

GEOLOGICAL AND NATURAL HISTORY SURVEY OF CANADA.

CONTRIBUTIONS TO CANADIAN PALEONTOLOGY.

VOLUME I.

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2. *On some fossils from the Hamilton Formation of Ontario, with a list of the species at present known from that formation and province.*

The calcareous shales and limestones of the Hamilton Formation of the Middle Devonian System in western Ontario have long possessed a special interest to paleontologists, on account of the variety and excellent state of preservation of the fossils which they contain.

A succinct account of the first recognition of the exact geological horizon of this group of rocks is given by Mr. Alexander Murray on pages 129-182 of the "Report of Progress of the Geological Survey of Canada for 1853-54-55-56," published in 1857, and their distribution in Ontario is described more in detail in the fifteenth chapter of the "Geology of Canada" (1863) and in Professor Chapman's "Outlines of the Geology of Canada" published in 1876.

According to the writer last mentioned, "the formation in this district is estimated at about 250 feet in thickness. It extends across the counties of Norfolk, Elgin, Kent, Middlesex and Lambton, and also the south part of Huron, but is much obscured throughout this area by overlying clays, sands and other drift and superficial deposits. The best exposures occur in the township of Bosanquet, in the north-west corner of Lambton." To this it may be added that extensive and richly fossiliferous outcrops occur on both banks of the Sable River, in the adjacent township of West Williams, county of Middlesex, near Bartlett's Mills, that Windsor and Thedford are both in the township of Bosanquet, and that the name of the station on the Grand Trunk Railway which was formerly called Widdow has been changed to Thedford, the two villages of that name being only one mile and a half apart.

Most of the fossils that have been recorded from these rocks in Ontario are enumerated or described in two papers by the late Mr. E. Billings, and in two reports by Professor H. Alleyne Nicholson.

In Mr. Billings paper "On the Fossil Corals of the Devonian rocks of Canada West," published in the Canadian Journal for March 1859, two species, viz.: *Heliophyllum Halli* of Edwards and Haimo and *H. tenui-*