

My dear sir

I would have thanked you
some time since for your kind note in-
forming me of the reading of my paper
last spring; but waited in hope of having
something interesting to communicate. During
the past summer I have done almost
nothing in the way of observation. When I
returned from Britain I found so much work
to be done in addition to my ordinary busi-
ness that I was kept in a bustle nearly all sum-
mer; and when I had a little time the
weather was so bad that I could do nothing.
We have had the wettest summer on record
and very bad crops in consequence.

Last winter I got up a cheap little
map of Nova Scotia, and this summer have
prepared as a companion to it a book on the
geography and Natural history of the Province abo-
ut the size of one of Pennock's Catechisms. If
I can find an opportunity I will send you a
copy. I have also written a few letters for
a newspaper here on the Useful minerals
of the Province, copies of which I have sent you
by mail as published. I have had some

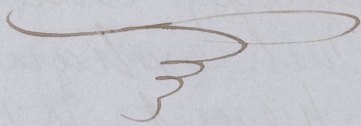
Correspondence with Professor Johnston of Philadelphia and at his request prepared a short statement of the evidence that the system of this province forms true beds and of the facts bearing on the mode of its formation. This is published in the Proceedings of the A. C. Nat. Sciences for September.

If I can find time next summer I intend to attempt the arrangement of the Silurian & metamorphic rocks of the Eastern part of the province. I have already a considerable number of facts on this subject but not enough to give any satisfactory results in respect to the grouping of these formations. I am likely to be most out of luck about the fossils, and if you cannot get anything done with those I sent you, I suppose the best thing I can do will be to get some of Murchison's books or the American States reports, and do what I can with the aid of the figures and descriptions. The only useful work of this kind that I have at present is Phillips report on Cornwall. Perhaps you could direct me to the best works.

If I could have gone to London last winter I intended to have inquired respecting the possibility and advantages of being a member of your Society. If a person here I would derive no

advantage from it but the purpose of the name
I do not care much about it because though
a puppet has usually little honour in his own
country without such extraordinary encouragements I
do not need at present to make a professor
of geology and therefore care little what reputation
I may have here. Perhaps I find time
to write you might inform me on this subject
in case at any future time it might be an
object of importance to me.

Copy Let to Colwell
Dec 1894



veins seen to traverse limestones and
sometimes the gypsum the thickness is always
fibrous.

The crystalline structure and great comparative
purity of the gypsum indicate an aqueous solution.

The constant association of gypsum with the
limestones of the Carboniferous system containing
marine shells (Lehrhata, Producta, Althoceras &c)
leads me to have been a marine deposit, and I
think there is evidence that the sea basins in
which it was deposited were not very extensive
but were circumscribed by ridges of the older
rocks. The deposit of gypsum in these basins
alternated with mechanical deposits of red
sandstone, marls and with the growth
of shell fish & corals from beds of
limestone.

In the reports also stated I am disposed to
refer ~~that~~ changes to the purging of springs or rivulets
impregnated with free sulphuric acid into seas containing
beds of lime carbonate. This sulphuric water may have
proceeded from the volcanic regions of the highly oxidized
the sulphuric acid by perhaps derived from the oxidation
of the iron pyrites abundant containing a some of
the older rocks either directly or indirectly & the
product of sulphuric hydride and its oxidation in presence
of high warm springs in contact with water

As is seen in some Sulphide Springs. Gages
Streams like the St. Albans Niagara Falls with
shells by cavity shells & coral beds or into
the space between a coast and its
coral reef and I think you have the cavity
of water from I Carl Spruce.