

Ottawa, April 21. 1894

Sir J. William Dawson
Montreal

Dear Sir:

Your letter of March 27th was given to me only yesterday having been mislaid while I was on the way from Nova Scotia to Ottawa.

I am much obliged for the additional information concerning the fossil plants from the Cobeguid Hills. That given by you before was acknowledged in the Annual Report 1890-91 Pages 69 and 64 P. and I have not been near these localities since. The rocks of Murphy's Brook are among the most highly altered of the Cobeguid series, the associated sandstones being very like those of Portapique River which you say "are more like Lower Devonian than anything else" and also like those of Riversdale and McKay's Head which you have called Millstone Grit, but which both Dr. Ellis and I independently have without hesitation referred to the Devonian (or at all events to a series unconformably beneath the limestone and gypsum series, with associated conglomerates at its base, seen near Talley, Clarke's Head, Parrston R., Advocate, South Maitland, Selma, Ferrycape and elsewhere).

These rocks, so far as we could make out, differ from the less-altered strata immediately above the shore-road at Lower Five Islands (N^o 2 of your letter) only because of their proximity to the syenite and other igneous rocks of the mountains, the fossils as well as the rock being apparently altered at the junction.

I should very much like to know Prof. Rupert Jones' opinion of the age of the Esteria, for whatever the age, the intrusive rocks I am sure are newer as I think a short examination of the sections in the immediate neighborhood of Lower Five Islands (Dr. Rand spends his Summer holidays there) will convince any person. Numerous better specimens from the unaltered portion can easily be collected: those sent you were curious because taken from strata which might be aptly described as gneissic or porcellanous similar to others in Bass River in which Dr. Schwyn ridiculed the idea of finding fossils when first I showed them to him but from which he soon collected a Cardiocarpum? and many stems of plants, between two great masses of syenite at the barytes mine evidently altered by the syenite.

Where do hard slates and shales occur in the "millstone grit" in Nova Scotia that can be compared with the rocks of Riversdale, McKays Head or Steiwacks? In most cases all such rocks can be clearly shown to underlie the Carbs. Limestone. Walcott says that the same mistake has been made of referring similar series to the Carbs. in the U. S., at first probably because of their plants and traces of coal. The seeming impossibility of referring the greatly twisted, faulted and altered rocks to their true relative positions disappears when they are shown to come between well-defined Silurian beds and the Carboniferous limestone in the scale.

Perhaps I have always underestimated the value of palaeobotany, but I have more than once examined the Devonian plant shales of the Fern Ledges of St John, and am at present working in the immediate neighborhood of Horton Bluff, with the result of finding the rocks in question compare closely lithologically and fall into place stratigraphically with them. It was Dr. Ellis, I think, who coming from N. B. Devonian rocks first called those of Riversdale and Inuro Devonian, and I have seen no reason to question

this as I have other conclusions of his but found on the contrary that they agreed with the work on that series begun by me at Loch Lomond in Cape Breton and included the plant-bearing rocks of the Middle River of Pictou described long ago by you from some of which Mr. H. S. Poole has, I understand, lately collected fossil plants.

I shall be glad to see your arrangements of these rocks in the Redpath Museum when I am next in Montreal. And if there are any of the sections of Reports P for 1886 and 1890-91 from which you would like me to collect fossils or to examine and describe in a different way or more fully I shall be pleased to try and do it for you.

Had you the large slabs described on p. 69 of last report, 1890-91? or the fragments in vol. Dr. Ami (p. 67) found Cylopterus obtusa from the same neighborhood?

The strata beneath the Carbs. in Hants county are not so much disturbed as on the north side of Minas Basin and I have hopes of being able to make out their sequence although here too they are greatly folded and outcrops away from the shore are infrequent.

Thanking you for your letter, with best wishes, I am

Yours truly,
Hugh Fletcher

This is to certify that the sum of \$1000.00
 was paid to the order of the Treasurer of the
 County of ... State of ... on the ... day of ...
 18... The receipt is on file in the office of the
 Treasurer.

W. W. ...
 Clerk

Wm. W. ...
 Treasurer