

claim not a few of them as the originals of present species. Remains of the same plants have been found fossil in our temperate region, as well as in Europe."

Between 1860 and 1870 the writer was engaged in working out all that could be learned of the Devonian plants of Eastern America, the oldest known flora of any richness, and which consists almost exclusively of gigantic, and to us grotesque, representatives of the Club mosses, Ferns, and Mares'-tails, with some trees allied to the Cycads and Pines. In this pursuit nearly all the more important localities were visited, and access was had to the large collections of Professor Hall and Professor Newberry in New York and Ohio, as well as to those of the Geological Survey of Canada, and to those made in the remarkable plant-bearing beds of St. John, New Brunswick, by Messrs. Matthew and Hartt. In the progress of these researches, which developed an unexpectedly rich assemblage of species, the northern origin of this old flora seemed to be established by its earlier culmination in the north-east, in connection with the growth of the American land to the southward, which took place after the great Upper Silurian subsidence, by elevations which began in the north, while those portions of the continent to the south-west still remained under the sea.

When, in 1870, the labours of those ten years were brought before the Royal Society of London, in the Bakerian Lecture of that year, and in a memoir illustrating no less than one hundred and twenty-five species of plants older than the great Carboniferous system, these deductions were stated in connection with the conclusions of Hall, Logan, and Dana, as to the distributions of sediment along the north-east side of the American continent, and the anticipation was hazarded that the oldest Palæozoic floras would be discovered to the north of Newfoundland. Mention was also made of the apparent earlier and more copious birth of the Devonian flora in