

simple latticed shell of the same form, only separated from it by a thinner or thicker jelly-veil. The lenticular or discoidal fenestrated shell is therefore an extracapsular or "cortical shell," without an enclosed medullary shell.

The few genera of the Cenodiscida differ only in the shape of the equatorial margin of the lenticular disk. In the first subfamily, Zonodiscida, the margin is either quite simple (*Cenodiscus*) or surrounded by a smooth, solid equatorial girdle (*Zonodiscus*). In the second subfamily, Trochodiscida, the margin is armed with solid radial spines, lying in the equatorial plane. According to the number and disposition of these marginal spines, we distinguish *Stylodiscus* (with two spines, opposite in one equatorial axis), *Crucidiscus* (with four spines, opposite in pairs in two equatorial axes, perpendicular one to another), *Theodiscus* (with three marginal spines), and *Trochodiscus* (with numerous, commonly twenty to thirty, irregularly disposed spines). The spines are constantly simple, not branched; sometimes more conical or cylindrical, at other times more angular or pyramidal.

The two convex faces of the lenticular shell are constantly of similar shape, commonly smooth, sometimes more or less thorny, or armed with bristle-shaped radial spines. The pores are commonly more or less regular, circular, and disposed in series, which are occasionally more radial, at other times more concentric. If the wall of the hollow lens be rather thick, the difference in the shape of the central and peripheral pores is often striking. The central pores perforating the thick wall perpendicularly are short cylindrical tubes; the marginal pores perforating it in an oblique direction are longer conical tubes. The bars between the central pores are often somewhat smaller.

*The Central Capsule* of the Cenodiscida is in all cases a perfect, circular, biconvex lens, the equatorial diameter of which is commonly between two-thirds and three-fourths of the enclosing lattice-shell. The interval between the two is filled up by the jelly-veil, or the hyaline "calymma," which is perforated by the numerous pseudopodia that pass through the shell-pores.

As the Cenodiscida possess the most simple shell-form of all Discoidea, we may regard *Cenodiscus* as the common ancestral form of this large section, in the same manner as *Cenosphæra* is the ancestral form of Sphæroidea, *Cenellipsis* of the Prunoidea, *Cenolarcus* of the Larcoidea. But it is also possible that a part of Cenodiscida (or all?) arises from the Phacodiscida by reduction and loss of the medullary shell. For in some cases we find arising from the inside of the shell centripetal radial beams, which end at a certain equal distance from the hollow centre (Pl. 31, fig. 11; Pl. 38, fig. 2). *Cenodiscus* itself can be derived either from *Cenosphæra* by compression of the spheroidal shell in one axis, or from *Sethodiscus* by loss of the intracapsular medullary shell, or from *Actidiscus* (the lenticular *Actissa*) by formation of a cortical shell around the lenticular central capsule.