

of Brongniart with favor, but regards a different form as more expressive of the relationship which he determined.¹⁸ He therefore says: "Pour conserver le nom, premier en date, donné par M. Brongniart à ces portions de plantes, et en même temps pour rappeler leur nature, je les désignerai sous le nom de *Myelopteris*."

The yet more recent studies of these plants by Williamson led him to admit the force of the arguments employed by Renault and the appropriateness of his name.¹⁹ Reference to Williamson's figures discloses several points of resemblance between his specimens and my own. This is to be noted first in a great similarity with respect to the general distribution of tissues, particularly as exhibited in his *figs. 3* and *4*, as likewise in the very general removal of the vascular bundles. The vascular bundle given by him (Williamson, *fig. 7**) is closely similar to that derived from the Topeka specimen (*fig. 4*), but differs materially from his other representation (Williamson, *fig. 7*) taken from the upper end of a rachis, which is closely similar to bundles observed by me in *Dioon edule*, whereby it offers some basis of comparison with the Cycadaceae.

In longitudinal section the resemblance is rather close, but in this aspect the Topeka specimen offers little evidence of a satisfactory nature beyond the general relations of parts, and the structural markings of the vessels which are seen to be scalariform, as in the ferns.

Finally, the relation of the mucilage passages to the vascular bundles (Williamson, *fig. 14*) and of the very large, elliptical mucilage passages to the sclerenchyma strands (Williamson, *fig. 13*), as also the very thin walled elements of the fundamental structure, all present features almost identical with those observed in the Topeka specimens (*figs. 1, 2, 3*).

Williamson's specimens appear to differ from my own chiefly with respect to the particular distribution of the sclerenchyma strands in the cortical region, a difference which, however, is

¹⁸ Recherches sur les végétaux silicifiés d'Autun. (From Williamson.)

¹⁹ Fossil plants of the Coal Measures. Phil. Trans. 1661.