true *Haliomma*, and that their skeleton was siliceous.