far as they go, are rather those of the genus Lycopodites than of Lepidodendron, from which this plant differs in wanting any distinct leaf-bases, and in its short crowded leaves. It is to be observed that they apply also to Salter's Lycopodites Milleri, and that the difference of the foliage of that species may be a result merely of different state of preservation. For these reasons I am disposed to place these two supposed species together, and to retain for the species the name Lycopodites Milleri. It may be characterized by the description above given, with merely the modification that the leaves are sometimes one-third of an inch long and secund.

Decorticated branches of the above species may no doubt be mistaken for Psilophyton, but are nevertheless quite distinct from it, and the slender branching dichotomous stems, with terminations which, as Miller graphically states, are "like the tendrils of a pea," are too characteristic to be easily mistaken, even when neither fruit nor leaves appear. With reference to fructification, the form of L. Milleri renders it certain that it must have borne strobiles at the ends of its branchlets, or some substitute for these, and not naked spore-cases like those of Psilophyton.

The remarkable fragment communicated by Sir Philip Egerton to Mr. Carruthers,* belongs to a third group, and has I think been quite misunderstood. I am enabled to make this statement with some confidence, from the fact that the reverse or counterpart of Sir Philip's specimen was in the collection of Sir Wyville Thomson, and was placed by him in my hands in 1870. It was noticed by me in a paper on New Devonian Plants, in the Journal of the Geological Society of London in 1871, in the following terms:—

"In his recently published 'Paléontologie,' Schimper (evidently from inattention to the descriptions and want of access to specimens) doubts the Lycopodiaceous character of species of Lycopodites described in my papers in the Journal of this Society from the Devonian of America. Of these L. Richardsoni and L. Matthewi are undoubtedly very near to the modern genus Lycopodium. L. Vanuxemii is, I admit, more problematical; but Schimper could scarcely have supposed it to be a fern or a fucoid allied to Caulerpa had he noticed that both in my species and the allied L. pennæformis of Goeppert, which he does not

^{*} Journal of Botany, 1873.