

and by Dr. Ami, the conclusion is reached that the formation is safely within the Carboniferous. Dr. Ami, who has not only critically reviewed all the faunal evidence but who has also studied the structure and position of the beds in the field, refers the Riversdale formation to the Eo-Carboniferous, and places it at the base of the Lower Carboniferous.¹

Palaeobotanists have been disposed to refer this formation to a still higher stage. Specimens from Harrington River examined by Sir William Dawson, were referred by him to the Millstone Grit. Later, in December of 1897, a small collection from these beds was inspected by the writer and recognized by him as indicating a position in the Carboniferous not far from the dividing line between the Upper and Lower Carboniferous, *i.e.*, in the region of the Millstone Grit or the Pottsville of the Appalachian trough. A little later a collection was submitted to Mr. Robert Kidston, of Sterling, Scotland, who arrived, absolutely independently, at nearly the same conclusion, suggesting that the plants might be even so late as the Lower Coal Measures. Both Mr. Kidston and the writer recognized the approximate contemporaneity of the Riversdale plant beds with the "fern ledges" of the Lancaster formation at St. John. Both regions furnish species of *Asterophyllites*, *Calamites*, *Sphenopteris*, *Aneimites*, *Neuropteris*, *Alethopteris*, *Cordailes* and *Cardiocarpon*, which, after continued study of the Carboniferous floras of the Appalachian trough, I find to be characteristic of that stage. I therefore do not hesitate, on the evidence of the fossil plants, to regard the Harrington River plant beds as representing a level at or not far below the Pottsville.

In addition to the specimens from the Riversdale formation of Nova Scotia the *Whittleseya* material in hand for description includes a single specimen from the "fern ledges," Lancaster formation, at St. John, New Brunswick. On examining one of the specimens of *Neuropteris Selwyni*, labelled by Sir William Dawson and now in the collection of McGill University, a small outcropping plant fragment was observed whose nerves suggested those of *Whittleseya*. The removal of the rock from the remaining portion of the specimen brought to light a new and very interest-

¹ Trans. Nova Scotia Inst. Sci., vol. X, 1900, pp. 167-178.