

## CONTRIBUTION TO THE PALÆONTOLOGY OF THE POST-PLIOCENE DEPOSITS OF THE OTTAWA VALLEY.

By HENRY M. AMI, M.A., D.Sc.

In connection with the Pleistocene fossils of the Ottawa district, the writer has brought together a few notes which may be deemed of service to those who wish to carry on further investigations in this promising field. Most of the evidences of fossil marine organisms in the sands, clays and gravels about Ottawa will be found in the accompanying lists which include the result of the investigations and identifications of species by Sir William Dawson, by Prof. Penhallow and by the writer. To these are added determinations of specimens from two shell-made deposits which may be taken as typical or representative of similar deposits elsewhere in the Ottawa Valley.

## MARINE DEPOSITS.

(1) In his "*Geological History of Plants*"\* Sir William Dawson has recorded the following species of fossil plants from the nodules found at Green's Creek by himself and other collectors :

- |                                   |  |
|-----------------------------------|--|
| 1. <i>Potentilla Canadensis</i> . | 7. <i>Potamogeton perfoliatus</i> .                        |
| 2. <i>Drosera rotundifolia</i> .  | 8. " <i>pusillus</i> .                                     |
| 3. <i>Acer spicatum</i> .         | 9. <i>Equisetum scirpoides</i> .                           |
| 4. <i>Gaylussaccia resinosa</i> . | 10. <i>Fontinalis</i> , sp.                                |
| 5. <i>Populus balsamifera</i> .   | 11. <i>Fucus</i> or <i>Ulva</i> , sp.                      |
| 6. <i>Thuja occidentalis</i> .    | 12. <i>Carices</i> and <i>Gramineae</i> , several species. |

Regarding these plants, Sir William argues (p. 232): "I regard the plants above-mentioned as probably belonging to the period of greatest refrigeration of which we have any evidence," and then goes on to say: "of course, not including that mythical period of universal incasement in ice of which I have elsewhere endeavoured to show in so far as Canada is concerned, there is no evidence whatever."

(2) In his "*Contributions to the Pleistocene flora of Canada*"† Prof. D. P. Penhallow has noted the occurrence of many species

\*Intern. Scientific Series, Vol. LVI, 1892.

†Trans, Royal Soc. Canada, Vol. II, New Series, Sect. IV, pp. 59-77, Ottawa, 1896.