

P. A. Clarke

Canandaigua N. Y.

July 22. 1862

Prin. J. W. Dutton.

Dear Sir,

It may be somewhat in-  
propriate for me to discuss you with any  
inquire's while you are in the press of preparations  
for the meeting of the American Assoc. but there  
are some arising from my vacation work,  
here under my that I would like to  
have answered when you find the leisure.  
I have found a new stratum in the Genesee  
beds containing plant remains in unusual  
mode of preservation. The stratum is shaly but  
filled with large concretions it is these  
that contain the vegetable remains. As far  
as I have yet found these fossils are all  
more or less plumb fragments of branches  
broken up somewhat by the interior scarring  
of the concretions but with the structure retained  
the fibres not changed to coal.

The form which <sup>you</sup> had called Dadoxylon Claskei  
is the only specimen found heretofore in  
a concretion, and it may be more than possible  
that these inclusions are also of the same  
species. Some of the specimens are quite large,  
one measuring  $4\frac{1}{2}$  in. in diameter & 24 in. in length.  
I would like to know if you would advise  
me from the experience you have had in  
working over the specimens I have sent  
from the Styhola layer of the Seneca, to collect  
indefinitely from these concretions in the expectation  
of finding the forms microscopically different  
were the probabilities that they will turn  
out all the same. I make the enquiry as the  
fossils are ugly specimens to handle and have  
to be transported by team 10 or 15 miles.

This layer is about 50 feet above the  
Styhola layer in the Seneca. I have been  
finding other interesting & to me new forms from  
the compact black slates of the Seneca,  
which I will be glad to send for inspection  
when you can signify your willingness

to receive them. There is one abundant  
plant in the genus the nature of which  
has long puzzled me, but which must be  
well known to you. I have burned over  
hundreds of specimens of long straight  
tope-like stipes or stems occasionally  
branching, Psilophyton-like, but invariably  
changed to coal the structure lost. Often they  
are several inches wide, commonly one or two  
+ of all lengths up to 5 feet, but rarely showing  
any termination. Very rarely does the rock show  
any variation in the largest specimen (5 ft)  
showed here at all. They do not present the  
appearance of alaminites nor in any surface  
marking. Psilophyton, though for the sake of  
a name I have been in the habit of calling  
them the latter. You will recall my sending  
you last summer a small fragment of  
a large Lepidodendron primaevum discovered  
by my friend Mr. D. D. Sulzer, an indiatigabee  
worker in the new barren Devonian, which we

Have now worked out to a length of  $7\frac{1}{2}$  feet  
with the probability still remaining that it  
extends as much further into the rocks.

The body is about 4 in. wide & we are making  
root-wards & have about 300 cu. ft. of rock  
to remove before we can decide the matter  
of its length. I had hoped to be at Monkshead

at the August meeting but I find my  
plans going a-gley -

With this I rise for as early a reply as

convenient -

Dear Sir, Yours Very Respectfully

J. M. Clarke