

Professor Macoun is a member of the executive committee of the Canadian Forestry Association, and we hope to give to our readers some sketches from his pen in connection with his work in the park.

The Ontario Government are sending out at the beginning of this month ten parties to explore the northern portions of Ontario. Their work should result in very much additional information as to the resources of new Ontario, and should place the Government in a better position to put them to a proper use. The examination and proper use of the resources, especially of timber, is one of the objects, the promotion of which the Forestry Association lays down for itself in the statement of its aims, and its members can very heartily approve of the action which has been taken.

A Canadian manufacturer of paper, in connection with the question of the increase of cost in that article, recently stated: I think we will have to give up the notion of cheap paper. What are the facts? The great bulk of the paper used for newspapers is made from wood pulp. Wood is the basis of this class of paper. What are the conditions to-day in regard to timber? Last winter there was very little snow in the early part, but the men in shanties had to be paid and fed just the same. We had little snow until March, and after that we had an early spring. The water in the creeks is phenomenally low, and the wood cannot be brought down. Every difficulty increased the expense. Moreover, note this, that whereas a few years ago the wood was at the hand, so to say, at the present time, whether in the St. Maurice or Saguenay districts, the men have to go in fifty, a hundred and a hundred and fifty miles. There is still plenty of wood, but it is being cut into, it recedes, and as it recedes it becomes more expensive to procure. The paper manufacturers pay from 25 to 40 per cent. more for material than they did some time ago. This applies to ground and chemical wood. Still further, those who manufacture manilla paper have to pay an increased rate for hemp. The same remark applies to colored rags. Indeed, prices have gone up in connection with every feature of the manufacture of paper. If you wish a new piece of machinery you find the price 25 per cent. higher than would have been the case a few years ago. So it should be well understood by the public that the manufacturers are not making any more profit when they raise the price of paper. They are not combining against newspaper publishers or any other body, they are simply endeavoring to secure a living profit upon their output. I really do not think very cheap paper can be expected again; at the same time I do not think there need be alarm over a great increase. If we had plenty of rain, even now, the situation might improve. It is largely a question of wood and water. The creeks are low and

the wood cannot be brought down. A plentiful supply of rain would swell the creeks, and swelling the creeks would affect the price which the manufacturer charges and which the publisher pays."

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Forest Tree Planting in the West

The vast prairies of the west have been the theme of song and story from the days when they were first trodden by the foot of civilized man, and the "Great Lone Land" has always had its fascination for the adventurer and the pioneer, and has developed its own peculiar and interesting types of character. These wide-stretching plains seem to open up a new and boundless world and to give room to breathe and expand. But to the pioneer of settlement the prairies present their own special difficulties, less arduous in some respects, than those which beset the early settler in the older provinces in their struggle with the forest, but bearing their own freight of discouragement and disappointment. The grasshopper and the frost, sometimes flood and sometimes drought, wind and hail, all in turn, had to be battled with, and the openness of the country left it peculiarly exposed to such attacks.

The bareness of the landscape is a feature which has been commented upon again and again, and the only means by which this character could be changed by man, the planting of trees, has been given more or less attention for many years. Belts of trees would not only add beauty to the scenery, but would be of great value for fuel, as shelter to the growing crops, and for their effect on the climate.

The Hon. David Laird, in submitting the report of the Department of the Interior, in 1876, stated that during his journey from Fort Garry to Qu'Appelle, in the summer of 1874, nothing impressed itself upon his mind more than the treelessness of a vast portion of the country over which he passed. Day by day as he crossed the wide extend of prairie utterly destitute of trees the question presented itself: How is the settlement of these prairies possible if the settler is without wood for fencing, building or fuel? His attention having been called to the work done in tree planting in the United States, he instructed the Surveyor-General, Col. J. S. Dennis, to obtain all available information on the subject.

The Surveyor-General apparently considered Hon. L. B. Hodges, superintendent of tree planting on the St. Paul and Pacific line of railway, as the most competent authority on the question, for he appended to his report some suggestions on tree planting taken from an essay of Mr. Hodges, and he also quoted the assertions made by that gentleman which he deemed that his five years' experience justified. Some of these statements were that at a mere trifling expense the stockyard and building on the bleakest prairie home-

stead may be surrounded in five years with a belt of trees forming a wind-break and affording effectual protection; that a grove of trees can be grown as surely as a crop of corn and with far less expense in proportion to its value; that apparently worthless prairie lands can, by the planting and cultivation of timber thereon, be sold for \$100 per acre within twenty years; that the net profits of land properly planted and cultivated with trees will within ten years realize at the rate of ten to one as compared with the profits attending the raising of wheat. The Surveyor-General added that other even more forcible propositions were put forth by Mr. Hodges, but he forebore to quote them and perhaps it was well, for in the light of later experience, even those which are quoted are sanguine enough to suggest recollections of the predictions which characterized the days of the "boom."

As a result of the investigation it was decided to amend the Dominion Land Act so as to provide for "Forest Tree Culture Claims," similar to those provided for by Act of Congress, and in 1876, an amendment was passed authorizing the granting of a quarter section of 160 acres to a settler after the expiry of six years from the date of entry on condition that eight acres of the land had been broken and prepared for tree planting within one year after entry, an equal quantity during the second year and sixteen additional acres within the third year after such date, and that a similar scale had been followed in tree planting commencing from the second year, the trees to be placed not less than twelve feet apart each way. Each applicant for entry would require to make an affidavit that the land applied for was open prairie and without timber.

Under this amendment 253 claims, covering an area of 40,480 acres, were taken up during the years 1877 to 1879, but only six entrants completed the duties necessary to entitle them to patent, the last patent being issued only so recently as the 31st August, 1895. Most of these claims were in the district along the Red River, others were farther west along the boundary and some even so far north and west as the Minnedosa district. The claims for which grants issued were in Township 2, Range 4, East; Township 3, Ranges 5 and 6, West; and Township 2, Ranges 12 and 14, West.

The reason for the practical failure of this experiment was undoubtedly the lack of knowledge of the trees suitable for growth in the West, and of the proper methods of caring for them. The fact has gradually forced itself upon the public mind that agriculture cannot be carried on successfully except by those who have special knowledge of and training in it, and it is largely the same with arboriculture. The grower must know what to plant, how to plant it, and how to care for it afterwards.