at some future period, it would be no small matter to have the water of Mille Lacs at command, for, until after passing French Portage, the supply of water on the canoe route, although ample for the works now proposed, is not sufficient for the more extensive improvements which will doubtless be required in the future.

Among the further advantages of this dam would be the additional depth which it would give over an extensive shoal just at the mouth of the *Savane* River.

Moreover, in the event of a land road all the way between Lac des Mille Lacs and Rainy Lake becoming necessary, a dam at the Little Falls would extend the navigable water of Mille Lacs to within a distance of seventy miles of Rainy Lake. The construction of such a road has been strongly urged by various parties who have manifested a deep interest in opening the communication, chiefly under the idea that it would greatly expedite th e conveyance of mails.

It must be borne in mind, however, that taking into account the character of the country, seventy miles of road, while in such way as to be really useful, in a region so remote, would cost not less than one hundred and twenty thousand dollars. It is, therefore, a matter for consideration whether for the present the less expensive way would not be the best, and whether if such a sum, instead of being applied to making a road, were expended on the construction of locks to extend the navigable reaches, it would not have a better effect, even as regards the transport of mails, inasmuch as steamers might then be placed to advantage on reaches now too short to admit of their being used.

The situation at the Little Falls is admirably adapted for a dam, the river at that point passing through a cut in the rock with high rocky banks on either side. To have the desired effect of raising the water of Lac des Mille Lacs to the extent of about three feet over its present level, the dam would require to be forty-two feet in height. From a rough estimate made by me when on the ground, I have set down its cost at twenty thousand dollars. If, however, the mere raising of Lac des Mille Lacs were the only object in view, it could be attained by a much less costly structure at its immediate outlet.

Taking the works proposed in their regular order from Lac des Mille Lacs to Rainy Lake, the improvement next required would be at—

Baril Portage.

This is the portage or carrying place, between Lac des Mille Lacs and Baril Lake, in length sixteen chains. For the present it is merely proposed to improve the portage and place a tramway upon it for hand cars. Baril Lake is, as stated, $1\frac{86}{100}$ feet above the level of Mille Lacs, and, when the latter is raised by means of the dam proposed, a cut might easily be made to connect the two lakes and do away with the portage, as already stated.

Brulé Portage.

Here, also, it is proposed to place a tramway. The present length of the portage is twenty-one chains, but the brook forming the discharge of Baril Lake can be so improved as to reduce the distance to ten chains. The difference of level between the water of Baril Lake and the lower end of the portage is $47\frac{2}{100}$ feet.

Dam at head of French Portage.

The effect of this dam would be to raise the water of the Windegoostegoon Lakes, which is in some places shallow, and do away with a little rapid where there is a fall of three feet. The channel, where the dam is to be built, is of solid rock, eighty feet in width, with rocky banks on both sides. The structure would be an ordinary flat dam, built of unhewn timber and covered in front with timber hewn to six inches, raised to the height of twelve feet, with a flood gate fifteen feet in width, provided with stop logs and the means of raising them, in the same manner as at the head gates of a slide. A work of this extent would cost in ordinary circumstances about twelve hundred dollars, but considering the remoteness of the situation and the cost of getting men, supplies, etc., I have set it down at sixteen hundred dollars.

French Portage.

This carrying place is one mile and sixty chains in length and the fall from its eastern