

Now, for the other picture. The east side of Eel's Creek presents an altogether different aspect. Viewed from the Burleigh road, it has the appearance of a thrifty young poplar forest, with a few young pine trees appearing on a level with the poplar. On closer examination, it was found that the young forest was largely composed of red and white pine. It was moreover learned that this portion of the forest had not been visited by fire since twenty-three years ago. The pines will, if protected from fire, soon overtop the poplars and assert the supremacy of their species. The conclusion arrived at was that within fifty years lumbering operations in this locality could be profitably resumed and the larger pine trees taken out, producing timber of a merchantable quality, and giving the younger trees a better chance to grow. Reasonably good forest conditions could, under proper regulations for cutting, be introduced and a continuous supply kept up. This statement as to the condition in the township of Burleigh may be taken as fairly typical of the course of natural forest regeneration in nearly all the fire-swept lands which came under the observance of the commissioners. Much of the forest lands now looked upon as of little use will yet, under proper protection, be very productive. The main feature of forest preservation must be protection from fire.

To the north of the height of land which sheds water into Hudson Bay, it was found that some timber lands had been burned over through the carelessness of Indians, but the Hudson Bay officials there had promised to help the Government in protecting the forests. The commissioners proceed to say that, though in earlier years the lumbermen confined their operations to taking out trees which measured at least 14 inches diameter at the butt, many rafts were observed to-day to consist of mere poles—six inches or so in diameter. This practice should be promptly stopped by the Government.

The commissioners give the following idea of the rate of growth of white pine. A young tree which would cut only one log 8 inches in diameter and 16 feet long, measuring 16 feet, board measure, would, if allowed to stand for thirty years, grow in diameter at the rate of one inch in five years—in some cases the growth is an inch in two years—and hence would give a butt of 14 inches diameter, 16 feet long, or 100 feet of lumber, board measure. In addition to this, however, this tree would have grown in height sufficiently to give two more logs, one, say of 11-inch, and one of 8-inch diameter, both 16 feet long, or a total of 164 feet, board measure, for the tree. Thus, a tree that required, perhaps, 40 years to make its first 16 feet of merchantable timber would in 30 years more have increased to 164 feet.

The commission suggests that a market should be secured for the "thinnings," which should be taken out where the timber stands too thick, and the idea is put forward that much of this apparently useless forest material might be utilized in the manufacture of pulp and small wood goods, or for the production of charcoal for smelting ores.

In conclusion, the commissioner recommends that—

1. The present system of fire ranging inaugurated by the Government in 1886 be extended so as to be compulsory on all the holders of timber berths; that all unlicensed timber land contiguous thereto be also protected by rangers employed by the Government and that all fire rangers be subjected to the inspection and control of the Department of Crown Lands

2. That the officials of the Hudson Bay Company be asked to cooperate with the Government in preparing and printing fire proclamations in the language of the Indians of the northern districts, to be posted along the canoe routes throughout the country

3. That for all unworked limits on which the ground rent shall be two years in default on the termination of the present license year, the license shall not be renewed, but the berths be held by the Crown as forest reserves.

4. That license-holders be not allowed to cut any trees for logs smaller than will measure 12 inches across the stump, two feet from the ground, unless under special forest conditions, with the sanction and under the supervision of the district forest ranger.

5. That the Government take power by Order-in-Council to withdraw from sale a location, and set aside, to be left in permanent Crown forest reserves, such areas of territory as are generally unsuitable for settlement, and yet valuable for growing timber.

FIRES OF THE MONTH.

Jan 12th—North-West Elevator Co.'s elevator, Cypress River, Man. partly insured. — Jan. 13th—The Dominion Paper Box Co.'s building, Adelaide street, Toronto, loss, \$50,000. — Jan. 17th—A. Merizzi's woolen mill, Napierville, Que., loss, \$10,000. — Jan. 21st—Richelieu and Ontario Co.'s office, Montreal, damages, \$500. — Jan. 23rd—The power house and car house of the Metropolitan Street Railway Co., Toronto; damages, \$10,000, fully insured. — Feb. 1st—The Doherty organ factory, Clinton, Ont., damages, \$75,000, insurance, \$35,000.

—J. H. Still promises to have the St. Thomas electric street railway in operation before Dominion Day.

—The voting on a \$25,000 system of waterworks for Mount Forest, Ont., took place January 20th, and resulted in the by-law being sustained by a majority of 49.

—The trustees of Havergal Ladies' College, Toronto, have taken out a permit for the erection of a three-story brick school building at 356 Jarvis street, to cost \$35,000.

—Edward Hooper, Toronto, has taken out a permit for the erection of a five-story brick addition to the Grand Union Hotel at the corner of Front and Simcoe streets, Toronto, to cost \$30,000.

—The Ontario Wind Engine and Pump Company has taken out a permit to erect a two-story brick machine shop and office at the southwest corner of Atlantic avenue and Liberty street, Toronto, to cost \$3,000.

—It is stated upon good authority that the H., G. & B. electric railway will be run through to St. Catharines if the Decew Falls power scheme proves a success, so that the company can get power from that source.

—In view of the Canadian Pacific's decision to bring Toronto business round by Carleton Place a large number of new locomotives will be put into service on the line, orders for some forty new engines being now in the hands of locomotive builders.

—The Polson Iron Works Company, Toronto, has secured the contract from an English syndicate for the building of a steamer to be used on the Yukon River. She will be a stern-wheeler, dimensions 45 feet long and 9 feet beam, and will draw only 15 inches of water.

—The Ontario Government granted the sum of \$35,000 towards the construction of an International railway bridge across the river St. Lawrence, at Cornwall, on the line of the Ottawa and New York Railway, provided that aid be granted also by the Government of Canada.

—A big scheme is on hand for the incorporation of the Montreal and Champlain Canal Co., which proposes to construct a canal from the St. Lawrence to the Richelieu River, a distance of 18 miles. The company is to have a capital of \$6,000,000. Albert J. Corriveau is the promoter.

—There was a general strike of men employed by the Canadian Pacific Navigation steamers in British Columbia, February 2nd. They demanded an increase in wages in view of the rush to the Klondyke. Some of the strikers were placed under arrest charged with violating the laws governing the sailing of vessels. They appeared before the magistrate, who gave them the choice of going to work or jail. They chose the former.

—The annual report has been issued of the Niagara Falls Park & River Railway. The report shows the number of passengers carried is away ahead of previous years. In 1896 the passengers carried numbered 497,000, in 1897 the number carried was 579,000, giving to the year 1897 an increase of 82,363 passengers over 1896. The Niagara Falls Park & River Railway was established in 1893, and has been a success ever since its inception. W. Phillips, who has completed his first year as acting manager of the road, was appointed general manager at an increased salary.

—The second inter-provincial conference of Canadian mining engineers and mine managers will be held in Montreal, under the auspices of the Federated Canadian Mining Institute, commencing Tuesday, March 1, and continuing the three following days. Some forty papers will be read and discussed by the members of the association. The proceedings of the conference, which will take place in the ladies' ordinary and other rooms of the Windsor Hotel, will be open to the public. The annual banquet of the association will be held at the Windsor Hotel on the evening of Thursday, March 3rd.

—Although little or nothing has been said about it, the Chateaugay and Northern, or, as it is better known, the Bout de l'Île Electric Railway Company, has done a very considerable amount of construction work during the season past. The system has been connected with the Canadian Pacific Railway freight yards, on Moreau street, Montreal, the meeting of the two roads being effected near the old North Shore freight office. This new branch, which brings the Chateaugay and Northern into immediate connection with the C.P.R., embraces about 1½ miles of track, the rails being 60 lbs. to the yard, and extending all the way from Lasalle street to the Canadian Pacific yards, just mentioned, so that goods can now be billed from any part of the C.P.R. to any point on the electric road in question.