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LIGHT TRAMWAYS FOR THE NORTH WEST.

In our March number we took occasion to urge the importance and necessity of Tramways in rural districts and for opening up outlying districts and referred especially to the value of their adoption in our great North West country.

Since writing the article circumstances have more than confirmed the desirability of putting the Tramway method into practical shape.

Our North West Rebellion has abundantly demonstrated the absolute necessity of some such suitable communication between our main line and the districts outlying and at present unfortunately so isolated.

We consider the scheme well worthy the attention of the Government and capitalists and believe it to be a political, military, and commercial necessity.

The English Government have lately admitted a similar conclusion in their Soudan and Egyptian campaign and it remains for Canadians to at once put a system of things in operation. This would bind all our Territories together as a unit.

OUR REBELLION.

The capture of Riel has in a measure broken the resistance of many half-breeds and Indians, but it is still a question to what extent the Rebellion will be carried on by other tribes of warlike Indians.

The serious fighting which General Middleton and his troops had to go through was evidence enough that the Rebels had planned and calculated on a long and stubborn resistance if not upon a successful issue.

The Battle of Batoche will, undoubtedly, notwithstanding its death roll, adorn the pages of Canadian History in favour of our gallant General and volunteers.

It is to be hoped that the Government of the day will mete out justice speedy and effective to all those who have plunged the country into needless war and expense with all its attendant loss of valuable life.

One of the results of the present campaign will be to make Canadian's feel more confidence in their own strength and at same time, show that Fenians can have no hope or business this side of the border.

The present trouble more than demands that we ought to sustain a well equipped and efficient standing army of not less than 3000 men, because it is notorious that smart young men have been taken from the ordinary walks of life, to quell every little disturbance that crops up.

In addition to an increase of mounted police it is now quite evident that more effectual methods will have to be employed to preserve the safety of settlers and the different supplies and stores situated all over our North West Country.

Although the rebellion will retard immigration and settlement for a time, we think on the whole it will do good to Canada in proving her strength and importance.

Canada ought now to provide herself with all the appliances of modern warfare and especially those appliances suited for Indian tactics.

THE USES OF GLUCOSE.

Both glucose and grape sugar find extensive applications for a great variety of purposes as substitutes for cane sugar or for barley. The most general purposes for which glucose or starch sugar is used are:

1. For the manufacture of table syrup. This consists of a nearly or quite colorless glucose, with a sufficient addition of cane sugar from the sugar refinery to give it the flavor and appearance of a highly refined molasses. The quantity of cane syrup added varies from 2 per cent. up to 33 per cent.

2. As a substitute for barley malt in the brewing of ale or beer. This is really a substitution of Indian corn for barley, but it constitutes a very imperfect substitute, as the corn, by the treatment employed in extracting its starch for conversion into glucose, is completely deprived of all the nitrogenous bodies and mineral salts which it originally contained. Hence the glucose alone, which is simply transformed starch, is substituted for the entire barley grain, with its great variety of valuable constituents. This is not true, however, of the maltose produced from the entire corn by the action of the malt. This material contains all the soluble constituents of the corn, together with the additional substances which are rendered soluble by the action of the diastase of the malt.

3. As a substitute for cane sugar in confectionery.

4. For the adulteration of cane sugar, to which it is added to the extent of twenty or more per cent.

As a substitute for cane sugar in canning fruits and in the manufacture of fruit jellies.