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NOTES ON SOME CANADIAN SPECIMENS OF "LITUITES UNDATUS."

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One of the rarer fossils of the Black River limestone in the Province of Quebec, is a spirally coiled cephalopodous shell that was identified with *Lituites undatus* by E. Billings many years ago, and that certainly corresponds very well with one of the specimens that Professor James Hall has figured under that name. Specimens of this fossil, collected at the Falls of the St. Charles River at Lorette, also on the Lac Ouareau River, north of Joliette, by Sir W. E. Logan in 1852, and three miles west of Napierville, south of Montreal, are still labelled with that name in the Museum of the Geological Survey. Most of these specimens are not more than two inches in their greatest diameter.

But it has long been suspected that Hall has unintentionally included more than one species under the name *Lituites undatus*, and it is obvious, from his figures, that none of these are referable to Breyn's genus *Lituites*, as now understood.

The following is a brief summary of the literature bearing on this question:—

1842. On page 394 of the "Report of the Geology of the Second District of New York", by Dr. Ebenezer Emmons, two fossils are rather roughly figured under the name Inachus undatus. There is no detailed description of this species, and all that is said of it is that "this remarkable fossil is found at Watertown in the black limestone. It is rare. Casts sometimes occur which are smooth."

1847. In the first volume of the Palæontology of New York, Hall described some specimens from the same locality, which he evidently believed to be conspecific with Emmons' species. under the name Lituites undatus, and figures four of them on Plates XIII and XIII bis. Hall,