

After the formation of several cameras the animal began to withdraw also from the apical conch and then the formation of the endosiphosheaths set in, which continued throughout the neanic or adolescent age. Bather has described this process so graphically [1894, p.433] that we can do no better than quote here from him.

We know that in *Nautilus* and *Spirula* after the secretion of the septal necks, the outer coat of the siphuncle, both inside and outside the region of the septal neck, becomes hardened by calcium carbonate; this gives it a certain rigidity and assists its retention in the fossil state. The same thing must have occurred in the coat of the visceral cone. Now in *Piloceras*, when the animal advanced in the shell its viscera naturally followed it, and by suction the walls of the visceral cone were drawn in so as to form the narrow and empty siphuncle. At least such would have been the case had not the stiffness of the outer coat prevented complete yielding of the skin, especially at the posterior part where the siphuncle tended to begin, but where the coat was most calcified. It must therefore have happened that the inner layers of the skin were gradually torn away from the outer layers. Another stiffening of the skin would take place higher up and the process would be repeated.

As an explanation of this periodical sloughing it is suggested that the actual moment of the casting "was after the emission of the generative products, when the visceral cone was flaccid; this explanation coincides with Seeley's explanation of the origin of septation itself, but it is not exposed to the objections brought against the latter."

Perhaps the fact that the cast of the visceral cone preserved by the mud filling of the "Spiess" within the last endosiphosheath is sometimes of an undulating character, as in the specimen reproduced in plate 8, figure 3, and at other times well expanded and smooth, thus indicating considerable difference in the relative tension of the wall of the visceral cone, can also be taken to point to the conclusion that the visceral cone, which in our form undoubtedly expanded far back into the siphuncular tube,