It thus appears that we already know five species of Coniferous trees of the genus Dadoxylon in the Middle Erian of America, an interesting confirmation of the facts otherwise known as to the great richness and variety of this ancient flora. The late Prof. Goeppert informed me that he had recognised similar wood in the Devonian of Germany, and there can be no doubt that the fossil wood discovered by Hugh Miller in the Old Red Sandstone of Scotland, and described by Salter and McNab, is of similar character, and probably belongs to the genus Dadoxylon. Thus this type of Coniferous tree seems to have been as well established and differentiated into species in the Middle Devonian as in the succeeding Carboniferous.

I may here refer to the fact that the lower limit of the trees of this group coincides, in America, with the upper limit of those problematical trees which in the previous chapter I have named Protogens (Nematophyton, Celluloxlyon,\* Nematoxylon†), though Aporoxylon of Unger extends, in Thuringia, up to the Upper Devonian (Cypridina schists).

## V.—Scottish Devonian Plants of Hugh Miller and others. (Edinburgh Geological Society, 1877.)

Previously to the appearance of my descriptions of Devonian plants from North America, Hugh Miller had described forms from the Devonian of Scotland, similar to those for which I proposed the generic name Psilophyton; and I referred to these in this connection in my earliest description of that genus.‡ He had also recognised what seemed to be plants allied to Lycopods and Conifers. Mr. Peach and Mr. Duncan had made additional discoveries of this kind, and Sir J. Hooker and Mr. Salter had described some of these remains. More recently Messrs. Peach, Carruthers, and McNab have worked in this field, and still later # Messrs. Jack and Etheridge have summed up the facts and have added some that are new.

The first point to which I shall refer, and which will lead to the other matters to be discussed, is the relation of the characteristic Lepidodendron of the Devonian of eastern America, L. Gaspianum, to L. nothum of Unger and of Salter. At the time when I described this species I had not access to Scottish specimens of Lepidodendron

<sup>\* &</sup>quot;Journal of the Geological Society," May, 1831.

<sup>†</sup> Ibid., vol. xix, 1863.

<sup>‡ &</sup>quot;Journal of the Geological Society," London, 1859.

<sup>#</sup> Ibid., 1877.