

narrow and rather deep, obliquely transverse constrictions. Between these constrictions the siphuncle is laterally compressed and but slightly expanded, while its transverse diameter is from two to three times as great as the distance between the constrictions.

The surface makings of these siphuncles consist of fine close-set longitudinal striae.

Rainy island, Attawapishkat river, Dr. R. Bell, 1886; three fine and rather slender specimens. Ekwan River, upper rapid: two distorted fragments.

The best specimen, from the Attawapishkat river, which shows ten of the siphuncular constrictions, is three inches and nearly a half in length, by twelve millimetres in diameter near the smaller end, and twenty two near the larger. In this specimen the width of the siphuncle is about twice as great as the distance between two of the constrictions. In another equally slender but shorter specimen from the same locality, which shows seven siphuncular constrictions, the width of the siphuncle is nearly three times as great as the distance between the constrictions, at the smaller end; and only twice as great at the larger.

*Kionoceras cancellatum* (Hall).

*Orthoceras cancellatum*, (Hall). 1852.

*Orthoceras columnari*, Hall. 1866. Not *O. columnari*, Marklin, 1857.

*Orthoceras Scammoni*, *O. Hogin*, *O. undulatum*, and *O. irregulare*, McChesney, 1861; teste Hall.

*Orthoceras Woodworthi*, McChesney, 1865; teste Hall.

*Orthoceras Cadmus*, Billings, 1886.

*Orthoceras angulatum*, Hall. 1867. But not *O. angulatus*, Wahlberg, 1821.

*Orthoceras virgatum*, Hall. 1867. Not *O. virgatum*, Sowerby, 1839.

*Orthoceras subcancellatum*, Hall. 1877.

*Orthoceras orus*, Hall. 1877.

Ekwan river: portage road at falls, two fragmentary specimens, the largest less than two inches in length; and middle rapid, two similar fragments; all of which seem to be referable to this species. Each of these specimens is a portion of a longicone orthoceratite, with a circular transverse section, a central or nearly central siphuncle, and marked with narrow longitudinal ridges, separated by wider grooves or intervals, with minute, close-set, transverse, raised lines between them. Specimens with similar external characters have been found in the Niagara and Guelph formations at three localities in Ontario and Quebec. These are the *Orthoceras Cadmus*, of Billings, from