Rarely the six hydrotomical or principal spines are of equal size, and thus the margin of the shell may be quite circular or regularly hexagonal (Pl. 139, figs. 1-3); the two equatorial spines of the hydrotomical plane are usually larger than its four polar spines, and thus the margin of the shell becomes more or less elliptical (Pl. 139, figs. 4-7). Usually (almost constantly) these six larger spines are more or less compressed, triangular, often very broad and flat; their two edges lie in the hydrotomical plane. Their two flat surfaces are often furrowed, with longitudinal ribs or crests converging towards the simple apex of the spines.

The fourteen smaller spines are regularly disposed according to the Müllerian law of Icosacantha on both convex sides of the lenticular shell; they are not only smaller than the six principal spines, but often also of different form, much thinner and shorter, sometimes needle-shaped. In the genera *Hexonaspis* and *Hexacolpus* (Pl. 139, figs. 1, 2) only their inner part (inside of the shell) is developed, whilst their outer part is quite rudimentary and not prominent on the surface. Therefore these genera appear to possess only six marginal spines externally.

The Lenticular Shell itself offers in the Hexalaspida great difficulties in the way of accurate study, as its wall is constantly very thick and dark, often quite opaque and non-transparent. However, prolonged accurate researches have convinced me that its structure is essentially the same as in the Belonaspida and especially in the genera Dictyaspis and Coleaspis. As in these latter the twenty plates of the shell bear high crests or combs on the outer surface, and by these funnel-shaped dimples are separated. The network of these crests is more or less regular (Pl. 139, figs. 1–7). Around the base of each radial spine the shell is usually elevated in the form of a conical or cylindrical sheath; the crests are prolonged into the sheaths as longitudinal ribs, parallel to the spine or convergent towards its apex. Whilst in Hexalaspis and Hexanaspis these basal sheaths are not at all or but little prominent (Pl. 139, fig. 2; Pl. 140, fig. 16), in Hexaconus and Hexacolpus they envelop the basal half (or even more) of the spines, and very often the circular or elliptical free distal edge of the sheath is elegantly denticulated or serrated (Pl. 139, figs. 1, 3–7; Pl. 140, figs. 9–16).

The Pores of the shell exhibit in the Hexalaspida the same shape as in the majority of the Belonaspida. Each spine bears only two broad opposite apophyses, the fork-branches of which unite to form a polygonal shield with two pores. The number of parmal pores is constantly (?) forty, as each plate possesses only two primary aspinal pores; there are no secondary or coronal pores. The numerous (between fifty and one hundred, rarely more) smaller pores between the forty parmal pores are probably always sutural pores; however, their number and position is very difficult to determine, on account of the high protecting crests; the majority of the funnel-shaped dimples between the latter seem to be blind, not perforated. Sometimes all the dimples, except the twenty spinal ones, seem to be blind and the sutural pores appear