## 5. Tetrapyle cardiopyle, n. sp.

Cortical shell rough, without radial spines. Lateral girdle with hexagonal contour, nearly cylindrical in the middle part, conical at both ends, twice as long as broad. Four gates heartshaped, about as high as broad. On each half wing of the transverse girdle three to four longitudinal rows of subregular, polygonal pores.

Dimensions.-Medullary shell 0.04 long, 0.02 broad ; cortical shell 0.14 long, 0.07 broad; gates 0.05 high and broad.

Habitat.-Eastern Tropical Atlantic, Station 348, depth (2450) fathoms.

## Subgenus 2. Tetrapylura, Haeckel.

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

## 6. Tetrapyle fusiformis, n. sp.

Cortical shell rough, with two strong conical spines on the poles of the longitudinal axis. Lateral girdle spindle-shaped, one and a half times as long as broad. Four gates kidney-shaped, twice as broad as high. On each half wing of the transverse girdle four to five longitudinal rows of irregular, roundish pores.

Dimensions.-Medullary shell 0.07 long, 0.05 broad; cortical shell 0.18 long, 0.12 broad ; gates 0.04 high, 0.08 broad.

Habitat.-Western Tropical Atlantic, Mexican Gulf Stream, depth 1500 fathoms, Schaffner.
7. Tetrapyle pleuracantha, n. sp. (Pl. 9, fig. 9).

Cortical shell rough, with two strong conical spines on the poles of the transverse axis. .Lateral girdle elliptical, one and a half times as long as broad. Four gates subcircular or nearly hexagonal, about as high as broad. On each half wing of the transverse girdle three to four longitudinal rows of very irregular pores.

Dimensions.-Medullary shell 0.045 long, 0.035 broad; cortical shell 0.16 long, 0.11 broad; gates 0.045 high and broad.

Habitat.-Western Tropical Pacific, off New Guinea, Stations 222 to 224, depths 1850 to 2450 fathoms.

## 8. Tetrapyle transversa, n. sp.

Cortical shell thorny, with two strong conical lateral spines on the poles of the transverse axis. Lateral girdle elliptical, only four-fifths as long as broad. Four gates elliptical, twice as broad as high, with two prominent spines on the poles of the longitudinal axis of the medullary shell. On each half wing of the transverse girdle five to six longitudinal rows of subregular, roundish pores. (Similar to Octopyle transversa, but without sagittal septum and with stronger lateral spines.)

