

Mudon 28th July 1845

My dear Sir

Although near midnight I cannot  
forego so good an opportunity of writing and sending  
a parcel to you as offered by Mr Thomas Randal  
who leaves this at early dawn for the  
Albion Mines - When I went to Mr Brass the  
next morning after parting with you, I was very  
sorry to find that you had just gone as  
I anticipated much pleasure and profit  
from visiting with you our localities interesting  
to a geologist.

I did not receive your friendly letter  
and parcel for some time after they were  
sent. And I have taken the first days  
I could snatch from ~~protraction~~ to visit  
the places alluded to in the letter. My first  
visit was to Smiths Mill; but it coming on  
to rain I could not make as diligent  
search as I should otherwise have done -

As you ascend the brook on the western side  
is a large bed of freestone, stratified  
and enclosing one layer of shale

One of the slabs from the Half way river contain  
impressions which look to me very like the back  
bone of a fish, with the lateral malle bones coming  
off: but having nothing to compare it with  
and having never seen any specimens of the kind, it  
being too large to send to you, I must remain in  
ignorance of its name for the present — The specimen  
picked ~~from~~ Half way river No 1. Contains a sharp  
like impression new to me — Is it the skin of a fish? —

I have another specimen longer and wider, from the  
side of which come out two processes, which look like  
teeth, <sup>curved, and the points, striking into the stone, looking not unlike the talons of a bird</sup> and the whole thing looks like a small jaw bone —  
probably you will know what it is at once —

I am very much obliged to you for your very  
kind attention in the matter of the specimens of  
shells &c. — As I am only just beginning inquiries  
of this kind, every thing is new to me. — I have

sent a few shells such as I have picked up  
and shall in future be glad to exchange any that  
I may pick up for such as you can readily spare.  
If you were able to give me a list of such as you  
know to belong to N. Section, it would be of service  
to me by enabling me to concentrate my inquiries  
to a smaller no. of shells — I have also sent you  
a few of our fossil shells such as I can readily  
put my hand upon and shall be very happy  
in future if I find any thing new to  
communicate with you —

And now, my dear Sir, I hope  
you will excuse this very hurried letter  
and believe me very sincerely yours

E. H. Mearns

A little higher up nearly opposite is the  
freestone which contains fossil vegetable remains  
such as I have sent as specimens: about  
1 or 2 hundred feet further up the stream  
on the same side occurs the shale and  
slate containing Lepidodendron, specimens  
of which are sent, intermingled with freestone  
and a quartzite rock. From the talus  
of yellowish shale at the foot of the  
mount I could not see the lowermost rocks;  
but suppose the lower layers to be <sup>what</sup> shal-  
low which is the prevailing rock  
lower down the brook - I could not  
find any fish scales, altho I should  
think it quite possible that they may be  
there from the bottom of the shale and  
and of some pieces of freestone, <sup>or what may be called slate</sup> similar  
in appearance to what I afterwards found at half  
- way river, specimens of which I send containing  
fish scales - Yesterday I visited the  
half way river. Not knowing from your letter

whether you meant the bridge at Mount Senison  
at the mouth of the River or another about a  
mile higher up to the South where the post  
road now goes I thought it best to begin below  
and ascend the river — The first rocks which  
make their appearance are coarse sandstones  
of every shade of colour from white to deep  
brown, but principally grey. They are  
stratified and dip to the North East —  
I found no fossils except 2 or 3 casts of pieces  
of trees too indistinct to ascertain their genera.  
In following the river up, a creek branches  
off to the East which I also followed  
up for some distance, finding the  
bottom of the creek and the hills  
on each side made up of coarse sand-  
stones — When I arrived above  
the bridge it was near night and  
I could not make as full examination as  
I could wish. The face of the country around  
is strewn with white free stone of an  
excellent quality — The Eastern bank, to  
the Southward of the bridge is made  
up of layers of slate of lighter or

deeper shades of colour, with now and then  
an intermixture of a layer of (with slightly  
effervescent, with acid) <sup>what may be called</sup> ~~crystalline~~ limestone, <sup>about 8 inches thick & impregnated with stems of</sup> ~~the bed of the~~ <sup>crinoid</sup> ~~crinoid~~  
is strewn with masses of this, and with  
large blocks of freestone, with ripple marked  
slabs. — on the ripple marked or perhaps  
in some instances fucoid slabs sometimes  
occur fish scales — but then are most abundant  
in the micaceous slate. I found no  
shells (unless you consider one of the specimens  
sent as such, I have a larger one which has  
much the appearance of the internal and middle  
half of a mussel. As Mr Logan found  
shells at the bluff similar to the wonder  
specimens, I should think it highly probably,  
if true, that they were brought down from  
wonder by the ice cakes which sometimes  
carry away considerable rocks — but I  
shall make myself more sure about this  
when I have time to visit this interesting locality  
One of the fossil plants appears to me almost  
if not quite carbonized —

I am not aware of any rocks in the Avon  
like those at Sude's Mill or the Half  
way river. I know not the Western as well as the  
Eastern bank: but limestone such as you  
saw here and Gypsum prevail  
with various kinds of Mact —

There appears to me a great similarity  
between the minerals at Sude's Mill and  
those at the Half way river, so as to  
constitute them both. I should not doubt  
Coal bearing measures —

As far as I have had opportunity  
of observing, 2 or 3 miles to the Southward  
on the old road, Sandstone, granite  
sandstone and slates prevail — but  
this is only from memory for I have not  
seen them since they were objects of Geological  
interest to me — fossil plants are found  
in them — As I had I have  
honed over two leaves at once, I  
may as well employ some of the vacant  
space in scribbling a little more

a few days ago, called to a patient at Chester, I found  
 a large specimen of *Lepidodendron occury* in freestone  
 18 miles South of this, occurring in a granitic district

Letter  
 Dr. Harting

acca - but perhaps  
have some from WJ

prepare list  
 send for from Bluff  
 1 packet

Then move R. Beech  
 under paper Bird & Hunt  
 that explain real parts  
 Scaled *Holophylax* No 1 -  
 Tota,

*Arceuthobium* full size  
*Intella* in sp

28.5  
 44.1

72.6

72.6 - 50.5 = 22.1

15.5

25.26

72.6 - 47.6 = 25

how by

185

185 - 69 = 116

with a parcel

J. W. Dawson Esq  
 Pictou

Mr. Thomas Randall

44.1

22.1

72.6 - 50.5 = 22.1

72.6 - 47.6 = 25

185

185 - 69 = 116