1. Amphipyle aceros, n. sp.

Cortical shell quite smooth, without any spines or thorns. Both lateral wings (or opposite half girdles) semilunar, with convex lateral crest, three times as long as broad; twice as broad as the trizonal lentelliptical medullary shell.

Dimensions.—Length of the medullary shell 0.05, breadth 0.03; length of each lateral wing (or principal dimension of the latticed girdle) 0.18, breadth of it (or transverse dimension of each girdle-tube) 0.06.

Habitat.—Pacific, central area, Station 271, depth 2425 fathoms.

2. Amphipyle stenoptera, n. sp.

Cortical shell smooth, without spines. Both lateral wings of the same breadth as the lentel-liptical medullary shell, but five times as long as broad, prolonged on both ends into cylindrical latticed tubes, with rectilinear lateral crest.

Dimensions.—Length of the medullary shell 0.06, breadth 0.04; length of each cylindrical lateral wing 0.2, breadth 0.04.

Habitat.—South Atlantic, off Ascension Island, Station 343, surface.

3. Amphipyle platyptera, n. sp.

Cortical shell thorny, but without larger spines. Both lateral wings nearly triangular, very broad and short, four times as broad as the medullary shell between them, and only twice as long as broad, with rectilinear lateral crest.

Dimensions.—Length of the medullary shell 0.05, breadth 0.25; length of each lateral wing 0.18, breadth 0.09.

Habitat.—Indian Ocean, Ceylon, Haeckel, surface.

Subgenus 2. Amphipylura, Haeckel.

Definition.—Cortical shell armed with large, symmetrically disposed spines.

4. Amphipyle amphiceros, n. sp.

Cortical shell with two conical spines on the poles of the longitudinal axis (of the lentelliptical medullary shell), without other large spines, but with small thorns on the surface; two to three longitudinal rows of irregular, roundish pores on each half wing of the cortical girdle.

Dimensions.—Length of the medullary shell (or principal axis) 0.06, breadth (or transverse axis) 0.04; length of each lateral wing 0.2, breadth of it 0.05.

Habitat.—Western Tropical Pacific, Station 222, surface.