more; all the chambers form a single series and have a common main axis. All constrictions lie in planes parallel to the equatorial plane of the original ellipsoid; in the centre of the latter constantly lies a double "medullary shell," composed of two concentric, either spherical or lenticular, compressed shells. In all Panartida we call the two inner chambers (on both sides of the equatorial constriction) "proximal chambers," the two outer chambers (on the poles of the main axis) "distal chambers." The four-chambered cortical shell of the Panartida is either simple (in *Panartus*, Pl. 40, figs. 1–4) or double, with an external mantle (as in *Peripanartus*, Pl. 40, figs. 5–7). The simplest form of the subfamily is *Panartus* (*loc. cit.*). In this case also on both poles of the main axis may be developed solid spines, or hollow fenestrated tubes (*Panarium*, Pl. 40, fig. 9).

The seventh and last family of the Prunoidea, the Zygartida, is most nearly allied to the Panartida, and appears as a further developmental step from that family. Whilst in the Panartida the cortical shell is constantly four-chambered, with three parallel ring-like constrictions, in the Zygartida it is always prolonged and composed of six or more chambers, separated by five or more ring-shaped constrictions, in the middle of which is the equatorial stricture. In the centre of the latter (as also in the Panartida) always lies the double medullary shell, composed of two concentric, spherical, or lenticular shells. The number of the chambers of the cortical shells is commonly six or eight (with five to seven ring strictures), but it often mounts to ten and sometimes to twenty (with nineteen strictures), as in some species of *Zygartus* (Pl. 40, fig. 13). All the chambers lie in one series, one behind another, with a common main axis. The cortical shell is usually simple (in *Ommatocampe*, Pl. 40, fig. 10), sometimes double (in *Desmocampe*, Pl. 40, fig. 12), rarely triple (in *Zygocampe*, Pl. 40, fig. 13). In all three cases hollow fenestrated tubes may be developed on the poles of the main axis.

The morphological references and the phylogenetic affinities of all Prunoidea are so complex, that they seem to represent a quite natural group; all forms of it may be derived from the common ancestral form *Cenellipsis*. But a far more difficult question is the manner in which its pedigree may be constructed. The oldest family is probably the simplest, namely, Ellipsida. From this the Druppulida may be derived by production of medullary shells, the Artiscida by equatorial constriction. The Cyphinida can be produced either from the Druppulida by equatorial constriction or from the Artiscida by development of medullary shells. The Panartida appear as further developmental steps of the Cyphinida, by duplication of the chamber number; and the Zygartida as further productions of the Panartida, by increasing the number of the chambers.

The seven subfamilies of the Prunoidea can be arranged in two sections according to the presence or absence of medullary shells. The Ellipsida, Spongellipsida, and Artiscida possess a simple cortical shell, without a medullary shell; they represent the