

and even in some Coccodiscida (principally in the peripheral part of the disk or its chambered arms); but both flat (or convex) surfaces of the disk (at least in the central part) remain here constantly as simple lattice-plates, whilst in all Spongodiscida the whole surface of the disk is spongy.

When I constituted the family Spongodiscida in my Monograph (1862, pp. 452, 460) I had separated from them the Spongocyclida, exhibiting in the central part of the disk a more or less distinct concentric arrangement of the spongy chambers, whilst in the former the delicate spongy framework is quite irregular, composed of branched siliceous threads, connected and interwoven in all directions. But in all Spongocyclida the whole surface of the spongy disk is quite as irregularly rough and deprived of smooth sieve-plates as in all true Spongodiscida, and the more or less concentric structure of the central part of the disk in the former (very variable and often scarcely able to be recognised) seems not sufficient to separate both groups; even the single genera cannot be sufficiently separated by this character. I now therefore give up entirely the group of Spongocyclida (as already done in my Prodrömus, 1881). Nevertheless the concentric annular structure in the dark central part of some Spongodiscida is very interesting as transition to the Porodiscida; it indicates already that the former are derived from the latter. Even the single genera in both families are corresponding.

In the new system of "Polycystina," which Ehrenberg gave, 1875 (Abhandl. d. k. Akad. d. Wiss. Berlin, p. 157), are enumerated under the *Calodictya* four genera "with spongy disk," viz., *Spongodiscus*, *Rhopalodictyum*, *Dictyocoryne*, *Spongaster*. Indeed these four genera, which I here retain, are true Spongodiscida, and must be separated from the other *Calodictya*, the greater part of which are Porodiscida. The number of species of true Spongodiscida now amounts to sixty-seven, which I dispose in thirteen genera.

The whole family may be divided into three subfamilies. The first of these are the Spongophacida (corresponding to the Trematodiscida among the Porodiscida), in which the circular margin of the spongy disk bears no radial appendages; either the margin is quite simple, spongy (*Spongodiscus*), or surrounded by a hyaline, solid, or porous equatorial girdle (*Spongophacus*). The disk is either more lenticular (biconvex) or more flat discoidal (a shortened cylinder), rarely a little biconcave (thicker at the margin than in the centre). The spongy framework of the solid disk is either quite irregular (*Spongodisculus*), or in the central part with concentric circular rings (*Spongocyclia*), or in the central part spirally convoluted (*Spongospira*).

The second subfamily, Spongotrochida, corresponds to the Stylodictyida (among the Porodiscida), and is distinguished by solid radial spines on the margin of the disk, disposed in the equatorial plane either irregularly or regularly (after the same order as in the other families of Discoidæa).

The third subfamily, Spongobrachida, correspond perfectly to the Euchitonida