more natural to unite these latter into another suborder as Cladophracta, and to separate them from the Sphærocapsida, which may be called Capsophractæ.

The Dorataspida (Pls. 134–138), the common ancestral stock of the Cladophracta, in the definition here restricted embraces all those Acanthophracta in which the spherical lattice-shell is simple and composed of the meeting branches of twenty radial spines united in its centre. As already pointed out above, this family is probably diphyletic, and embraces two subfamilies which have been derived originally from two different forms of Acanthonida—the Diporaspida (with two opposite apophyses on each spine) derived from the Phractacanthida, and the Tessaraspida (with four crossed apophyses on each spine) derived from the Stauracanthida; in the former we find originally forty apophyses, in the latter eighty apophyses, by the meeting branches of which the spherical lattice-shell originates. The four following families of Acanthophracta have probably been derived from the Diporaspida.

The Phractopeltida (Pl. 133, figs. 1–6) differ from all other Acanthophracta in the possession of a double lattice-shell, composed of two concentric spheres which are united by the twenty radial spines meeting in the centre. As all Phractopeltida possess originally only two apophyses on each radial spine, they must be derived from the Diporaspida (*Orophaspis*), and bear to them the same relation as the Dyosphærida do to the Monosphærida. As the spherical central capsule of the Phractopeltida is enclosed between both shells, smaller than the outer, larger than the inner shell, the latter may be called "medullary shell," the former "cortical shell." This family represents among the Acanthophracta only the "Diplophracta," whilst all others are "Haplophracta."

The three families here characterised may be called together "Sphærophracta," as their central capsule and the enveloping shell are constantly spherical (or the shell sometimes an "endospherical polyhedron"). On the contrary the following three families of Acanthophracta may be united as "Prunophracta," as their central capsule and shell are never spherical, but either ellipsoidal or lenticular or of another form. The common ancestral stock of this suborder are the Belonaspida, in which the form of the central capsule and the enclosing lattice-shell is ellipsoidal; they are derived from the Dorataspida (and probably all from the subfamily Diporaspida) by the prolongation of two opposite radial spines which are larger than the eighteen others; they are the two equatorial spines of the "hydrotomical axis" (compare above, p. 719, and Pl. 136, figs. 6–9).

The Hexalaspida (Pl. 139) represent a new and very remarkable family, distinguished from all other Acanthophracta by the preponderating development of six stout radial spines, which are much larger than the fourteen others. These six principal spines lie in one meridian plane of the shell (in the "hydrotomical plane," p. 720), and are the two opposite equatorial spines and the four appertaining polar spines of the same plane.