

aspinal pores, and two, four, or more (secondary) coronal pores. In the majority of species the two opposite apophyses are first crossed at right angles by a transverse beam, and the two parallel transverse beams are again crossed by perpendicular tertiary branches (again parallel to the apophyses). In this case the network of the free lattice-plates becomes more or less rectangular. But in other species the ramification of the apophyses assumes more the form of bifurcation or of irregular branching. As already said, the neighbouring free lattice-plates of this third order never meet, and therefore a complete third shell is never formed.

The different genera of Phractopeltida exhibit very remarkable differences in the development of free apophyses (or lattice-plates of the third order). Whilst in the numerous species of the ancestral genus *Phractopelta* all twenty spines remain simple, without such apophyses, only in a single observed species (representing the genus *Pantopelta*) were all twenty spines protected by them. In the three other genera only one part of the spines bears free apophyses, but not the other part. The most frequent form is *Dorypelta* (Pl. 133, fig. 2); here eight spines are simple (four equatorial and four polar spines of the hydrotomical plane), whilst twelve spines bear apophyses (eight tropical and four polar spines of the geotomical plane). In *Octopelta* the eight tropical spines only bear apophyses, whilst the twelve other (four equatorial and eight polar) are simple. In *Stauropelta* finally the four equatorial spines only are simple, whilst the sixteen others bear free apophyses (eight tropical and eight polar spines).

The *Central Capsule* of the Phractopeltida is constantly spherical, and enclosed between the two concentric spherical shells; it is therefore larger than the inner and smaller than the outer shell. Its wall is pierced by the twenty radial beams connecting the two shells. The shape of the central capsule and of the enveloping calymma is the same as in the other *Acanthophracta* and specially in the *Dorataspida*.

Synopsis of the Genera of Phractopeltida.

All twenty spines of the same form,	{	All twenty spines without apophyses in the free external part,	366. <i>Phractopelta</i> .
		All twenty spines with apophyses in the free part,	367. <i>Pantopelta</i> .
Twenty radial spines, partly without, partly with apophyses in the free external part,	{	Eight tropical spines with apophyses, twelve others (eight polar and four equatorial) simple,	368. <i>Octopelta</i> .
		Twelve radial spines (eight tropical and four polar) with apophyses, eight others (four polar and four equatorial) simple,	369. <i>Dorypelta</i> .
		Sixteen radial spines (eight tropical and eight polar) with apophyses, four equatorial, simple,	370. <i>Stauropelta</i> .