

rowly rounded. Siphuncle very small, close to the ventral margin slightly dilated between the septa; of these latter there are six in three lines where the transverse diameter of the shell is five lines.

The dimensions of the best preserved specimen that I have seen are as follows. Length of specimen twenty-two lines; transverse diameter of aperture seven lines; dorso-ventral diameter of aperture five lines; depth of chamber of habitation, twelve lines; transverse diameter at smaller extremity of specimena four lines nearly; dorso-ventral diameter three lines nearly. In the length of twenty-two lines measuring from the aperture this specimen tapers three lines in the transverse diameter and one line in the dorso-ventral diameters. The width of the siphuncle between the septa is about three-fourths of a line; its passage through the septa is a small circular aperture scarcely one third of a line in diameter. At the smaller end of this specimen the greatest transverse width is about one fourth the dorso-ventral diameter from the ventral margin. The aperture is more nearly a regular oval. The siphuncle is in the middle of the ventral aspect. The shell is gently curved towards the dorsal side.

This species is related to both *O. xiphias* and *O. hastatum*, (Report for 1856, p. 318 and 333) but the proportions are very different. In *O. xiphias* the two diameters of the aperture are to each other as 7 to 3, but in *O. tener* they are as 7 to 5. *O. hastatum* tapers at the rate of about 4 lines to the inch, while in *O. tener* the rate is scarcely two lines.

*Locality and Formation.*—Black River limestone. Pauquettes Rapids.

*Collectors.*—Sir W. E. Logan, E. Billings.

#### ORTHOCERAS PERTINAX. N. s.

*Description.*—The specimen on which this species is founded is two inches and five lines in length; nine lines in diameter at the larger and seven lines at the smaller extremity; section circular; septa distant three lines at the large end and two lines and a-half at the small end. The siphuncle is moniliform its centre distant two lines from the margin where the diameter is seven lines; the expansions are sub-globular and about two lines or a little more in their greatest diameter. The septa have a convexity equal to about half their distance from each other and they cross the tube obliquely so that their edges at the surface on the