

ON AN OCCURRENCE OF HYBOCYSTIS IN ONTARIO.

(Plate II, Figures 1-5)

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In the Journal of the Cincinnati Society of Natural History for 1880, Professor Wetherby records the discovery of seven specimens of a remarkable organism which he describes as *Hybocystites problematicus*, referring the genus to the Cystoidea, as the name implies. The same specimens were examined by Herbert Carpenter who decided that their relationships were with the Blastoids rather than with the Cystids.* Wachsmuth and Springer in their revision of the Palaeocrinoidea, are of the opinion that these forms are really Crinoids of low organization. In view of the diverse opinions as to the proper place in a classification of this remarkable genus, it will be of interest to students of the Echinodermata to learn of its occurrence in a new locality—the first since the original discovery in Mercer County, Kentucky. The Trent Valley Canal cutting in Eldon tp., Victoria County, near Kirkfield, Ont., has yielded the University collector, Mr. Joseph Townsend, a fine series of Crinoids, Cystids and Asteroids. In working over this material one excellent specimen of *H. problematicus* and three of a new species of the same genus were found. As the present example of Wetherby's species is in a much better state of preservation than any of the original forms it is hoped that a few additional notes on the anatomy of this interesting fossil will not be superfluous. Rather than to enter the discussion as to the affinity of the organism the writer prefers to accept Wachsmuth and Springer's conclusion and to regard it as a Crinoid. The almost exact resemblance to *Hybocrinus* in the arrangement of the calyx plates and in the character of the anal orifice tend to strengthen the decision of these authors. An emended description of *Hybocystis problematicus* follows:—

Basals.—Five, pentagonal, the two posterior plates symmetrical and larger than the other three. This forces the column into an excentric position. (Fig. 5).

Radials.—The second ring of plates consists of four radials and a posterior hexagonal anal (azygous plate). This plate bears on its upper left side a small upper azygous or

* *Quarterly Journal, Geol. Soc., London*, p. 307, pl. XI., 1882.