

## FOSSIL INSECTS FROM THE LEDA CLAYS OF OTTAWA AND VICINITY.

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Fossil Insects are of rare occurrence in the calcareous nodules or concretions of the 'Leda clay' formation (Pleistocene) about Ottawa. So far, we know of only *four* species, all of which were described as new species by the eminent authority, Dr. S. H. Scudder of Cambridge Mass. to whose facile pen the world is greatly indebted for valuable contributions to Palæo-Entomology. *Three* of these species were discovered by the writer and one by Sir William Dawson. They all came from nodules collected along the south bank of the Ottawa River, below Ottawa City, and form an interesting series to which will no doubt be added a great many more when the fauna of these rocks is better understood.

The first three species of fossil insects described by Dr. Scudder were *Coloptera*.

(1) *Fornax ledensis*, Scudder. This species was the first fossil insect found in the calcareous nodules of Green's Creek and was described by Dr. Scudder in one of the reports the Geological Survey of Canada published in 1894. \*

It was associated with *Mallotus villosus*, Cuv. or capeling, the most abundant fossil fish in the nodules at the same locality.

(2) *Tenebrio calculeus*, Scudder. †

This species is compared with *Tenebrio molitor* which occurs in North America from Nova Scotia to Mexico and is also found in Alaska.

(3) *Byrrhus Ottawaensis*, Scudder. ‡

(4) *Phryganea ijeda*, Scudder. The *fourth* fossil insect discovered in the "Leda Clay" belongs to the Neuroptera. It is a caddis-fly found by the writer in a nodule at Green's Creek, Ottawa R., and has only just recently been described by Dr. Scudder in the Canadian Record of Science, Montreal.

I am indebted to the Editor of the Can. Rec. of Science for advance copies of the description of this fossil insect, also for the block

\*Contrib. to Can. Pal., Vol II, pt. 2. p. 39, Pl. III, figs. 3 and 4, Ottawa, 1894.

† loc. cit. p. 31. Pl. III, figs. 1 and 6.

‡ loc. cit. pp. 40 and 41, Pl. II, figs. 6 and 8.