On the same principle P. newton-winchelli should be removed from the holochoanitic Piloceratidae and brought under the Orthochoanites, where, as far as I am aware, it constitutes a new genus (Clarkoceras).

A further character quite significant of the advance of Clarkoceras newton-winchelli beyond the typical

Piloceras stage is to be seen in the reduction of the endosiphosheaths of which only two were observed in a specimen of which only a small apical portion is missing [see fig.26]. These leave large endosiphuncular chambers between them which are not filled by depositions of lime carbonate, as the much smaller chambers in the species of Piloceras are. endosiphotube is only indicated by the perforation of these endosiphosheaths and has lost its own wall. The entire endosiphuncular structure is distinctly in a process of dissolution, resulting from the reduction of the size of the siphuncle in consequence of the more complete withdrawal of the visceral cone. In Balto-

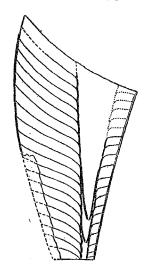


Fig. 26 Clarkoceras newton-winchelli Clarke (sp.). Median vertical section of a specimen. x1.5. (Copy from Clarke)

ceras the process of dissolution has gone already a step farther and all traces of endosiphosheaths have been lost notwithstanding the still considerable width of the siphuncle.

Summary

- I The conch of Cameroceras brainerdi from the Upper Beekmantown formation begins with a long slender preseptal cone or nepionic bulb, which terminates anteriorly with a slight constriction where septation sets in.
- 2 The nepionic bulb and the middle (neanic) portion of the siphuncle are filled by endosiphosheaths, while the anterior (ephebic) portion is empty.
- 3 The empty anterior portion is closed in apicad direction by the final endosiphosheath, which incloses the endosiphocone