

their roots are properly roots at all, and not stems of some aquatic plant. Then the structure of their

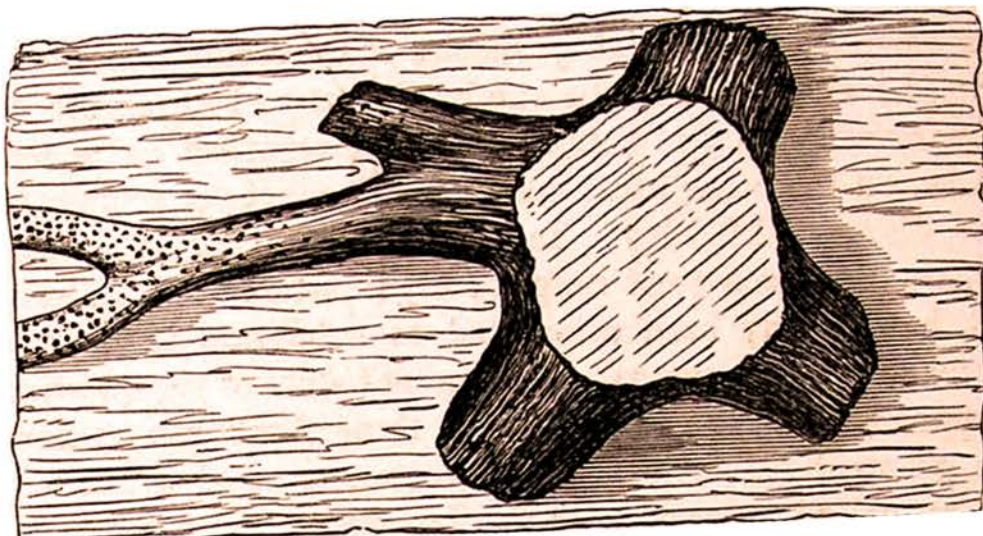


FIG. 38.—*Stigmaria* root, seen from above, showing its regular divisions. From "Acadian Geology."

stems is most puzzling, and their fruit is an enigma, for while some have found connected with them cones supposed to resemble those of lycopods, others attribute to them fruits like those of yew-trees. For years I have been myself gathering materials from the rich coal-formation deposits of Nova Scotia in aid of the solution of these questions, and in the mean time Dr. Williamson, of Manchester, and Renault and other botanists in France, have been amassing and studying stores of specimens, and it is still uncertain who may finally be the fortunate discoverer to set all controversies at rest. My present belief is, that the true solution consists in the fact that there are many kinds of *Sigillariae*. While in the modern forests



FIG. 39.—Portion of bark of *Stigmaria*, showing scars of attachment of rootlets.