rests only on mere juxtaposition of fragments, and on the slight resemblance of the decorticated ends of the branches of the latter plants to *Psilophyton*. It is contradicted by the obtuse ends of the branches of the *Lepidodendron* and *Lycopodites*, and by the apparently strobilaceous termination of some of them.

Salter's description of his *Lepidodendron nothum* is quite definite, and accords with specimens placed in my hands by Mr. Peach: "Stems half an inch broad, tapering little, branches short; set on at an acute angle, blunt at their terminations. Leaves in seven to ten rows, very short, not a line long, and rather spreading than closely imbricate." These characters, however, in so 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 characterised by the description above given, with merely the modification that the leaves are sometimes nearly one-third of an inch long and secund (Fig. 17, *supra*, lower figure).

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 in my paper on "New Devonian Plants," in the "Journal of the Geological Society of London," and referred to my genus *Ptilophyton*, as stated above under Section II., page 86 *et seq.*

* "Journal of Botany," 1873.