Dimensions.—Length of the spines 0.2 to 0.3, breadth in the middle part 0.012, on the base 0.02; length of the apophyses 0.02 to 0.03.

Habitat.—Mediterranean, Atlantic, Stations 348, 354, surface.

2. Xiphacantha crucifera, n. sp.

Spines slender, four-sided prismatic, thin, of nearly equal breadth throughout the whole length. Base with small wing-cross. Four apophyses much nearer the proximal than the distal end, thin, straight smooth, three to six times as long as the basal breadth of the spine. Central capsule pellucid, with yellow bodies.

Dimensions.—Length of the spines 0.4 to 0.5, breadth 0.002 to 0.004; length of the apophyses 0.01 to 0.02.

Habitat.—Central Pacific, Station 266, surface.

3. Xiphacantha spinulosa, Haeckel.

Xiphacantha spinulosa, Haeckel, 1862, Monogr. d. Radiol., p. 388, Taf. xvii. fig. 4.

Acanthometra spinulosa, Haeckel, 1860, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 807.

Spines stout, four-sided prismatic, of nearly equal breadth throughout the whole length, on the distal apex truncated, two-edged. Base with large wing-cross. Four apophyses about in the middle of each spine, conical, straight, spinulated, twice to four times as long as the basal breadth of the spine. Central capsule opaque, yellow.

Dimensions.—Length of the spines 0.27, breadth 0.014; length of the apophyses 0.05. Habitat.—Mediterranean (Messina), surface.

4. Xiphacantha emarginata, n. sp.

Spines stout, four-sided, in the proximal half prismatic, in the distal half pyramidal, with emarginated apex. Base with very large wing-cross. Four apophyses about in the middle of each spine, compressed, straight, two-edged, with emarginated ends, about twice as long as the basal breadth of the spine. Central capsule small, pellucid.

Dimensions.—Length of the spines 0.2 to 0.3, breadth 0.02 to 0.03; length of the apophyses 0.04 to 0.06.

Habitat.—South Pacific, Station 291, surface.

5. Xiphacantha falcata, n. sp.

Spines slender, four-sided prismatic, gradually thickened from both ends towards the middle part, with simple apex. Base with very small wing-cross. Four apophyses about in the middle part of each spine, falcated, compressed, recurved, twice to three times as long as the greatest breadth of the spine.