

The study of certain rock formations in Southern New Brunswick, which have long been known under the head of Devonian, was undertaken by several local geologists, notably Hartt, Matthew and Bailey, nearly forty years ago, and a statement of the results then obtained will be found in a report by Professor Bailey entitled "Observations on the Geology of Southern New Brunswick" and published in 1865. The details of the Devonian formations were at that time but little worked out, a large part of what has since been recognized as pre-Cambrian in the south-eastern portion of the province being included. The stratigraphical relations of certain divisions of the Devonian rocks, both to the underlying upper Silurian and the overlying lower Carboniferous, were, however, early recognized, and the finding of a rich flora in the strata at a number of points added greatly to the interest of the investigation. To the late Sir William Dawson, then presumably the ablest Palaeobotanist on this side of the Atlantic, was assigned the task of deciphering the correct horizon of the plant remains thus discovered.

That Sir William was especially fitted for this work cannot be denied. He had just completed a series of investigations on the flora and fauna found in the Devonian of Eastern Gaspé, and his work was facilitated by the study of collections of fossil plants from Ohio, New York and Great Britain. Elaborate sections of the Gaspé Devonian had already been made by Sir William Logan<sup>1</sup> and the true position of the rocks in this area was ascertained beyond a doubt, since the lower portion of the section passes downward into the upper part of the Silurian. The thickness of the Devonian rocks as determined by the Gaspé section was found to be somewhat over 7,000 feet.

Fresh from the study of the Gaspé fossils, Sir William Dawson began his study of the plant remains from the

<sup>1</sup> Rep. Geol. Sur. Can., 1844.