

THE COMMERCIAL

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The Commercial certainly enjoys a very much larger circulation among the business community of the vast region lying between Lake Superior and the Pacific Coast than any other paper in Canada, daily or weekly. The Commercial also reaches the leading wholesale, commission, manufacturing and financial houses of Eastern Canada.

WINNIPEG, AUGUST 11.

ASSINIBOINE WATER POWER.

It is pleasing to note that attention has recently been directed again to the matter of utilizing the waterpower of the Assiniboine river at Winnipeg. It is earnestly hoped that the present movement will result in the carrying out of the proposed work, which would do more than anything else we can conceive of to build up the city of Winnipeg. The undertaking of this work at the present time, together with the work now going on for the improvement of the Red river would greatly tend to counteract any tendency to depression resulting from the unfavorable crop conditions existing this year. Winnipeg has made rapid strides in population, industry and influence of late years. The city and country has now reached a position which offers a far better inducement for taking hold of this work than at the time the undertaking was first seriously considered. The country is now on a solid basis and our future is assured. We are now in a position to turn to practical account the power running to waste in the Assiniboine river. The power required for civic purposes alone will be doubled by the time the new waterworks are in operation, compared with a few years ago. If the waterpower of the Assiniboine were made available, it would be largely taken up at once, for municipal and general industrial purposes.

Some years ago great interest was taken in the proposal to utilize the waterpower of the Assiniboine river at Winnipeg. A thorough investigation was made at the time and it was then considered that the work would prove of great advantage to the city. A complete survey of the proposed work was made by the city engineer, who estimated that a waterpower, at

the lowest stage of the river in a dry year, could be developed of 3,219 horse-power. By making a cut from Lake Manitoba to the Assiniboine river it was estimated that the power could be increased to 15,000 horse-power per day of fourteen hours. In order to verify the finding of the city engineer, J. T. Fanning, an expert hydraulic engineer, was brought here from the United States, and in the main he fully endorsed the report of City Engineer Ruttan. This set at rest any doubt as to the feasibility of the work, the approximate cost of the same, and the value which the development of the power would be to the city.

Latterly, attention seems to have been directed toward the improvement of navigation on the Red river, so much so that the development of the waterpower within the city limits has been almost forgotten. While it is very important that navigation should be opened on the Red river to Lake Winnipeg, in many respects the development of the Assiniboine river water power within the city limits particularly in connection with the canal to Lake Manitoba, is of very great importance.

It is estimated that at the present cost of fuel, steam power will cost in Winnipeg about \$90 per annum per horse power, or 29 cents per day for each working day in the year. This applies to steam power used on a large scale for twenty-four hours' steady running. Used in a small way the cost would be greater, ranging as high as \$300 or more per horse power per year. After allowing very liberally for the cost of developing and maintaining the Assiniboine waterpower, the rental of only 2,500 horse power at an average of \$10 per year would pay an interest of 5 per cent on the outlay and cost of maintenance. The cost of construction is estimated for canals, dams, etc., of a capacity of 10,000 horse power. If the cost of the work were estimated on a basis of the minimum low water power of something over 3,000 horse power, the percentage of interest would be much greater. But even at the outside estimate of cost of construction we would have the cost of motive power in Winnipeg reduced from \$90 or more per horse power per annum to \$10 per horse power per annum, besides securing a liberal return by way of interest on the investment. What this reduction would mean in the direction of encouraging the location of factories here, is beyond comprehension. The present total steam capacity of the city is estimated at about 3,500 horse power, or something less than the minimum power which the Assiniboine river would furnish at lowest water, without the Lake Manitoba connection. This 3,500 horse power represents an expenditure estimated at an average

cost of \$100 per horse power per year, of \$350,000 per annum. This 3,500 horse power if obtained from the Assiniboine river and rented at \$10 per annum, would represent an annual saving of \$310,000 after paying expenses of maintenance and allowing for a liberal interest on the first cost. As stated, this first cost is estimated on the work necessary to develop 10,000 horse power, though the river does not furnish this amount of power all the year round. Work required to develop the minimum power would cost much less, and would therefore represent a much greater saving than is apparent on the present steam power capacity of the city.

It is also stated by competent authority that by carrying out this work, a portion of the water could be used for flushing the sewers of the city, the principle of natural gravitation, and, therefore, without any cost of pumping. Now that the city is going in for municipal ownership of waterworks, electric lighting plant, etc., the great need of developing the waterpower should become more urgent. When the city has the new waterworks in operation, a maximum of about 800 horse power will be required. The saving on 800 horse power, by the development of the Assiniboine waterpower, would be \$64,000 per year, on the basis of \$10 per year per horse power for the waterpower. The actual saving should be considerably greater, as the charge for waterpower would allow a larger interest on investment than the city would have to pay for money, providing the work were done by the city.

This much has been said with reference to the Assiniboine waterpower at Winnipeg alone, without the Lake Manitoba connection. If the cut from the lake to the Assiniboine river were made the value of the waterpower at Winnipeg would be increased by almost the multiple of 5, as the horse power thus made available would be increased by about this proportion. It would make possible the development of 15,000 horse power within the city limits of Winnipeg, and this would be of vastly more importance to the city than any other enterprise now in view.

THE NEW GAME PROTECTION ACT.

At the recent session of the Manitoba legislature all previous enactments relating to the protection of game within the province were repealed and a new law substituted therefore which embodies a number of changes and new provisions. The legislature recognizes the value of the game birds and animals which inhabit the province in such large numbers and makes strict provision for their protection from the destructive propensities of unscrupulous and un-