which have this peculiarity, as also certain modern Cycads of the genus *Zamia*, which Professor Penhallow has kindly pointed out to me. The present plant would seem to be a form of *Cordaiteæ*, tending to *Nœggerathia*, which many paleobotanists believe to have been a gymnospermous genus allied to *Cordaites*. The affinities, however, so far as can be judged, are nearer to the latter; and following the example of Grand Eury in his nomenclature of the genera, I would propose the name *Dictyo-cordaites* for the present genus, and the specific name *Lacoi*, in honor of its discoverer.

It is apparent that this specimen combines the fructification of the *Cordaiteæ* with leaves akin to those of *Nœggerathia*, thus connecting two groups of paleozoic plants, both of which are now considered as allied to *Cycadeæ* and *Taxineæ*, and I entertain the hope that when it is fully studied and brought into comparison with other specimens in my collections, or which have been figured and described by other paleobotanists, it will throw additional light on a great number of Paleozoic Canadian leaves, fruits and stems, now designated as *Cordaites*, *Nœggerathia*, *Psygmophyllum*, *Gingkophyllum*, *Sternbergia*, *Lepidoxylon*, *Saportea*, etc.; and which have been waiting for some specimen thus complete to bring them into harmony with each other.

I hope to be able to bring the whole of this material, which will necessitate some change in the nomenclature of some of my own species, under the notice of geologists at the approaching meeting of the American Association.

I may add that the oldest true *Cordaites* known to me is *C. Robbii* of the Middle Devonian, which is said to have also been found in the Silurian. *C. angustifolia* of the Lower Devonian is a somewhat uncertain species. Plants of the genus *Nœggerathia* are known in the Upper Devonian.

EXPLANATION OF FIGURE.—*Dictyo-cordaites Lacoi*, much reduced. (*a*) Venation of leaf, natural size. (*b*) Fruit enlarged.