

My dear Professor ~~Sapson~~

Many thanks for your highly interesting Reports on the Fossil Plants of the Devonian and Silurian Formations of Canada, and the welcome Report of Prince Edward Island. My extracts on both worthy papers shall be soon printed in our New Jahrbuch of Mineralogie. The series of beds in Prince Edward Island with the predominant red color is the true Equivalent of our Lower Rothliegendes, or my Lower Syas, as I mean, and I hope, you will acknowledge it, after having taken a review on my large collection of Syaditic Plants in our Museum at Dresden.

With greatest pleasure I learned today by Miss Herrington, that Dr. Herrington intends, to go this year to England. If so I will write him urgently, to come some days to Dresden, where he can see the richest collection of Syas - or Permian Fossils.

I think, you will find no difference  
between Sadoxylon materiarum and Arauc-  
arites sp. from our lower Gyas,

Walchia gracilis and W. robusta  
with Walchia piniiformis Mill.,  
Pecopteris arborescens, in the lower  
Gyas and upper Coal measures,

Aethopteris nervosa (Pl. 2. fig. 18.)  
and Neuropteris rari-nervis (Pl. 2. f. 19)  
with Aeth. (Neur.) pinnatifida Gutt.  
in the lower Gyas,

Cordaites simplex with C. Roessler-  
ianus Geiss. ib.,

Calamites listii a. C. arenareus with  
Cal. infractus Gutt. and C. Herbergi  
Eichw. ib.,

Cal. gigas, one of the most charac-  
teristic Plants of the lower Gyas,  
Trigonocarpum Pl. 2. fig. 20. 21.  
with Rhabdocarpus dyadicus Geiss.

Gyas, in 153. Taf. 34. fig. 14-16.

Congratulate you and Dr. Harrington,

to be the first, who have discovered  
the truest series of the lower Syas  
in America and I only regret that  
the English and American still  
prefer the name "Permian", which  
is much younger than the name "Permian"  
to the name "Syas", although both  
include quite different idea.

### Permian Murks

- 3 Lower Trias Schiefer (in Europe belong-  
ing to the Trias.)
- 2 Zechstein (Magnesian Limestone)
1. Rothliegendes (Lower new Red)

If we subtract from that Paleozoic  
Trias one member, No. 3, it re-  
mains only a Syas. But in the system  
of the "Permian" is still a greater  
fault. The Rothliegendes, that limit  
representant of the Syas and the Permian,  
is not allways below the Zechstein,  
but the Upper Rothliegendes is  
the equivalent of the Zechstein.  
Therefore Syas Gen.

Ober Etage. Zechsteingruppe or Ober Roth-  
(marin) liegendes  
(limit).

Untere Etage Unteres Rothliegendes with  
above red Conglomer. with many Porphyries,  
Porphyries, Zechstein etc.  
below grey Conglomerate etc.

<sup>June 1872</sup>  
The Dyadic Character of the Dyas is not only  
uttered by the representation of a basin by  
a marine formation in the upper part,  
but as much by the relation between sedi-  
mentary and plutonic formations in the lower  
part of the Dyas.

I would be very happy, if I had oppor-  
tunity, to convince you or Dr. Harrington  
here of the truth of this opinion.

Miss Harrington was kind enough,  
to leave me your Photograph and that  
of Mr. Logan. Both are very worthy to me.  
Allow-me, dear Sir, to include for you  
in exchange my one, hoping, you will  
kindly accept it.

Should you have opportunity, to send  
me a piece of your famous Lozoon  
canadense, I would be very much  
obliged to you, and I will send you in  
exchange some of my Zerkstein-Fossils.  
I have the Lozoon from different loca-  
lities of Europe, and also from our  
neighborhood, but not from Canada.

I remain, my dear Sir, with  
the highest consideration

Yours very truly

Frederick W. B. Meyer  
1872  
H. B. Geinitz