these had been well figured and described by Salter, and had been identified with *L. nothum* of Unger, a species evidently distinct from mine, as was also that figured and described by Salter, whether identical or not with Unger's species. In 1870 I had for the first time an opportunity to study Scottish specimens in the collection of Mr. Peach; and on the evidence thus afforded I stated confidently that these specimens represented a species distinct from *L. Gaspianum*, perhaps even generically so.* It differs from *L. Gaspianum* in its habit of growth by developing small lateral branches instead of bifurcating, and in its foliage by the absence or obsolete character of the leaf-bases and the closely placed and somewhat appressed leaves. If an appearance of swelling at the end of a lateral branch in one specimen indicates a strobile of fructification, then its fruit was not dissimilar from that of the Canadian species in its position and general form, though it may have differed in details. On these grounds I declined to identify the Scottish species with *L. Gaspianum*. The Lepidodendron from the Devonian of Belgium described and figured by Crepin,† has a better claim to such identification, and would seem to prove that this species existed in Europe as well as in America. I also saw in Mr. Peach's collection in 1870, some fragments which seemed to me distinct from Salter's species, and possibly belonging to *L. Gaspianum*.‡

In the earliest description of *Psilophyton* I recognized its probable generic affinity with Miller's 'dichotomous plants,' with Salter's 'rootlets,' and with Goeppert's *Haliserites Decheniauus*, and stated that I had "little doubt that materials exist in the Old Red Sandstone of Scotland for the reconstruction of at least one species of this genus." Since, however, Miller's plants had been referred to coniferous roots, and to fucoids, and Goeppert's *Haliserites* was a name applicable only to fucoids, and since the structure and fruit of my plants placed them near to Lycopods, I was under the necessity of giving them a special generic name, nor could I with certainty affirm their specific identity with any European species. The comparison of the Scottish specimens with woody rootlets, though incorrect, is in one respect creditable to the acumen of Salter, as in almost any state of preservation an experienced eye can readily perceive that branchlets of

* Report on Devonian Plants of Canada, 1871.

† Observations sur quelques Plantes Fossiles des dépôts Devoniens.

‡ Proceedings Geological Society of London, March 1871.