

If a land plant it is probably the oldest at present certainly known.*

With these plants, Prof. Nicholson sent a fibrous body from the Upper Llandeilo of Hart Fell, near Moffat, which at first sight had the appearance of a fragment of coarse-grained wood. On microscopic examination of it, however, I concluded that it had been a bundle of spicules of a sponge of the type of *Hyalonema*. This I still believe to be its true nature.

In studying the plants of the older rocks, the botanist requires to be on his guard as to the Algæ and Zoophytes of these formations which simulate land plants. In the latter group I know no forms more deceptive than those of Hall's genus *Inocaulis*, which is regarded as a relative of the Graptolites. A specimen now before me, from the collection of Col. Grant, of Hamilton, Ontario, in its ramification and appearance of foliage, bears the closest resemblance to a lycopodiaceous plant, and I have seen what appears to be the base of a *Dictyonema* from the Niagara formation, which might readily be mistaken for a small and peculiar species of *Psilophyton*.

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. From this it would appear that species referable to the genera *Calumites*, *Lepidodendron*, *Lycopodites*, *Psilophyton*, *Arthrostigma*, *Archæopteris*, *Caulopteris*, *Paleopitys*, *Arucarioxylon*, and *Stigmara* have been recognized.

The plants described by those 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 *Ptilophyton* 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

* Since the above was written, Lesquereux has described supposed land plants from the Cincinnati Group (Lower Silurian) of Ohio. Saporita has discovered what he regards as a fern in rocks of similar age in France, and Claypole will shortly describe an apparently lepidodendroid tree (*Glyptodendron*) from the Clinton Group of Ohio; but neither of these is quite so old as the Skiddaw plants.