| Canadian Geolo-<br>gical Survey. | Ells & Fletcher<br>in Nova Scotia.  | R. Kidston. | David White. |           |
|----------------------------------|---|-------------|--------------|-----------|
| Catskill.<br>Chemung.            | Union, includ-<br>ing rocks of<br>MacAra Brook,<br>Lochaber and<br>Economy.     |             | ······       | Devonian. |
| Hamilton.                        | Riversdale, Har-<br>rington River<br>(4000 ft.) Mac-<br>Kay Head and<br>Horton. | •••••       |              |           |
| Corniferous.                     | {Basal<br>Conglomerate.   |             | ····· ,      |           |

## THE HORTON PLANT BEDS.

The Horton Bluff terrane, as recognized by Sir William Dawson (1843) and Sir Charles Lyell (1847), is referred by Dr. Ells and Mr. Fletcher to the Hamilton, it being apparently included in the Riversdale series. The Horton plant beds are characterized by a very peculiar flora containing an abundance of both Aneimites Acadicus and Lepidodendron corrugatum with its numerous decorticated phases, together with one or more higher types of Lepidodendron and a singular form of Sphenopteris. Aneimites appears to be an exclusively Carboniferous genus. The Lepidodendra are larger and more advanced, with larger bolsters than any known Devonian type. Biologically the flora is distinctly younger than any yet found in undisputed Devonian rocks, and it appears to be even more modern than the Ursa<sup>1</sup> flora

Essentially the same flora is everywhere characteristic of the Pennsylvania and Virginia Pócono, with which the Horton flora was correctly correlated by Sir William Dawson as long ago as 1873. Not only is the Pocono similarly marked by an abundance of *Lepidodendron corrugatum*, but by the hardly less abundant *Aneimites*, some

<sup>&</sup>lt;sup>1</sup> The Ursa stage, typical in Bear Island and Spitzbergen, is generally included within the lower limit of the Carboniferous, though by some geologists it is regarded as transitional from Devonian to Carboniferous.