

pl.6, fig.2]. The septal necks,¹ however, do not as in most orthoceratites extend only a short distance backward, but curve first gently inward, thus contracting the siphuncle slightly and just above the preceding septum bend again outward, growing thicker and standing on the latter septum. The cameras are thus completely shut off from the siphuncular space. There is, however, no separate siphuncular wall present in this part, the septal necks forming the only partitions. The proportional length of this part to the total length of the conch I have not ascertained; it is, however, certain that this open siphuncle extended for the distance of several inches apicad from the living chamber.

Under the second part of the siphuncle we comprise that portion in which the organic deposits characteristic of *Cameroceras* and consisting of endocones begin to form. The space included by the last formed endocone is a cone with elliptic or more frequently subtriangular section, the base lying parallel to the flat side of the siphuncle [see pl.8, fig.7]. The more convex side is provided with low annulations which are slightly convex forward. The cone is always filled with matrix, like the living chamber and open part of the siphuncle and is what Dewitz and other authors have termed the "Spiess" (or dart) of the endoceratites. The last endocone is in sections [see pl.9, fig.2] distinctly set off by its darker color from the coarsely crystalline white calcite infilling of the more apical portions of the siphuncle, which suggests that, when left behind by the advancing animal, it contained considerably more organic matter than is found in the solid part of the siphuncle where calcite infiltration has taken place. This endocone connects with a cylindric layer of equally carbonaceous lime carbonate, which being directly adjacent to the septal necks, lines the entire siphuncle and extends forward into the first part to an extent at present not known to me, but certainly not comprising the entire first part, for its absence in the siphuncle for several inches from the base of the living chamber could be ascertained in

¹We prefer the older term "septal neck" to the later "funnel" proposed by Hyatt for the reason pointed out by Foord [1888, p. 130] that under funnel another organ of the recent Cephalopoda is understood.