## V .- Contributions to the Pleistocene Flora of Canada.

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Since the author's first general summary of the Pleistocene flora of Canada, in 1890, a number of additions have been made, which serve yet more fully to establish the similarity between the flora of that period and our own times. We have now to record other additions which serve to extend the geographical range over a much wider area.

## PEAT AND LIGNITE FROM THE MOOSE AND MISSINAIBI RIVERS.

The material on which the first part of the present paper is based was collected by Dr. Robert Bell, of the Geological Survey, during the progress of his survey in the Moose River region, in the summer of 1895. As received by me, it was represented by four lots but only two kindscoarse peat and lignite. These specimens are designated by laboratory numbers 44, 45, 46 and 47. Numbers 46 and 47 are lignite obtained from a locality on the Moose River about fifty miles from its month. Numbers 44 and 45 are specimens of coarse peat or vegetable matter derived from the foot of the Long Portage on the Missinaibi River, a stream which constitutes the western branch of the Moose River, reaching to within about twenty miles of the station of the same name on the Canadian Pacific Railway, but on the opposite side of the divide. Dr. Bell reports that this peat occurs in horizontal layers in a clayey deposit at a depth of fifty feet from the surface. For fully twenty years it has been known that lignite occurs in abundance on the Moose River and the tributary above mentioned. In 1865 Dr. Bell noted its occurrence, and in his report for the surveys of that year states that, in addition to its having been reported as seen in situ at the mouth of Coal Brook, fragments were to be found strewn, often in abundance, all along the bed of the Missinaibi River from the Forks to Coal Brook.3 Similar lignites had previously been found on the Mattagami and Albany Rivers. In 1867 Dr. Bell was able to observe this lignite in situ in several places on the Missinaibi River between the Long Portage and its junction with the Mattagami. At Coal Brook, three-fourths of a mile from its mouth, the deposit is about three feet thick. It is underlaid by soft, sticky blue clay, and

<sup>&</sup>lt;sup>1</sup> In the preparation of this paper I am much indebted to Sir Wm. Dawson for a number of valuable suggestions relative to the geological aspects of the question.

 $<sup>^2</sup>$  " On the Pleistocene Flora of Canada," Bull, Geol. Soc. Amer., i., 321.

<sup>&</sup>lt;sup>3</sup> Geol. Surv. Can., 1875-76, 326.

<sup>4</sup> Ibid., 1871-72, 112.