

Murray



St. John's Newfoundland  
Nov-7<sup>th</sup> 1876

Very dear Dr. Dawson


I took the opportunity  
of a young friend of mine going  
direct to Montreal, to send a small  
supplementary collection of some of our  
utmost rocks for your inspection, which  
I hope you may have duly received  
upon this reaches you. I unfortunately  
have been laid up for the last three  
weeks, so that I was unable to super-  
intend the selection, and as I have some  
scores of Boxes containing specimens  
collected in by-gone years, I have very  
little doubt that had I time, and even I  
in a fit state to overhaul them, some  
important and valuable fragments might

turn up. - I shall try during the winter  
to have them thoroughly investigated.

I take it for granted you have  
seen an obituary notice of Sir William  
Logan, in the Report of the Council of the  
American Academy of Arts and Sciences, by  
Dr. Henry Hunt. - Although the paper is  
perhaps generally unobjectionable, there is  
one paragraph in it, which in my opinion,  
the dictates of good taste would have  
withheld; and it reads thus - "That these  
" latter rocks, called by him the "Alton  
" "Ambee Group" belong to the same Huron-  
" ian series which he now the first to  
" distinguish farther to the westward as of  
" the Paleozoic age, will now be questioned  
" by some who have compared the two  
" regions." - Now as I am not aware of  
what Dr. Hunt's evidences may be for this  
bold assertion, and as I am personally ac-  
quainted with the ground, I can only  
say that notwithstanding the confident  
tone in which he expresses himself, I (for one)

remain ~~skeptical~~ sceptical of his accuracy,  
and still believe, in great part at least,  
in the views expressed by Sir William. -  
My opinions are mainly founded upon the  
Structural evidences as seen on the Western  
and Northern coasts of Newfoundland,  
which are described in my reports for 1864  
- 73 - and 74. - Here, if the presence of  
vast masses of Serpentine, chlorite slate &c  
with Metalic ores are to be taken as  
representative of the Lanson Division of  
the Quebec Group; the evidences appear to  
me to place them rocks as high up in  
the chronological series as the Cherry at  
the very lowest, and I almost suspect they  
are still higher. We have nearly an un-  
broken sequence in section at Port-a-Port  
from the Potsdam to the top of the Lanson,  
with all the typical & characteristic fossils;  
and over them later, a great body of  
Sandstones come in, which has all the  
peculiarities of the Sillery. - This however  
places the Sillery below instead of above  
the Serpentine, which I am inclined to  
think is its true position. Richardson's  
section at Bossu Bay - seems exactly to

correspond with mine in Port-a-Port and  
the Bay of Islands. - Then, as to rocks having  
any relation to the Permian series on the  
West coast, I have never seen the very remotest  
sign, nor do I believe there is as much as a  
pebble to represent <sup>them</sup>. But it is <sup>than</sup> very different  
on the East coast of this island, where ~~the~~  
nearly the whole peninsula of Avalon, and  
large tracts to the Northward are spread over  
by Permian rocks, with Permian Silurian  
strata resting unconformably upon them.  
So far, all our evidences, between the Bay of  
St. Johns and the northern extremity of the island  
appear to point towards the conclusion, that  
the metamorphic rocks containing the metal-  
iferous ores are on a horizon of later date  
(at all events) than the Carboniferous; and we  
find in Bay of St. Johns, and on the Grande  
Bay, and the islands of Hamilton's Sound,  
partially altered strata, very much disturbed  
by volcanic intrusions, holding abundance  
of fossils; some of which Mr. De la Beche recognized  
as of a Harlow's River type, but more generally  
resembling a higher horizon as high up as  
the Clinton. - Further into the interior, upon

The banks of the Gander River, and the  
great Lake, ~~see~~ ~~from~~ and other parts, we  
have come upon  great bodies of  
Serpentine, with mica slates, ~~various~~  
slates, and chlorite rocks - in which Staurolite  
is frequently an abundant mineral, the  
relation of which to either the older or  
younger formation, is exceedingly obscure.  
These seem occasionally to come directly in  
contact with undoubted Laurentian, and  
at others are supposed to rest upon Huron-  
ian, to which series it is possible to  
suppose they may belong; but it is rather  
a remarkable, although a negative fact, that  
the general mineral and lithological character  
of the rocks of these parts, is altogether unlike  
those of the more typical regions - such  
as the North Shore of Lake Huron on the  
one hand, and this ~~is~~ region of ~~the~~  
Avalon on the other; among which as you  
are aware I have spent many of the best  
days of my life. - As a general rule, I

has observed that the Permian system is in  
the main, nearly destitute of lime, and that  
Mica is but very sparingly disseminated, which  
then rocks are frequently calcareous, and are  
in great part composed of Mica schists. —  
In the case of the Serpentine and associated  
rocks, on the west and northern sides of the  
island, they appear to be ~~overlaid~~ overlaid over  
the L. Silesian fossiliferous strata unconform-  
ably, while those of the interior seem to  
be interstratified with micaceous slates, &c. —  
The two sets of metamorphic strata therefore  
may in reality belong to widely different  
periods; but before there is more <sup>decided</sup> ~~conclusive~~  
evidence, either by some fortunate find of  
organic remains, or the stratigraphical  
relations more thoroughly worked out, no  
definite conclusion can possibly be come  
to. I wish Solwyn could be persuaded  
to take up the investigation when Dr Williams  
left off, and satisfy his own mind upon the  
matter. —  
~~problem~~. No doubt there are many difficulties  
to be encountered; but as every little step

in advance must tend towards the solution  
of the grand question, it surely ought to  
be taken, if only to do justice to the  
memory of Canada's best and most  
distinguished son. - My small scale  
Geological Map, I expect is now ready for  
issue, upon which you will be able to follow  
the general structure according to my present  
views. - I have instructed Stanford to take  
orders for copies, and I expect Dawson  
Mrs. will shortly have some on hand. - The  
sample I sent is only topographical  
with the most favorable spots for  
settlement represented. - The map set  
will be more perfect in topography &  
will be also colored geologically. - I  
intend to commence forthwith to write  
a summary, or condensation of all  
my animal reports, which will be a  
better form accompaniment to the  
maps. - I am obliged to dispose of  
the maps by sale, as I have had to  
~~just~~ publish it at my own expense.  
I can get very little aid for any  
thing of that kind from our Govt -

which seems only to go from bad to worse,  
and will continue to do so until our  
happy accident drives us into the great  
Dominion.

Young Charles Murray is here at  
present, and is amusing himself at  
this moment, ~~in~~ helping me in the  
draughting room. I wish I could afford  
it I could employ a good large staff  
of the like of him.

Hoping to hear from you  
again soon, and with every kind  
regards, believe me always

Yours very truly

Alex. Murray

I am writing down a few anecdotes of  
our old friends' careers, which I shall  
send you in the course of the winter. I  
am too ill at present to do much work,  
although I am able to think it over.