while the dorsal one is very convex, or in other words, that the ventral side appears as a base, all growth taking place in dorsal direction, tends also to support the view that the conch was carried slightly oblique and at rest placed in a horizontal position.

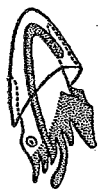

Fig. 23 Diagram of original cephalopod. (Copy from Lancaster)

It is interesting to note in this connection the views held by prominent zoologists as to the polarity of the Cephalopoda. Huxley, Lancaster and Lang give the original cephalopod the position shown in the diagrammatic figure reproduced here from Lancaster, while Verrill holds that the antero-posterior axis of the cephalopod is shown by forms as Loligo at rest [*see* fig.24]. It seems that the structure of Piloceras explanator, which both in organization and the time of its appearance is to be considered as a primitive form, could be easily reconciled with this latter view, if we assume that it was a sluggish creeping form which would rest its shell on the flat ventral side, but lift it up slightly while moving.

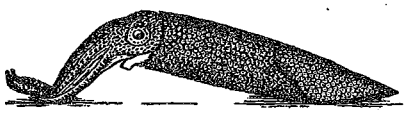

Fig. 24 Loligo at rest. (Copy from Verrill)

**Endosiphocoleon.** It remains to us to trace the development of the endosiphocoleon of the siphuncle of Piloceras explanator, which can be best done by reference to the series of sections 1–7 on plate 11.

We have already stated that the endosiphocone becomes flatter as it approaches its posterior end till at its termination it is five or more times as broad as high [*see* pl.13, fig.2]. From this end proceeds the endosiphocoleon, a flat sheathlike canal, which is nearly as wide as the innermost endosiphosheath; in section 1 by a secondary fracture apparently still wider. The longitudinal section [pl.13, fig.3] shows this endosiphocoleon in a young specimen, cut through its shorter axis. It demonstrates that the endosiphocoleon possesses a thin conchiolinous wall which extends through the last endosiphosheath into the cavity of the endosiphocone; and hence was here not formed as a continuation of the external conchiolinous layer of the endosiphosheath, but within the apical end