

though not longer, for this reason probably amounting to as large a proportion of the animal as in *Proterocameroceras*.

Endosiphosheaths and endosiphofunicles. The endosiphosheaths were, corresponding to the heavy weight they had to support, rather stout membranes, reaching in some instances a thickness of 1mm. They are mostly well preserved, sometimes closely crowded and separated by intervals not wider than .5mm [see pl.12, fig.5]; but in at least one instance they were also separated by an open space of 5mm into which calcite crystals freely project. Their sections are not evenly curved ellipses, but partake more of the nature of polygonal surfaces or are even bounded by undulating lines. This is due to their being held in position by guy ropes or funicles, which we will designate here as "endosiphofunicles." These are of the same nature as the endosiphosheaths and appear in sections as dark gray to black pillars of organic carbonate of lime, often bounded by black lines. They originated from membranous funicles, in which organic carbonate of lime was deposited in similar manner as in the endosiphosheaths. The sections [pl.11, pl.13, fig.3] show them well developed. Several have been further enlarged to show their relation to the endosiphosheaths [see pl.12].

If it were not for the outward curvature or angulation of the endosiphosheaths [see pl.12, fig.1, 2] at the points of connection with the endosiphofunicles, and for the fact that the outer wall of the siphuncles passes over these funicles [see pl.12, fig.2; pl.13, fig.5], one might be inclined to consider them as worm tubes; specially where they appear in such great numbers as in plate 11, figure 2. But in this latter section it will be noticed that the greater number pass only from the outer wall of the siphuncle to the first endosiphosheath; while but a smaller number—among these the remarkable one in the upper right corner which bifurcates three times [see pl.12, fig.1]—reach the inner endosiphosheath or the endosiphocoleon.

In looking over the series of sections, beginning with figure 1 [pl.11] we will readily notice that the number of endosiphofunicles diminishes very rapidly with the shrinking of the endosiphosheaths