



Amherst, N.S. 4<sup>th</sup> June, 1878.

Dr. J. W. Dawson

Print & V. Pres. McGill College & University

Montreal

Dear Sir,

In one of our tramps over a portion of the Cumberland Coal-field James S. Hickman Esq. of this place happened upon some nodules which he at first mistook for the crop of a seam of coal. But a minute before I had ~~announced~~ announced that I believed we were upon the Lower Carboniferous, and that hence no coal seam of size was likely to be found there. I examined the nodules and gave it as my opinion that it must be Bog Manganese. I send you by mail today a small sample for your inspection. If you would like a larger sample we can send you any required quantity.

Have you any fuller information on the subject of Manganese than is contained in "Canadian Geology." We propose to sink down for the rock in situ, with a hope of finding a workable deposit of pyrolusite. Meantime I may say that in one place the nodules come to the surface, and appear in a nearly horizontal layer about 1½ ft. thick. That the layer appeared about 15 feet broad, i.e. across the strike of the measures. That it is observed

extension east and west along the strike was considerable. That while exhibiting great purity - i.e. freedom from any foreign matter - the layer was underlain with a modern clay resembling fire-clay. That the bed or layer seemed slightly dipping northerly; and both upon the north side, <sup>as well</sup> <sub>as</sub> both easterly and westerly also, (as far as observed) about one foot of soil overlies it.

I have not the apparatus at hand to make even a proximate analysis - to say nothing of a quantitative; but from the general appearance, streak, s. gravity, and hardness of the specimen I feel pretty sure of its identity and comparative purity.

I found a fine exposure of fossils in a ledge of the Upper Carboniferous on the Little Forks Stream in this (Cumberland) County, a mile or two above the Iron Railway Bridge of the Intercolonial Railway. I brought one away with me, the pith of which - at one end - seems turned into coal. I have not broken it to show how far the coal centre extends.

I hear from Mr. And. Hill that you will soon be here. We hope to have the pleasure of meeting you in the County, and if we can show you anything of interest to you as a geologist we shall be but too happy. I thought I had a track - foot print - the other day in the sandstone, but the block was on the side of the stream and a little water-worn. I think, however, I traced out the layer in the ledge to which it belongs, and at any time samples may readily be obtained.

Will you kindly write Mr Hill or me about what time to expect you, as I may have to visit New York soon, and I may delay or hasten my trip depending upon your probable arrival.

It is an uncommonly favorable season for explorations. Six years ago we were not so favored at 12<sup>th</sup> June as this year at 20<sup>th</sup> April; and we have had few broken days. Our observations this year go far to show that the thick workable seams of coal in the Cumberland field do not extend far from what may be called the Spring Hill centre. We have thus far this Season been endeavoring to determine certain points in the field, and we flatter ourselves we have done much in a few localities. If any of these facts prove of interest to you we shall be glad to communicate them to you verbally or otherwise.

Wishing soon to see you here

Believe me

Yours with respect

E. N. Sharp

Will you kindly write Mr. Hill in one about what  
time is expected you, as I may have to print the  
part over, and I may delay a little by the  
printing you are probably aware.  
It is an encouragement for me to receive your  
expressions. This year so we are not so far from  
the time as the year before last, and we are  
in a fair light. The character of the year  
is to show that the thick water of 1850 is  
of a different kind, do not expect for the  
year to come to be like the water. No  
the far this season, but certainly  
the water in the field, and we  
have some more, we have some more in a  
few feet. If any of the feet have of  
interest to you, we shall be glad to communicate  
them to you without a charge.

Shrewsbury  
June 14/58

Yours truly  
J. M. Whipple