pean species of the upper coal-formation, and the same fact has been observed in the coal flora of the Cape Colony.* These facts bear testimony to the remarkable uniformity of climate and vegetation in the coal period, and I perfectly agree with Zeiller that they show, when taken in connection with other parallelisms in fossils, an actual contemporaneousness of the coal flora over the whole world.

1. Carboniferous Flora.

(1) *Permo-Carboniferous Sub-Flora:*

This occurs in the upper member of the Carboniferous system of Nova Scotia and Prince Edward Island, originally named by the writer the Newer Coal-formation, and more recently the Permo-Carboniferous, and the upper beds of which may not improbably be contemporaneous with the Lower Permian or Lower Dyas of Europe. In this formation there is a predominance of red sandstones and shales, and it contains no productive beds of coal. Its fossil plants are for the most part of species found in the Middle or Productive Coal-formation, but are less numerous, and there are a few new forms akin to those of the European Permian. The most characteristic species of the upper portion of the formation, which has the most decidedly Permian aspect, are the following:

Dadoxylon materiarium, Dawson.
* *Walchia* (*Araucarites*) *robusta*, Dn.
* *W.* (*A.*) *gracilis*, Dn.
* *W. imbricatula*, Dn.
Calamites Suckovii, Brongt.
C. Cistii, Brongt.
* *C. gigas*, Brongt.
Neuropteris rarinervis, Bunbury.
Alethopteris nervosa, Brongt.
Pecopteris arborescens, Brongt.
* *P. rigida*, Dn.
P. oreopteroides, Brongt.
* *Cordaites simplex*, Dn.

Of these species, those marked with an asterisk have not yet been found in the middle or lower members of the Carboniferous system. They will be found described, and several of them figured, in my "Report on the Geology of Prince Edward Island." † The others are

* Grey, "Journal of the Geological Society," vol. xxvii.
† 1871.