

Mr. Salter described, in 1857,* fragments of fossil wood from the Scottish Devonian, having the structure of *Dadoxylon*, though very imperfectly preserved; and Prof. McNab has proposed † the generic name *Palæopitys* for another specimen of coniferous wood collected by Hugh Miller, and referred to by him in the "Testimony of the Rocks." From Prof. McNab's description, I should infer that this wood may, after all, be generically identical with the woods usually referred to *Dadoxylon* of Unger (*Araucarioxylon* of Kraus). The description, however, does not mention the number and disposition of the rows of pores, nor the structure of the medullary rays, and I have not been able to obtain access to the specimens themselves. I have described five species of *Dadoxylon* from the Middle and Upper Erian of America, all quite distinct from the Lower Carboniferous species. There is also one species of an allied genus, *Ormoxylon*. All these have been carefully figured, and it is much to be desired that the Scottish specimens should be re-examined and compared with them.

Messrs. Jack and Etheridge have given an excellent summary of our present knowledge of the Devonian flora of Scotland, in the Journal of the London Geological Society (1877). From this it would appear that species referable to the genera *Calamites*, *Lepidodendron*, *Lycopodites*, *Psilophyton*, *Arthrostigma*, *Archæopteris*, *Caulopteris*, *Palæopitys*, *Araucarioxylon*, and *Stigmaria* have been recognised.

The plants described by these gentlemen from the Old Red Sandstone of Callender, I should suppose, from their figures and descriptions, to belong to the genus *Arthrostigma*, rather than to *Psilophyton*. I do not attach any importance to the suggestions referred to by them, that the apparent leaves may be leaf-bases. Long leaf-bases, like those characteristic of *Lepidoflojos*, do not occur in these humbler plants of the Devonian. The stems with delicate "horizontal processes" to which they refer may belong to *Psilophyton* or to *Pinnularia*.

In conclusion, I need scarcely say that I do not share in the doubts expressed by some British palæontologists as to the distinctness of the Devonian and Carboniferous floras. In eastern America, where these formations are mutually unconformable, there is, of course, less room for doubt than in Ireland and in western America, where they are stratigraphically continuous. Still, in passing

* "Journal of the London Geological Society."

† "Transactions of the Edinburgh Botanical Society," 1870.