

rarely circular. Their widest part is generally the distal opening; more rarely this is a little constricted. The thin transparent lamella of acanthin, representing the mantle of the double cone, is commonly ribbed or furrowed by longitudinal, parallel or divergent crests, and elegantly denticulated on the edge of the distal opening.

The two conical or cylindrical halves of the mantle are connected with the two enclosed principal spines not only at the base, where they arise from the small central lattice-shell, but also throughout a certain part of their length, by means of two, four, or six wings or leaves, which lie opposite and in pairs in the meridian planes of these spines. These meridian wings are more or less triangular (with broader concave outer bases), and connected by their axial edge with the spine and by their peripheral edge with the mantle. They separate two, four, or six conical spaces or pyramidal compartments in each cone. But these aspal compartments and the separating septa are not new productions of the Diploconida, but are by inherited from their ancestral family, the Hexalaspida (compare above, p. 873).

The eighteen smaller spines in *Diploconus* are either of nearly equal size or more or less differentiated. The eight tropical spines are often much larger than the eight polar spines. The two geotomical spines (or the two opposite equatorial spines of the shortened geotomical axis) are often quite rudimentary. In *Diplocolpus* the external part (outside the shell) is in all eighteen smaller spines rudimentary or atrophied.

*The Central Capsule*, as shown by Hertwig, contains numerous small nuclei, and is divided into three parts by the above named two transverse strictures; the smaller central part (in the original lenticular lattice-shell) and the two opposite larger parts, filling up the greater part of the two conical or cylindrical sheaths, and more or less adopting their form. Corresponding to the shell itself the enclosed capsule is often more or less flattened, being compressed at both poles of the geotomical axis. The pseudopodia seem to proceed only from the two large polar apertures of the sheaths, and form therefore two opposite conical tufts or bunches.

#### *Synopsis of the Genera of Diploconida.*

All twenty spines more or less developed (sometimes eight of them rudimentary), 380. *Diploconus*.

Only the two hydrotomical spines developed (all the eighteen others rudimentary), 381. *Diplocolpus*.

Genus 380. *Diploconus*,<sup>1</sup> Haeckel, 1862, Monogr. d. Radiol., p. 404.

*Definition.*—Diploconida with two very large spines (opposite in the hydrotomical axis) and ten to eighteen other much smaller spines externally visible.

<sup>1</sup> *Diploconus* = Double cone; διπλος, κώνος;