The genus *Diploconus* must be derived from *Hexacolpus* (among the Hexalaspida) by the stronger development of the two hydrotomical spines and their large sheaths; all the other eighteen spines are much smaller, and usually devoid of prominent sheaths. Sometimes the eight tropical spines are rudimentary.

Subgenus 1. Diploconulus, Haeckel.

Definition.—Mantle of the double cone not compressed; its transverse section therefore circular.

1. Diploconus amalla, n. sp. (Pl. 140, fig. 1).

Mantle of the double cone thick walled, not compressed; its transverse section circular; its contour little convex; its surface nearly smooth; its distal margin regularly denticulated. Diameter of its mouth twice as large as the equatorial diameter of the shell and one-third as long as its total length. The two large spines prismatic, one-fourth longer than their conical sheath. The eighteen smaller spines very thin, about half as long as the former, a little curved.

Dimensions.—Length of the shell 0.3; equatorial breadth 0.05, polar breadth 0.1. Habitat.—Central Pacific, station 271, surface.

2. Diploconus cyathiscus, n. sp. (Pl. 140, fig. 3).

Mantle of the double cone thin walled, not compressed; its transverse section circular; its contour strongly convex; its surface with six stronger and many smaller ribs; its margin with numerous, straight and long, parallel denticles. Diameter of its mouth half as long as the whole shell and one and a half times as long as its equatorial diameter. The two principal spines one-fourth longer than their conical sheath. The eighteen smaller spines about half as long, thin, straight. Both geotomical spines thick and short.

Dimensions.—Length of the shell 0.2; equatorial breadth 0.07, polar breadth 0.1. Habitat.—West Tropical Pacific, Station 225, surface.

3. Diploconus cylindrus, n. sp.

Mantle of the double cone thick walled, dark, cylindrical, not compressed; its transverse section circular; its contours straight, parallel; its surface with strong parallel straight longitudinal ribs; its margin irregularly dentated. Diameter of its mouth one-fifth as long as the whole shell and two-thirds as long as the diameter of the equatorial intumescence. The two principal spines prismatic, nearly twice as long as their cylindrical sheath. The smaller spines about half as long, thin, conical, straight. (Resembles the medial part of Hexacolpus trypanon, Pl. 140, fig. 11.)

Dimensions.—Length of the shell 0.25; equatorial breadth 0.08, polar breadth 0.05. Habitat.—North Pacific, Station 241, surface.