

Mc Gill Col Montreal
Apr, 25, 1842

My dear Sir,

Your favour of the 16th and
its enclosures arrived at a very busy time
otherwise I would have answered earlier.
I may now however give you the following
notes on the fossils, cuts, plates & drawings
which were contained in your letter.

The Lepidodendron is evidently of
the type of L. Corrugatum from the
Lower Carboniferous of Nova Scotia and
of L. Veltheimianum of the same horizon
and probably also of the Devonian in
Europe. It is probably a distinct species
though certainly very near as far as I
can judge from the cut to L. Corrugatum,
especially the younger branches. This group
of Lepidodendron approaches in character
to the genus Globo stigma. It is characteristic
of the lower Carboniferous and top of the
Devonian in Europe and the more
northern parts of North America.

Leaf No 1 (Photograph) is I should
say a Sphenopteris (Eremopteris or Diphyloz-
yctes of Schimper) allied to S. artemesiphora
of Brongniart or S. Crothamifolia of Lind & Hutton. This
is a type at present Carboniferous, and is
a peculiar and rare form evidently con-
necting the Sphenopteris with the Archaeo-

Plants and Gleditsias of the Decuria

^{C. virginiana Nutt}
No 2 (Reunit hairy) is very fine and
luxuriant species of Gleditsia-sphenopterid
type represented by *S. calyptra* Brongt
and by *S. valida* (Arenimoides Schimper
Arenites, Dawson) They connect the
Sphenopterids with the Decuria and
the Carboniferous ferns of the subgenus
Arenites. This is a ~~very~~ very luxuriant
species and very Gleditsioid in aspect.

^{C. alphandensis}
No 3 (Reunit hairy) reminds me of
Sphenopteris decipiens of Desquereux. Out of
the venation is correctly given it is a
somewhat abundant Gleditsioid of the
type of *Archaeopteris*, and not very far from
Wagnerothus (*Archaeopt.*) *minor* of Desquereux. <sup>Fig. 107
p. 107 of the
atlas</sup>
In the present comparison as to the
nomenclature and affinities of Palaeo-
zoic ferns it is not easy to give
generic names with any certainty
to such peculiar and abundant
forms as these especially from the
nature of drawings and photographs only
The things themselves and their
probable age may be more easily
estimated. The species are prob-
ably all new to me, and the
flora of Virginia may possibly have
suffered somewhat from that of

The more northern regions with which
I am familiar, I would say
however that your plants have
the fossils of the lowest Carboniferous
(sub-Carboniferous of Dana, &c.)
or of the uppermost Devonian.
If as I suppose your Carboniferous and
Devonian in Virginia are conformable
to one another I should suppose that
these plants might occur in the
beds of Popoys. Were the two
systems unconformable as in Gaspe
and New Brunswick I should
think your plants probably lower
Carboniferous.

If the above rough notes are
of any service to you please make
any use of them you may think
proper.

