

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 *Arthrostigma*. In like manner, *Haliserites Dechenianus*,† of Goeppert, is evidently the land-plant known as *Psilophyton*. *Sphaerococcites 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 *Dictyospongiae*. 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 *Arthrostigma*, 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, "Vegetaux 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 *Arthrostigma*, and perhaps leafy branches of *Berwynia*. These curious plants should be re-examined.