

Family XII. DRUPPULIDA, Haeckel, 1882 (Pls. 15, 16, 17, 39).

Definition.—Prunoides with ellipsoidal, latticed (not spongy) shell, composed of two or more concentric shells; a simple or double cortical shell enclosing one or two internal concentric shells (medullary shells), without equatorial stricture. Central capsule ellipsoidal or cylindrical, without annular equatorial constriction.

The family Druppulida differs from the Ellipsida only in the possession of a simple or double medullary shell, which is enclosed in the centre of the central capsule, and connected with the ellipsoidal cortical shell (lying outside it) by radial beams, perforating the membrane of the capsule. The Druppulida exhibit therefore the same relation to the Ellipsida that the Dyosphærida among the Sphæroidea bear to the Monosphærida. The cortical shell may be simple or multiple. The whole fenestrated shell is thus composed of a variable number (two at least) of concentric shells, which are connected by radial beams.

The Medullary Shell—enclosed in the centre of the central capsule—is either simple or double, and composed of two small concentric shells. Their form is either spherical, or ellipsoidal, or lenticular. If the medullary shell be ellipsoidal, the main axis of the ellipsoid is the same as in the cortical shell. Sometimes the inner medullary shell is spherical, the outer ellipsoidal or lenticular. If the medullary shell be lenticular (arising from both poles of the main axis) its vertical axis is also identical with that of the cortical shell (Pl. 39, fig. 5).

The Radial Beams, which connect the medullary and cortical shell, are either developed in all possible directions (Pls. 16, 17), or limited to the equatorial plane, more rarely to the meridional plane. Sometimes the connection is produced only by two opposite beams which lie in the minor or equatorial axis (Pl. 39, figs. 3, 7, 8); more rarely in the major or meridional axis (Pl. 17, figs. 7, 8).

The Cortical Shell is constantly ellipsoidal, rarely with modifications, similar to those which appear in the simple shell of some Ellipsida. As a rule it is simple, rarely composed of two or more (sometimes six or more) concentric ellipsoidal shells (in *Cromyodruppa* and *Cromyocarpus*). The outer surface is commonly smooth, more rarely covered with radial spines (in *Druppocarpus*, *Prunocarpus*, &c.). In the majority peculiar polar appendages are developed at both poles of the main axis, these being prolongations of them, either in the form of hollow fenestrated tubes (*Pipetta*, *Pipettaria*, Pl. 39, figs. 7, 8), or solid strong spines. The two polar spines are either equal in size and similar in form (as in *Lithatractus*, *Stylatractus*) or unequal (as in *Druppatractus*, *Xiphatractus*, Pls. 16, 17).

The most primitive of all Druppulida is *Druppula*, with simple medullary shell and simple cortical shell (Pl. 39, fig. 3); *Prunulum* differs from it only in the possession