

cussed the questions relating to *Prototaxites*. *Drepanophycus*, of Goeppert,* I suspect, is only a badly preserved branch or stem of the Erian land-plant known as *Arthro stigma*. In like manner, *Haliserites Dechenianus*,† of Goeppert, is evidently the land-plant known as *Psilophyton*. *Sphærococcites dentatus* and *S. serra*—the *Fucoides dentatus* and *serra* of Brongniart, from Quebec—are graptolites of two species quite common there.‡ *Dictyophyton* and *Uphantenia*, as described by Hall and the author, are now known to be sponges. They have become *Dictyospongiæ*. The curious and very ancient fossils referred by Forbes to the genus *Oldhamia* are perhaps still subject to doubt, but are usually regarded as Zoophytes, though it is quite possible they may be plants. Though I have not seen the specimens, I have no doubt whatever that the plants, or the greater part of them, from the Silurian of Bohemia, described by Stur as Algæ and Characeæ,* are really land-plants, some of them of the genus *Psilophyton*. I may say in this connection that specimens of flattened *Psilophyton* and *Arthro stigma*, in the Upper Silurian and Erian of Gaspé, would probably have been referred to Algæ, but for the fact that in some of them the axis of barred vessels is preserved.

It is not surprising that great difficulties have occurred in the determination of fossil Algæ. Enough, however, remains certain to prove that the old Cambrian and Silurian seas were tenanted with sea-weeds not very dissimilar from those of the present time. It is further probable that some of the graphitic, carbonaceous, and bituminous

* "Fossile Flora," 1852, p. 92, Table xli.

† *Ibid.*, p. 88, Table ii.

‡ Brongniart, "Vegeteaux Fossiles," Plate vi., Figs. 7 to 12.

* "Proceedings of the Vienna Academy," 1881. *Hostinella*, of this author, is almost certainly *Psilophyton*, and his *Barrandiana* seems to include *Arthro stigma*, and perhaps leafy branches of *Berwynia*. These curious plants should be re-examined.