

73 Harley St. - W.  
December 1868

My dear Dawson

I have been a long time in replying to your last letter of October. I told Curriethers that if you had an opportunity of showing him your specimens of coal plants, & proofs of their structure, I believe that you would bring him over, as you think, to your opinions.

Your last work, has, it seems to me, made a favourable impression on him. I have long been feeling impatient at the manner in which your valuable time has been frittered away in grinding, as you say, in small teaching of fresh crops of beginners, instead of having lectures to give on one science like geology, ~~and~~ which all your powers might be concentrated. When I heard of this new University in the State of New York, <sup>in</sup> which Goldwin Smith has accepted a professorship of Political Economy, I wished that I could have seen your name enrolled as a teacher.

If they founded a chair of Geology in Edinburgh the pay, I suppose, would hardly be sufficient and perhaps Geikie to whom it has always been an object of ambition, would have influence enough to obtain it. Of this I know nothing.

and the Chair is not yet created. If you saw your way to a post which you could accept in the U. S. without too great a sacrifice, and which would enable you to devote all your time to Lectures and Original Observations on Geology and Paleontology it would be for your happiness and your Scientific Reputation and for the benefit of us all.

What you say of the horizontal extent which the Laurentian Strata would occupy if they were flattened out is most true. Could you refer me to any chapters in the reports of or writings of Logan & the Canadian Surveyors where I could get some ideas as to the manner in which these rocks & the Huronian group have been folded & the relation of position of the older rocks to the Potsdam etc. I have been reading a paper by Shaler on the origin of

Mountain chains, in which there are  
some new ideas & Vose's book on  
"Orographic Geology" gives a useful  
review of different theories, but I should  
be very glad if you could tell me of any  
recent writers on your side of the Atlantic  
who have been treating of these subjects  
whether in books or periodicals.

When in Sweden I was much struck  
with the modern aspect of the horizontal  
ripple-marked quartzose Sandstone  
at the bottom of the true primordial  
beds of Barrande with paradoxitæ  
&c. - The succession of the Silurian  
beds being clear & unmistakable  
reposing on what I call in my last  
edition of the "Elements" the Cambrian  
to which the sandstone of littoral  
character with numerous conchid  
forms forms a base. - Forall has  
given me a good specimen of this  
most ancient-plant bearing bed.

which rests in the Kinrossville Hills  
near Lake Huron upon the truncated  
ridges of highly inclined & vertical  
Laurentian gneiss & mica schist.  
These fossil plants were examined  
at Norwich by Bentham, Hooker,  
Cannuthers & John Phillips all  
agreeing that they look like terrestrial  
reed-like plants, not ferns, perhaps  
of more than one species. In some  
places there is a conglomerate in the  
sandstone which I well refer to an  
old sea-beach, but this matter is  
undergoing examination & you will  
soon hear more of it. You had  
better not commit the four men  
I have named above, but I feel  
very sure that they are right & that  
the plants are not cryptogams  
but monocotyledons. It is a  
splendid jump from the Lepidodendron  
of the Upper Silurian to the base of

The primordial & to find a  
Pheogamous plant "evolved" at that  
remote period!! - But your  
Devonian flora will have prepared  
your mind to sustain this shock  
However much the advocates of  
finality & of the good old aegic  
times may be confounded. I  
was talking with Wallace the other  
day who seems to think the *Papa*  
& *Caulus* of the *Joggins* & the  
Cambrian *Singulella* such  
wonderful examples of persistent  
forms as to be more worthy matters  
of astonishment than a Cambrian  
*Angiosperm*

The 10<sup>th</sup> Edition of my *Principles*  
is selling well & the 6<sup>th</sup> of the *Elements*  
will be out of print long before I  
shall be ready with a recast for

which I am now steadily reading.  
The recent exploration of our coal  
fields & speculation as to their con-  
tinuity below the Permian & Trias  
has led to much important insight into  
the vast denudation undergone by the  
Carboniferous before the Older Permian  
was deposited & the measuring of ver-  
tical faults of 6000 feet ~~whether~~  
where the higher of the two masses  
has been planed down to the level  
of the lower side all in the interval  
between the upper Coal measures &  
the Lower Permian an interval of  
what we have no other representation,  
save the vast amount of mechan-  
ical work done -

My wife is quite well & joins  
me in wishing to hear news of all  
your family when you next write.  
My eldest nephew is a keen  
geologist & travelled with me to  
Wales last summer to study the  
Cambrian, where fossils have been  
found an entomostracum & a  
lingula 12000 feet lower down  
than the oldest previously known signs  
of life in the Longmynd series -

Believe me  
my dear Dawson  
ever most truly yrs

Ch Lyell

