

and designated as endosiphocoleon. Holm termed the species at the time, *Endoceras gladius*, but he later [1896, p.400] reunited it with *Endoceras (Nanno) belemniti-forme*. This again has been referred to *Vaginoceras* by Hyatt [1895, p.9]. We will state on this occasion that while we had worked out the characters of the endosiphuncular organs before we were aware of Holm's prior elaborate description, we found by subsequent comparison that our material on the whole verifies Holm's observations for the species in hand, but that at the same time it indicates an origin of the endosiphontube and a relation between endosiphontube and endosiphocoleon which is different from those observed by Holm. These and such other differences as have become apparent between the endosiphuncular structures of *Vaginoceras belemniti-forme* and *Camero-ceras brainerdi* will be noted at the end of the description of these structures in our species. We have copied here for comparison Holm's figure of the endosiphocoleon [text fig.4].



Fig. 4 *Vaginoceras belemniti-forme* Holm (sp.). Longitudinal section of siphuncle, showing endosiphocoleon. (Copy from Holm)

The endosiphococone which, at its forward end, is subcircular and only slightly flattened on the ventral (outer) side, becomes rapidly flattened toward its posterior end, the convex wall approaching the opposite flat one. It thus runs out into a double blade, which, lying approximately in the middle of the siphuncle and parallel to its flatter side, is at first almost as wide as the siphuncle and nearly touches its walls [see pl.7, fig.1]. This is at least the case in the large siphuncle of the later portions of the shell when the animal approaches maturity. This organ is the *endosiphocoleon*, which in our material consists just behind the endosiphococone of two thin, intensely black conchiolinous walls, forming a flattened broad tube. These walls are composed of extremely thin, concentric or rather long conical lamellae. They show a double sculpture, viz, low transverse ribs arching slightly forward and longitudinal lines