

into the angles [pl.8, fig.7] and the continuation of the angles into the supporting membranes indicate that the latter already supported the visceral cone before the formation of the last endosiphosheath, determined the form of the latter and at the time of its formation probably became the situs of organic deposits of lime carbonate. This latter view is at least suggested by the presence of cavities between the well defined bands of lime in the section.

If these membranes served as suspensory organs of the visceral cone and its posterior extension, their arrangement will give us a hint as to which side of this *Cameroceras* conch was the ventral side or turned habitually downward in the moving animal, the position of the siphuncle on one side of the conch not being a reliable criterion on account of its shifting sometimes in the same individual. It will now be noticed that in the sections reproduced in plate 8, figures 5, 6, the tube is suspended by three membranes, two of which form a diameter of the siphuncle, parallel to its flat side, while the third holds a perpendicular position to this diameter and connects the tube with the side of the siphuncle diametrically opposite to its flat side. If now a tube is suspended by means of three membranes, forming an inverted T, it is evident that the middle was the upper one. The alternative possibility that the tube was held by props or propping blades instead of by membranes, in which case the relation of the three blades would be inverted, may be neglected on account of the evident thinness and frailty of the supporting organs. It then follows that the flat side of the siphuncle which is in contact with the conch was the lower or ventral side.

4 Comparison of endosiphuncular structures in *Vaginoceras belemnitifforme* and *Cameroceras brainerdi*

Holm's elaborate description of the endosiphocoleon of *Vaginoceras (gladius) belemnitifforme* permits a close comparison of the development of this organ in the Swedish type and in this American form.

In the description of the endosiphocoleon of *V. belemnitifforme* a distinction [l. c., p.14] is made between the lateral and