

opposite in pairs in two crossed diagonal planes. Inner cortical shell of the same shape, but two-thirds smaller, also thorny. Transverse girdle broad, with four pores on the isthmus. (This species appears to be the common *Tetrapyle octacantha*, with doubled cortical shell.)

*Dimensions*.—Length of the first shell 0.04, breadth 0.03; length of the second shell 0.16, breadth 0.12; length of the third shell 0.24, breadth 0.18.

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

#### 5. *Tetrapylonium armatum*, n. sp.

Outer cortical shell nearly quadrangular, one and a fourth times as long as broad, with very spiny surface. Between numerous smaller (simple or branched) thorns arise twelve larger radial spines, symmetrically distributed, eight wing-spines crossed in two diagonal planes (as in *Tetrapylonium octacanthum*) and four corner spines on the four rounded corners of the lateral plane (as in *Tetrapylonium quadrangulare*). Therefore this species combines the armature of both foregoing species. Four gates kidney-shaped. Inner cortical shell elliptical, smooth, three-fourths smaller.

*Dimensions*.—Length of the first shell 0.045, breadth 0.035; length of the second shell 0.18, breadth 0.15; length of the third shell 0.25, breadth 0.2.

*Habitat*.—Pacific, central area, Station 266, depth 2750 fathoms.

### Genus 288. *Pylozonium*,<sup>1</sup> n. gen.

*Definition*.—Pylonida with trizonal lentelliptical medullary shell, surrounded by double latticed cortical shell; inner cortical shell as well as the outer *Pylonium*-shaped, each with three perfect crossed girdles (transverse, lateral, and sagittal).

The genus *Pylozonium* is the most highly developed form of the Pylonida, as all three systems of concentric girdles here become fully developed, each system with three perfect girdles. In this genus only among all the Pylonida we find nine complete latticed girdles, and in each of the three dimensive planes three concentric elliptical girdles. The first system forms the medullary shell, the second system the inner cortical shell, and the third system the outer cortical shell.

#### 1. *Pylozonium novemcinctum*, n. sp.

Outer cortical shell lentelliptical, thorny, one and a third times as long as broad, without radial spines, with four kidney-shaped gates. Inner cortical shell of the same shape, but one-third smaller, four times as large as the lentelliptical medullary shell.

*Dimensions*.—Length of the medullary shell 0.04, breadth 0.03; length of the inner cortical shell 0.16, breadth 0.12; length of the outer cortical shell 0.24, breadth 0.18.

*Habitat*.—North Pacific, Station 253, depth 3125 fathoms.

<sup>1</sup> *Pylozonium* = Shell with gates and girdles; πύλη, ζώνιον.