

(Similar to *Tetrapylonium quadrangulare*, Pl. 49, fig. 15), but without a sagittal girdle and with stronger lateral spines.)

*Dimensions*.—Medullary shell 0.06 long, 0.04 broad; cortical shell 0.18 long, 0.1 broad; gates 0.007 high, 0.01 broad.

*Habitat*.—North Atlantic, Canary Islands, Station 353, surface.

13. *Tetrapyle quadrigata*, n. sp.

Cortical shell thorny, with four brush-like groups of radial spines on the four diagonal corners of the lateral plane, opposite in pairs in diagonal axes. Lateral girdle nearly square, somewhat broader than long. Four gates kidney-shaped, twice as broad as high. On each half wing of the transverse girdle five to six longitudinal rows of irregular, roundish pores.

*Dimensions*.—Medullary shell 0.06 long, 0.04 broad; cortical shell 0.14 long, 0.15 broad; gates 0.03 high, 0.07 broad.

*Habitat*.—Pacific, central area, Station 270, surface.

14. *Tetrapyle octacantha*, J. Müller.

*Tetrapyle octacantha*, J. Müller, 1858, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 33, Taf. ii. figs. 1-6.

*Tetrapyle octacantha*, Haeckel, 1862, Monogr. d. Radiol., p. 435.

*Tetrapyle octacantha*, R. Hertwig, 1879, Organismus d. Radiol., p. 52, Taf. iv. fig. 7, Taf. vi. figs. 2, 5, 5a.

Cortical shell thorny, with eight long and thin, cylindrical radial spines, lying in two crossed diagonal planes, opposite in pairs. These eight characteristic diagonal spines (or "angular spines") are the same as in *Amphipyle octoceros* and many other Pylonida, and arise as prolongations of the proximal edges of the four gates (or of the lateral wings on the eight points, where they are intersected by the edges of the lateral ring). This cosmopolitan, widely distributed and very variable species was a long time the only known species of all the Pylonida, and very accurately first described (1858) by Johannes Müller, afterwards (1879) by R. Hertwig. But in the descriptions of these authors also some different species (such as the following) may be confounded with the true typical *Tetrapyle octacantha*. The four gates of this species are transverse-elliptical or almost triangular, nearly twice as broad as high.

*Dimensions*.—Length of the medullary shell 0.04, breadth 0.03; length of the cortical shell 0.18, breadth 0.13; height of the gates 0.05, breadth 0.08.

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

15. *Tetrapyle cladacantha*, n. sp.

Cortical shell thorny, with eight strong ramified radial spines, lying opposite in pairs in two crossed diagonal planes, as in the preceding species. It differs from this by the peculiar ramification of the eight spines, which bear two to eight simple or furcate lateral branches arising under