## Second Heological Hurvey of Pennsylvania.

J. PETER LESLEY, State Geologist, 1008 CLINTON STREET, PHILADELPHIA. Akron, O., April 20th., 1889

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Sir J. W. Dawson

My dear Sir

Some time ago when I was engaged in the examination of some fossils from the eastern part of this State I found among the rest several specimens which suggested to me the structure of monocotaled once stems. Their appearance was such that I was unable to reconcile it with any form that was known to me. During my visit to England last year, being in Manchester, I took the opportunity of calling upon Professor W. C. Williamson in order to enjoy the sight of the originals of several of his engraved figures of the coal flora & while there I incidentally mentioned these specimens to him. He inclined from the description to doubt their being really endogenous & suggested that they might belong to or at least represent his genus Myelopteria. Since I returned I have sent him a few small pieces & he repeats what he then said but had not then had time to give them more than a brief examination.

One reason for my writing today is to ask if you have ever met with similar specimens in this country. I cannot find that any such genus has been recognized by any of our palaeobotanists in any of their published works. Can you tell me the exact place of the genus in the system? What are its nearest affinities? The stem-structure must be very peculiar. In appearance it is far more endogenous-looking than anything else.

If you would like to see a specimen I shall be pleased to send

you a small piece. Unfortunately like all the material from these beds it is completely pyritized & therefore nothing can be done in preparing thin slices for examination by means of transmitted light. Still the peculiar arrangement of the vascular tissue embedded in a mass of cellular substance is very distinct. Every cell is separately pyritized.

A second reason for troubling you is to ask, that is if it would not be requesting too much, the favor of a short paper from your pen on a geological subject for the pages of the American Geologist. Speaking for my colleagues I may say that we should much value a communication from you on any branch of the science or on any kindred topic. I was much interested lately by an address of yours reported in the Educational Review of St. John, N.B. & delivered at a meeting of teachers somewhere in the eastern provinces of Canada. An article on a similar subject if more agreeable to yourself will be equally acceptable to us & equally useful to the class for which the magazine is intended. It is our wish to make it instructive to teachers who are compelled by the "rules" to teach geology but whose feel that they do not know enough of the science to justify their doing so.

Apologizing for intruding upon you with this request in the midst of duties which I am aware must occupy all & more than ayil your time & in the hope that you will be able to comply with it

I remain yours very truly,

EMClay pole