

and their piths larger than in the true pines, and some of the larger-leaved species must have had thick, stiff branches. They are regarded as constituting a separate family, intermediate between pines and cycads, and, be-

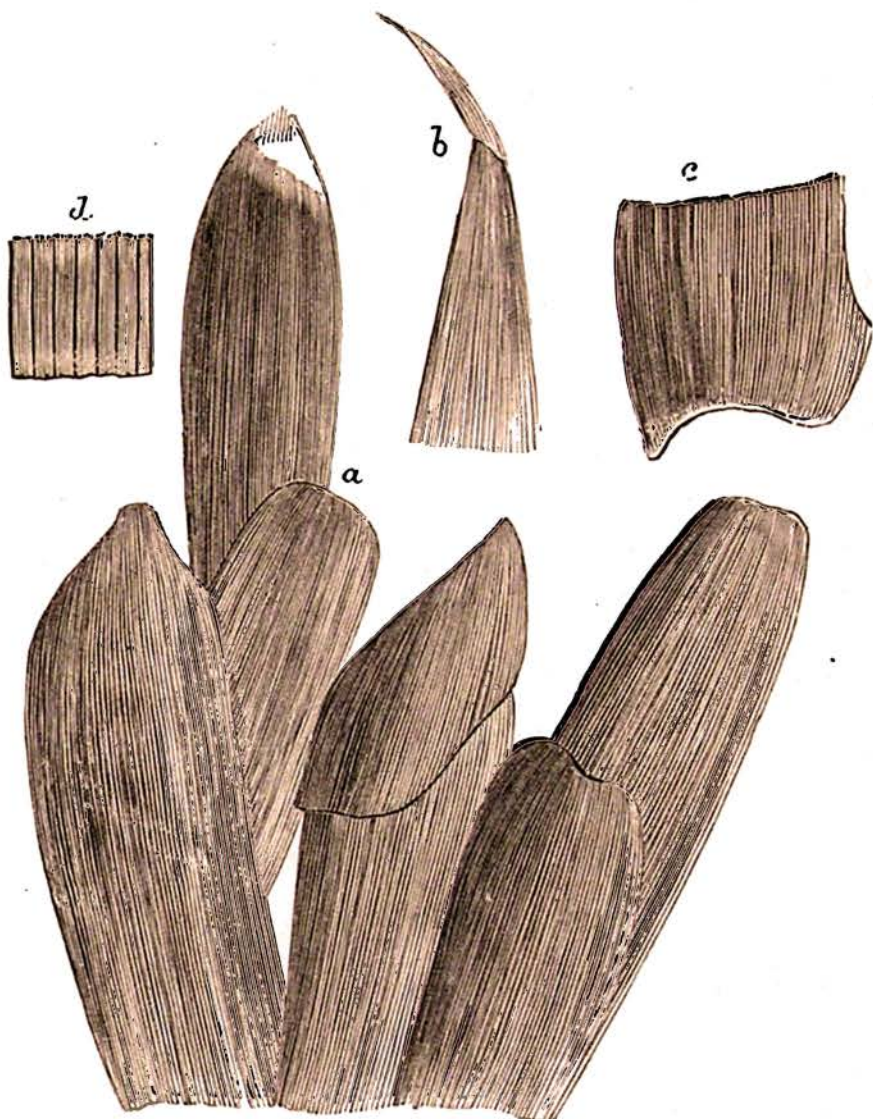


FIG. 30.—*Cordaites Robbii* (Erian, New Brunswick). *a*, Group of young leaves. *b*, Point of leaf. *c*, Base of leaf. *d*, Venation, magnified.

ginning in the Middle Devonian, they terminate in the Permian, where, however, some of the most gigantic species occur. In so far as the form and structure of the leaves, stems, and fruit are concerned, there is marvelously little difference between the species found in the