

University of Virginia

Albemarle Co Va

Dr J. W. Dawson,

Sept 29th 1879

Dear Sir,

Your letter addressed to Morgantown, was forwarded to me at this place, which will, in future, be my address. I received a letter from Dr Bigsby not long since, with reference to the matter mentioned in your letter Our Memoir, (that of Prof White & myself) on the Upper Carboniferous Flora of West Virginia, is now in the printer's hands, and will be out early in this Autumn, I hope, I wrote to Dr Bigsby informing of this, and promising to send him a copy as soon as it is published. This will be more satisfactory than a mere abstract, and he will get the complete work almost as soon as he would receive my points sent now.

I shall with great pleasure send you a copy as soon as I receive the work. It is being published by the Penn's Survey, uniform with Dr Hayden's Carboniferous Flora, and will contain 36 double plates. Most of the plants

are new and many of them most inter-
esting. We are fortunate enough also to add con-
siderably to what is already known of some old
Species, As I had not your papers before me
now I cannot say whether we find any of
your new Species or not, but I think not,
from my present recollection of them.

We find two horizons in W. Va above the Pitts-
burg beds, One Permian-Carboniferous, and the
other Permian, with *Callipteris conferta*, *Spher-*
nopteris allied to *oxydata* &c. We find a fine
new *Tamnipteris fruticosa*, a *Bucina*, and
a plant which Seward thinks is a true *Sal-*
ix lunata judging from the fig of one of the Spec-
ies, but we think it not specifically iden-
tical. We make a new genus of it, "*Saportea*",
and place it along side of *Salix lunata* in our
group of Conifers. We name a fine new
Callipteridium after you viz *C. Dawsonia-*
nium. We find at a lower horizon *Neu-*
ropteris hirsuta in fructification. Our flora has
types which remind one strongly of the Trias-
sic plants in some points.

(The above and some of the points in our Upper Carboniferous Flora, I am now working on an exceedingly interesting collection of plants made in the Richmond Coal Field, and in the Upper Jurassic (Walden) at Fredericksburg. You may have seen a few points which I published concerning these Floras in the Am. Jour. of Science last Winter. Of course the facts given were by meagre, as it was not my purpose then to discuss these Floras. I have this summer added largely to my collections from both localities, I find a curious commingling of plants at Fredericksburg, some few real Oolitic plants, apparently the few remains of an almost extinct flora, many Walden plants, and a few species found hitherto ^{only} in the Lower Cretaceous of Europe and Greenland. (not our Lower Cretaceous) Some of this material is so well preserved that it would lead to important results, I think, if studied under the microscope, this is especially true of the wood and epidermis of a "Frenelopsis" which is very close to, if not identical

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with Schenk's *Frenelopsis* from the Lower Cretaceous of the Carpathians, I have several varieties of woods, and would be glad to send you some for study under the Microscope, if it will not trouble you too much.

I have from this locality leaves, which in outline and venation, I cannot distinguish from Angiosperms. You know that it is hard to say positively from the venation whether a leaf is a fern or Angiosperm. Can you suggest any special test?

Yours truly
Wm. H. Fontaine

Fontaine
Oct 1908