

a true phylogenetic relation. But it is remarkable that we do not find further forms of development in this family, by multiplication either of the arm-chambers (further growth in the three perradii) or of the concentric chambered rings (in the periphery of the disk margin).

The central capsule of the Pylodiscida is constantly flat, discoidal, and enclosed between the two sieve-plates of the surface. Its form is either circular or triangular.

Synopsis of the Genera of the Pylodiscida.

I. Subfamily Triopylida. Three gates between three simple arm-chambers.	}	Three gates open, without a barring equatorial girdle, . 245. <i>Triolena</i> . Three gates barred by a latticed equatorial girdle.	{	Gate-faces simple, . 246. <i>Triopyle</i> . Gate-faces latticed, . 247. <i>Triodiscus</i> .
II. Subfamily Hexapylida. Six gates between three double arm-chambers (three inner and three outer); no cham- bered marginal girdle.	}	Three outer gates open, without a barring equatorial girdle, 248. <i>Pylolena</i> . Three outer gates barred by a latticed (second) equa- torial girdle.	{	Both faces of the outer gates simple, . 249. <i>Hexapyle</i> . Both faces of the outer gates latticed, . 250. <i>Pylodiscus</i> .
III. Subfamily Discopylida. Six gates between three double arm-chambers.	}	In the equatorial plane on the margin of the <i>Pylodiscus</i> -shell is a cham- bered equatorial girdle.	{	No peculiar osculum on the margin of the disk, . 251. <i>Discozonium</i> . One peculiar osculum (with a corona of spines) on the margin of the disk, . 252. <i>Discopyle</i> .

Subfamily 1. TRIOPYLIDA, Haeckel.

Definition.—Pylodiscida with a simple, spherical or lenticular, central chamber, surrounded by three simple arm-chambers, which are separated by three notches or gates.

Genus 245. *Triolena*,¹ n. gen.

Definition.—Pylodiscida with a simple, spherical or lenticular, central chamber, surrounded by three simple arm-chambers. Notches between the three arms open.

The genus *Triolena* is the most simple form of all Pylodiscida, and must be regarded as their common ancestral form, from an ontogenetic as well as a phylogenetic point of view. The small shell is composed of a simple, spherical or lenticular, latticed, central chamber, and of three simple, surrounding equal arms, which are also simple latticed chambers, lie in the equatorial plane, and are separated by three equal angles or open gates.

¹ *Triolena* = Shell with three arms ; τρία, ὠδίνη