

St. Johns N. F.

Nov. 29th 1890

Sir Wm Dawson K.C.M.G.

Dear Sir

On my return from the exterior just three days ago I found your letter of the 19th awaiting me, and hastened to answer it. I first looked over an old bundle of your old letters to Mr. Murray, and succeeded in finding your notes on our Carboniferous fossils, which I shall enclose, as I have not time to copy them before the mail closes. I would however wish to have them returned, or should you publish them, a printed copy would answer as well. Are they those you asked for? Should you have figures of those fossils lithographed, could I make any arrangement to procure copies to accompany my report? I fear I have not time just now, to go fully into the details of the Carboniferous structure on our west coast, and in any case I could add but little to what has already been published by Mr. Murray & myself. I had hoped to be allowed to complete my investigations of the St. Georges Bay district the past season, and I fully expected to have a detailed section of the entire formation, as represented there, but our Government advanced otherwise. Yours again
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my legitimate work of Geology, and converted into
a Civil Engineer. My season was spent in exploring
for a Railway Route, across the interior to the west
coast. It was a big undertaking for one man with
a small staff, none of whom had any experience in
Railroad surveying. As a consequence it proved the
hardest & most trying seasons work which I have
undergone in my twenty three years service. Of course
it left little or no time for geological investigation.
You will think it strange that I should undertake
such a work as this, especially when I inform you
that we have a regularly established Government
Engineers Department, with an Engineer at its head
who is paid a large salary, but the truth is he
knows nothing, from personal observation, of the coun-
try and somehow the Government have no confidence
in him. It is unfortunate for me in one sense, that
I should happen to be the only person now living who
really thoroughly knows the topography of the island.
I protested in vain against being sent at such a cost
& taking it out of the hands of the proper Officials,
but all would not do. I was told I was the proper
person, no one else knew the country, willing or unwilling
I must undertake this work. I still hope to be allowed
to resume my exploration of the Carboniferous area
next season D.V. In the meantime, such information
as I can furnish you, I will be only too happy to

give. In Mr Murray's reports for 1866 & 1873. & my report
for last year, all of which I presume you have. ^{work with} I
think I believe all that has been published about our ^{Capl. formations.} In
1873 we made a pretty extensive survey of the region.
I performed the topographical work, while Mr Murray
gave his attention more particularly to the geological
structure. The result of the work is contained in that sea-
son's report. I have since learnt that Mr M's estimate
of the thickness of the formation as there given, viz. 6,450 ft
is much too low. His estimate of the lowest members is
probably nearly correct, but I have found the Millstone
Gut & coal measures proper, taken together, greatly exceed
it. As yet I have not clearly defined what are really
the true divisions between these two members, nor yet
between Millstone Gut & Carl. Limestone. I had inten-
ded to visit Cape Breton last spring, on my way to
St. George's Bay, & endeavour to obtain a clear idea of
these divisions, by personal observation on the ground,
but of course all my plans were frustrated. I can only
say that there is a great development of strata between
the principal limestone bed & gypsiferous deposits, &
the highest coal bearing strata in the section, certainly
nothing under 7,000 feet, but probably nearer 9,000. This with
Mr Murray's estimate of the two lowest members 3,450
would give 12,450, say 12,000, as the total thickness of the
formation here. Of course this is merely approximate, yet
I believe is within the reality. A very large proportion of the
7,000 feet of strata comprising the Millstone Gut, & coal
measures

consists of red or reddish & yellowish sandstones, shales & marls, especially toward the base, but greyish & greenish sandstones & dark bluish shales, prevail toward the top, yet there are some reddish & brownish strata even above the coal seams themselves, and quite a large patch of red sandstones immediately underlies the principal set of coal seams. I have quite a large colored section of this portion of the formation, on a large scale, which should have been lithographed last year, but the cost considered the expense, some \$250., too great. If I can find time during the winter I will make a reduced copy of this section to send you. I shall feel greatly interested in the result of your palaeontological investigations of our Camb. fauna & flora, and with your approval, shall embody it in some future report on the coal formation of N. F. You will greatly oblige me, when you have finished the examination, in sending back the specimens, but you can of course, retain any duplicates you wish. Should I succeed in again visiting that section of country next year, I shall endeavour to make a more extensive & complete collection of fossils, from the various members, & send them on to you. Our little museum is now becoming quite an attraction, and thousands of visitors find their way to it. Nearly all the strangers who drop in upon us during the summer months, express themselves highly pleased with the collection. It is difficult for me however, single handed, to keep it in thorough order, and arrange everything, especially as I am absent so long every summer.

Yours sincerely
James P. Howley