

the Vancouver Id plants - - -
The geologists of the most insight have con-
sidered ~~for~~ years ^{ago}, that the flora of the
coal-bearing series at Petit Coeur belong to
the middle Lias, and have therefore referred
them to that period. Now no one ventures
to hold this opinion. How much more
accessible was Petit Coeur than the far-
off Vancouver Id, and how much more
frequently visited!

Dr Schuster has not identified the
Sequoia wood from the Mackenzie with
the *S. Langsdorfii*, because it resembles
more closely the wood of *S. gigantea* than
even of *S. sempervirens*, which species answers
to the *S. Langsdorfii* whilst the *S. Sternbergii*
corresponds to the *S. gigantea*. The presumption
seems to be that this wood from the Mackenzie
is descended from the *S. Sternbergii*; and although
this has been found at present in Greenland &
Iceland although not yet in Canada, it would
be imprudent to hastily encumber the wood with
another name. It is likely that the Sequoia
wood mentioned by you belongs to the same
species as that from the Mackenzie. It is only
by a microscopic examination of your wood, which
has not yet been made, that a determination can
be arrived at. Dr Schuster is ready to under-
take such an examination if you will send him
a piece of the wood.

Bear Mt
1851

I am very sorry to see from your two letters of the 9th and 20th January, that you are dissatisfied with me for placing the clay beds of the Mackenzie in the Lower Miocene, and for considering your view that they are Lower Eocene as an error. You do not seem however to have read my treatise on the plants of the Mackenzie, as you write to me, or else you have not understood it; for it is quite incomprehensible to me that you can say that those beds are "undoubtedly lower Eocene" if you had read and considered the reasons which I think appear to me thoroughly convincing that I have brought forward in proof of their Miocene age, and if you as well as myself wish only to arrive at the truth and not merely to make positive statements. In these beds no animal remains are known but only plants, and these plants do not belong to the Eocene, but almost all the species are found in the Miocene of the Arctic zone of Europe & also of America. These conclusions are founded upon a year's careful study of the Tertiary Flora, which has shown that the plants of the Mackenzie form a member of the Flora which was spread over the northern hemisphere in the lower Miocene.

Lesquerens has, as you know, in his comprehensive work on the Tertiary Flora of America, pointed out that the plants belong to different horizons; and it is to be regretted that G. King has taken no notice of this important work. Since then Lesquerens has received a quantity of new material especially from the Green River Group and has lately sent to me 20 new plates containing numerous beautiful plants. As to