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NOTES ON AN INTERESTING COLLECTION OF FOSSIL FRUITS FROM VERMONT, IN THE MUSEUM OF THE GEOLOGICAL SURVEY OF CANADA.*

By H. M. Ami, Geological Survey of Canada.

Amongst the specimens exhibited at the first January meeting of the Botanical Club was a collection of fossil fruits from Brandon, Vermont. These specimens appeared to have been in the collections of the Geological Survey Museum since the days of the late Sir William Logan, having been brought to his attention, it is thought, by the elder Hitchcock in the early fifties. It was in 1853 that these fossil fruits were recorded for the first time by President Edward Hitchcock, in the Amer. Jour. Sc., vol. xv, p. 95 (1853), as occurring in "a bed of brown coal connected with the white clays and brown hematite of the place," referring to Brandon, Vermont, which he had visited in the spring of 1852.

During the visit of the Geological Society of America held in Ottawa in December, 1905, Prof. G. H. Perkins, Director of the State Geological Survey, Vermont, was good enough to look over the collection of these fruits, which were shown to him by the writer, and he there and then undertook to identify every recognizable species, most of which he had himself recently studied, and more particularly described, not only before the Geological Society of America, at the Philadelphia meeting, but also in the Report of the State Geologist for Vermont for the years 1903-1904.

The geological horizon or formation to which these fruits have been referred by many geologists practically agree in ascribing them to the "Lignite Tertiary," the Brandon Lignite or Brandon formation, specially designating the horizon or formation to which they are referable. Professor Perkins is inclined to think them as "Miocene Tertiary" in age. Their age was compared by Edward Hitchcock with those of the fossil fruits from the London clay figured by Bowerbank, and he (Hitchcock) further states that "the Brandon deposit is the type of a Tertiary formation hitherto unrecognized as such extending from Canada to Alabama," adding: "This deposit belongs to the Pliocene or newer Tertiary."

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