Returning to the more special subject of this work, I may remark that the lepidodendroid trees and the ferns, both the arborescent and herbaceous kinds, are even more richly represented in the Carboniferous than in the preceding Erian. I must, however, content myself with merely introducing a few representatives of some of

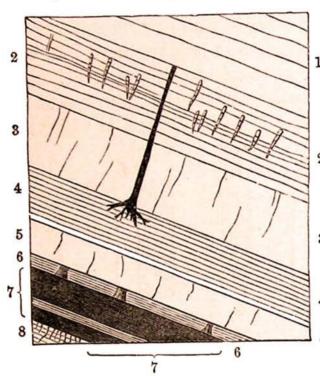


Fig. 41.—Beds associated with the main coal (S. Joggins, Nova Scotia). 1, Shale and sand-stone—plants with Spirorbis attached; rain-marks (?). (2, Sandstone and shale, eight feet—erect Calamites; 3, Gray sandstone, seven feet; 4, Gray shale, four feet—an erect coniferous (?) tree, rooted on the shale, passes up through fifteen feet of the sandstones and shale.) 5, Gray sandstone, four feet. 6, Gray shale, six inches—prostrate and erect trees, with rootlets, leaves, Naiadites, and Spirorbis on the plants. 7, Main coal-seam, five feet of coal in two seams. 8, Underclay, with rootlets.

the more common kinds, in an appended note, and here give a figure of a well-known Lower Carboniferous lepidodendron, with its various forms of leaf-bases. and its foliage and fruit (Fig. 43), and a similar illustration of an allied generic form, that known as Lepidophloios\* (Fig. 44).

Another group which claims our attention is that of the *Calamites*. These are tall, cylindrical, branchless stems, with whorls of branchlets, bearing needle-

like leaves and spreading in stools from the base, so as to form dense thickets, like Southern cane-brakes (Fig. 46). They bear, in habit of growth and fructification, a close

<sup>\*</sup> For full descriptions of these, see "Acadian Geology."