The genus Stylodiscus opens the series of the Trochodiscida or of those Cenodiscida in which the thin margin of the hollow lenticular disk is armed with a number of solid radial spines, situated in its equatorial plane. Stylodiscus is at the same time the most simple form of the Stylodiscida, or of the numerous Discoidea (belonging to different families) in which the disk bears only two spines, opposite in one equatorial axis. Hitherto only two species of this genus have been observed, but they seem to represent two different subgenera.

Subgenus 1. Stylentodiscus, Haeckel.

Definition.—Internal cavity of the shell with centripetal axial rods.

1. Stylodiscus endostylus, n. sp. (Pl. 31, fig. 11).

Sethostylus endostylus, Haeckel, 1881, Prodromus et Atlas (pl. xxxi. fig. 11).

Disk with smooth surface and dentated margin. Pores irregular, roundish; ten to twelve on the radius of the disk. Marginal teeth conical, short, irregular. Both opposite polar spines cylindrical, longer than the diameter of the disk, and as broad as one larger pore. On the inside of the hollow disk both spines are prolonged into two strong centripetal axial rods, which do not reach the centre. Also a number of smaller centripetal axial rods surrounds the central cavity, so that an original medullary shell (Sethostylus) seems to have been lost (comp. above, p. 410).

Dimensions.—Diameter of the disk 0.25, of the pores 0.005 to 0.02; length of the polar spines 0.3 and more, thickness 0.012.

Habitat.—Pacific, central area, Station 265, depth 2900 fathoms.

Subgenus 2. Stylexodiscus, Haeckel.

Definition.—Internal cavity of the shell without axial rods.

2. Stylodiscus amphistylus, n. sp.

Disk with smooth surface and smooth margin. Pores regular, circular; eight to nine on the radius of the disk. Both opposite polar spines pyramidal, sulcated, about as long as the radius of the disk, and three times as long as broad at the base. Inner cavity of the disk simple, without centripetal rods.

Dimensions.—Diameter of the disk 0.15, of the pores 0.007; length of the polar spines 0.08, basal breadth 0.03.

Habitat.—Pacific, central area, Station 274, depth 2750 fathoms.