

done, as I consider it a source of danger, but certainly gunning, excepting by Indians, should be prohibited on the limits, so far as it is possible, during any very dry season, and far better if camping parties and fishermen could be kept off also. As to lumbermen's farms, great losses have occurred in some instances in years gone by in clearing same, but this danger I think is largely past, the interest of the lumbermen themselves will provide against further danger from this source. But the last danger I mentioned, viz. lumbermen's drives, is a great source of danger and should be carefully guarded against. The plan we have adopted ourselves is this: on each drive going through a wooded country we appoint a careful and reliable man, whose only duty is to watch and guard against the starting fires. His duty is to walk up and down the ground being operated upon, and see to it that fires do not start from smoking or from any other source, also to guard the camp fire, and remain behind as the camping party move forward, and see that no seed for starting a forest fire is left behind. This system, or something similar, should, I think, be put in force over the entire province.

Now I will refer to the second question I mentioned in beginning this letter, viz. that of the careful cutting of the limits, and in dealing with this question I wish also to include the matter of saving the young pine as well as other timber. Now the conditions in the region of country with which I am dealing, and which I take it is a sample of the conditions all over the province, are these: fire has destroyed the greater portion of the thickly pine-timbered country. With the exception of very narrow areas the lumbermen have gone over this balance and have cut the better portion of the timber, and what is now left for the province and the operating lumbermen of to-day is the remaining large pine, of generally more inferior quality, and also the small growing pine, and the other woods, such as spruce, hemlock, ash, basswood, &c., which, if not possessing commercial value to-day, will, at the same time, be of value in the not very remote future, if preserved from fire. As to operating, my view is that the conditions and regulations should be such as to make it an object for the lumberman to cut in the most careful and economical way, wasting nothing that can be turned to any profitable account whatever, and save and preserve the young timber, and in every way strive to preserve the life of our forests and the lumber industry.

It is too true that hundreds of millions of dollars' worth of assets of the province have vanished in smoke, and it is also true that a very few years more of similar conditions

will see the end of the lumber trade and nearly all revenue from same. Untold value has been lost to the province, and the percentage of forest wealth remaining is comparatively small. At the same time, under careful and judicious management, the value of what remains can be much enhanced and its life very greatly prolonged, and to accomplish this the Department of Crown Lands and the lumbermen must join hands, all party and political differences must vanish, and no other sentiments prevail than those of patriotism towards the province and the preservation of the lumber trade. The position is alike a most serious one for the province and the lumbermen. In very many instances to-day the bulk of the possessions of the lumbermen is the young growing pine and other woods on their limits, and it is largely to this source the province will have to look for revenue for near approaching years, and the preservation not only of the young pine forests, but of all green forest country, is one of the utmost importance, for as the pine becomes exhausted, other woods will come in, and, bad as the conditions are to-day, at the same time a large revenue, extending over many years to come, can be saved for the province if the necessary precautions are carried out.

Another serious source of loss to the province, and at the same time a great wrong to limit holders, is a practice which is continually going on, of buying lots in surveyed townships ostensibly for settlement, but really for the purpose of securing at nominal cost the standing timber. For instance, in our case all the limits we hold are old limits, which were very greatly cut over before coming into our possession. In buying we were influenced in the price paid, in nearly every purchase, by the quantity of other timber apart from pine on the limits, but we find that we are pursued both on the North Nation River and the Gatineau by men who are robbing both the Crown and ourselves, by buying up lots at nominal prices on which we have paid ground rent for years, doing us out of our just rights, and at the same time getting quantities of timber from the Crown for comparatively nothing. Fire, and this system are the great enemies of the province and the licence holders, and they are two evils which in the best and truest interest of the province require immediate and most efficient remedy. I have stated only what I know to be true. It makes my heart sore every time I go up the Gatineau River to witness the devastation by fire in what was once a grand pine country, and also to drive through the young forests of young pine growing vigorously, but at the same time only growing and awaiting similar destruction.

Canadian Lumbering.



are such extensive and varied operations in the business of the successful Canadian lumberman that he must of necessity possess a combination of qualifications seldom required in other businesses of equal magnitude, but less intricacy and detail—judgment, foresight, administrative ability, power of organisation, acquaintance with commercial law, skill in finance, and knowledge of mechanism and engineering. These are some of the requisites to carry on this business from the forest to the ship, and in which the capital is often invested for from two to three years before it can be turned over.

Having secured the limits, a party of experienced scouts, generally Indians or half-breeds, are sent out to examine the land, and seek out groves of valuable timber. These self-taught surveyors are very sharp, exploring the length and breadth of the unknown territory, and reporting on the value of its timber, the situation and capabilities of its streams for floating out timber, and the facilities for hauling and transportation.

Having, with the aid of these scouts, selected a desirable grove, a shanty is constructed. The stores for the lumbermen are usually sent up to the forest shanty late in the autumn, and all preparations made to commence the work of felling as soon as the sap is down.

A few figures will show what quantities of provisions a firm has to supply in the course of a year in the getting out of 150,000 logs. This service requires during the winter season, in the woods, 450 men getting out the logs, 300 men piling and forwarding, and 300 teamsters with the same number of teams.

The average provisions required for such a gang of men is as follows:—

825 barrels of pork	3,750 gallons of syrup
900 barrels of flour	7,500 lb. of tea
925 bushels of beans	1,875 lb. of soap
37,000 bushels of oats	6,000 lb. of tobacco
300 tons of hay	60 cross-cut saws
1,000 grindstones	225 sleighs
75 doz. of axes	3,750 lb. of rope
1,500 boom chains (7 ft. each)	900 pairs of blankets
45 coats	

costing at a low estimate, 54,367 dolrs. These figures tend to show that the lumber trade of the Ottawa consumes a large amount of the agricultural and other products of the province, and is of benefit to the settlers.

About March or April commences the arduous and dangerous labour of driving the logs down the streams to the mills.