are complete, but the frontal ring is incomplete, its basal part being wanting (Pl. 82, figs. 4–6). Therefore we find here six large gates between the three rings; four upper lateral gates (between the two crossed vertical rings) and two lower basal gates (between the basal rod of the sagittal ring and the two halves of the basal ring). *Eucoronis*, the type of this subfamily, may be derived either directly from *Semantis* by development of a frontal ring, or from *Tristephanium* by loss of the basal part of the frontal ring.

A quite simple basal ring, with a single gate, distinguishes the fourth subfamily of Coronida, the Acanthodesmida (*sensu restricto*), the genera *Coronidium* (Pl. 82, figs. 1, 2, 7, 8) and *Acanthodesmia* (Pl. 93, fig. 5). The horizontal basal ring alone is here complete, whilst both vertical rings (the sagittal and frontal rings) are incomplete, their basal parts being wanting. Therefore there are here five gates, four lateral and one basal. These forms may be derived from *Eucoronis* by loss of the basal rod of the primary sagittal ring.

The Tympanida, the fourth family of Stephoidea, exhibit another type of ring structure. Here two parallel horizontal rings are constantly developed, one on the apical pole, the other on the basal pole of the sagittal ring. The latter is the same basal ring as in the Semantida and Coronida. The former is a "mitral ring," developed in the same manner, by union of two pairs of horizontal lateral branches, which arise on both sides from the apical rod (or mitral rod) of the sagittal ring. In the simplest case these two parallel horizontal rings are connected only by the sagittal ring, which is either complete (*Protympanium*, Pl. 93, fig. 14) or incomplete (*Parastephanus*, Pl. 93, fig. 21). But commonly also an incomplete frontal ring is present, so that the two horizontal rings are connected by four vertical or subvertical rods; two of these "columellæ" are the dorsal and ventral rods of the sagittal ring, the two others are the lateral rods of the frontal ring. Between the former and the latter are sometimes developed two, four, or more accessory columellæ (probably halves of accessory incomplete diagonal meridian rings). In this way arise the characteristic "drum-forms" of many Tympanida, in which the two parallel horizontal rings correspond to the upper and lower rings of a drum, whilst the connecting vertical columellæ correspond to its parallel lateral rods (Pl. 83, figs. 1, 2, &c.).

Originally the two horizontal rings of these "drum-shells" are both bisected by the complete sagittal ring, each provided with two lateral gates (Protympanida). But in the Eutympanida both rings exhibit one simple gate only, the apical and the basal rod of the sagittal ring being lost. In the Paratympanida both rings are closed by a secondary lattice-plate, whilst in the Dystympanida the upper (mitral) ring alone is closed by such a plate, the lower (basal) ring is open. In some Eutympanida the shell assumes the strange form of a regular geometrical cube, the twelve edges of which are represented by thin rods of silex (*Lithocubus*)—its four upper edges represent the mitral ring, the four lower the basal ring; two opposite of the four vertical cube-