## NOTES ON THE POST-PLIOCENE GEOLOGY OF CANADA: WITH ESPECIAL REFERENCE TO THE CONDITIONS OF ACCUMULATION OF THE DEPOSITS AND THE MARINE LIFE OF THE PERIOD

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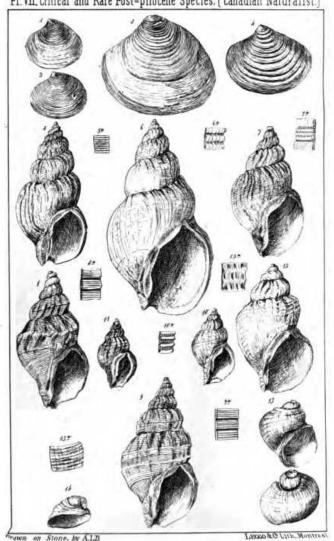
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### J. W. DAWSON

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Pl. VII. Critical and Rare Post-pliocene Species. [Canadian Naturalist.]



brown on Stone by ALD

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### To SIR WILLIAM E. LOGAN, LL.D., F.R.S.

#### MY DEAR SIR WILLIAM,

The subject to which this memoir relates is sometimes designated by the term "Superficial" Geology, to distinguish it from the study of those older and more deeply seated sediments with which you are so familiar. It is, however, as you well know, a department of geological investigation connected with some of the most profound and difficult questions of the science, on a few of which it is hoped that light has been thrown by the occasional labours of the last sixteen years, in the rich and instructive deposits of Eastern Canada, summed up in the following pages. I have therefore no hesitation in asking you to accept the dedication of this brochure; more especially as the work of which it is intended to be the completion, so far as I am concerned, was undertaken at your suggestion.

I am with sincere regard and respect, Yours faithfully,

J. W. DAWSON.



#### EXPLANATION OF PLATE VII.

This plate, drawn on stone under my own direction, is intended to present, as faithfully as possible, the characters of some of the more rare and critical shells of the Canadian Post-pliocene.

- Fig. 1. Astarte Banksii—A full-grown specimen of the ordinary type. Riviere-du-Loup.
  - Fig. 2. Astarte Laurentiana-An average full-grown specimen. Montreal.
  - Fig. 3. Astarte lactea-Ordinary type. Portland, Maine.
- Fig. 4. Astarte Elliptica -- A specimen with the ribs extending nearer to the ventral margin than usual. Portland, Maine.
- Fig. 5. Buccinum tenue—Full-grown specimen. Riviere-du-Loup. 5a—Sculpture enlarged.
- Fig. 6. Buccinum cyaneum—Full-grown specimen, Riviere-du-Loup. 6a—Sculpture enlarged.
- Fig. 7. Buccinum undulatum—(Var. of undatum)—Immature shell, broken at lip. Riviere-du-Loup. 72—Sculpture enlarged.
- Fig. 8. Buccinum glacials—Tuberculated variety. Riviere-du-Loup. 8a—Scalpture enlarged.
- Fig. 9. Buccinum glaciale—Smooth variety. Riviere-du-Loup. 9a—Sculpture enlarged.
- Fig. 10. Buccinum ciliatum—(Fabricius, not Gould)—Smooth variety, somewhat decorticated. Montreal. 10a—Sculpture enlarged.
- Fig. 11. Buccinum ciliatum—(Fabricius, not Gould)—Small but mature specimen. Recent Murray Bay.
- Fig. 12. Buccinum Grænlandicum—Adult specimen. St. Nicholas. 12a— Sculpture enlarged.
- Fig. 13. Choristes degans—(Carpenter)—Adult specimen. Montreal. 13a—Sculpture enlarged.
  - Fig. 14. Capulus commodus-Pt. Levi, Quebec.



