plates of the surface are the porous walls of the cortical shell itself. The correctness of this explanation seems to be proved by such forms as figured in Pl. **38**, figs. 2, 4, where the whole surface of the phacoid shell is covered by a concentric chamber-work, as a central continuation of the marginal concentric rings. If we imagine a system of perfect concentric lenticular phacoid shells, compressed strongly from both poles of the shortened main axis, we get the same figure.

Rarely one single girdle only is developed on the equatorial margin of the lenticular disk (Pl. **37**, figs. 2, 3, 5). Commonly the number of concentric girdles amounts to three to six, often to ten to twelve or more. Some of these largest Coccodiscida reach a considerable size. Commonly all the girdles are of the same breadth, which is about equal to the radius or to the diameter of the inner medullary shell. Rarely the first (or innermost) girdle differs by its greater breadth from the succeeding ones (Pl. **36**, fig. 8).

Only in few Coccodiscida the girdle-building remains restricted to the equatorial planes, so that all the chambers lie in it. Commonly on both sides of this plane become developed several layers, and often the number of these (three to six or more) increases towards the periphery; in other cases not their number, but their height increases. Therefore very often the margin of the discoidal shell is much thickened, as thick as the centre of the lenticular phacoid shell (or even more); whilst between the latter and the former (on the proximal girdles) the disk is considerably thinner (Pl. **36**, figs. 2, 4; Pl. **37**, figs. 7, 8; Pl. **38**, figs. 2, 4). The stratified layers communicate by large openings between their chambers. The radial beams are commonly more or less regular and piercing, but also frequently irregular and interrupted; often their number increases towards the margin by intercalation of new beams.

The Pores of the sieve-plates, which cover both sides of the chambered disk, appear on the margin of the phacoid shell as direct continuations of the pores of the latter, and sometimes they are so regularly disposed that one single circular pore is situated on the surface of each chamber (Pl. **36**, fig. 7; Pl. **37**, fig. 1). But commonly the pores are of variable size and number, two to three on each chamber, and often quite irregularly scattered.

The Margin of the chambered disk exhibits many differences, which afford characters for the distinction of genera. In the first subfamily, the Lithocyclida, the margin is quite simple without radial appendages. In the second subfamily, the Stylocyclida, it is armed with solid radial spines lying in the equatorial plane, and often regularly disposed in the same manner as in the Phacodiscida (compare above, p. 421). In the third subfamily, the Astracturida, the margin bears two or more (commonly three or four) chambered arms, also situated in the plane of the disk, and of the same structure as the circular chambered girdles (Pl. **38**). In some cases even the whole system of chamber-girdles is represented only by the radial arms, which are inserted immediately on the margin of the phacoid shell. We may regard therefore these formations as imperfect chambered disks, which are developed only in the direction of certain rays