ROYAL SOCIETY OF CANADA

quarries, I was guided by Mr. Scott, the manager of the Clifton quarry, to a spot where a fall of rock had recently taken place and had thrown down a great slab of argillaceous sandstone or coarse shale, on which was laid out, as if prepared for an herbarium, the specimen represented in Fig. D.

As the mass of rock was too large to be removed entire. I made a rough sketch of the whole plant in my note-book, and cut out specimens as large as I could take away, showing the trunk, branches and cones, Other matters, however, were at the time occupying my attention, and the specimens were not described till 1888, when a short description was given in my "Geological History of Plants," at which time I regarded the plant as a Lepidodendron, nearly allied to L. Wortheni of Lesquereux. Two years later, a collection of plants from the coal formation of Newfoundland was placed in my hands by the late Mr. Murray, F.G.S., Director of the Geological Survey of Newfoundland, and his successor, Mr. Howley, F.G.S. Among these was a remarkable Lepidodendron, which I named L. Murrayanum, and which raised a number of questions as to the group to which L. Wortheni belongs, and some members of which had been described as Sigillaria, because of the apparently vertical arrangement of the leaf-bases. The Newfoundland collection was described in the Bulletin of the Geological Society of America for 1891, and led to the re-examination of the Clifton specimen in the manner shown in the following extract:

III. THE RELATION OF THESE SPECIES TO OTHERS.

"In the coal formation of New Brunswick there is a species which I have described as L. Cliftonense from its locality,¹ and of which I have found very perfect specimens. It is in some respects so near to the above that I have doubted its specific distinctness, though on careful comparison there seem sufficient grounds for a difference of name. I therefore figure this species also, more especially as it has not been before figured and as it shows the fruit and habit of growth.

"It will be observed that this species agrees with the last in the forms of the leaf-bases and in the length of the leaves, which are, however, wider and sometimes as much as five inches in length, while the leafbases are transversely furrowed above as well as below the scars. The leaf-bases also are somewhat different in shape and more spirally arranged, and the leaves are longer in L. Cliftonense. Additional specimens might, however, show them to be varieties of one species. The foliage reminds one at first sight of that of L. longifolium of Sternberg, but both leaves and scars are altogether different in detail.

¹ Geological History of Plants, 1888, p. 164.

66