

\$48,683,437. Despite decreased demand and a falling market in 1921 there is reason to believe that when the returns are made up for this year it will be found that they are equal to if they do not surpass those of 1919, which, up to that time, was a record year.

Must Increase Canadian Pulpwood

But, as already indicated, the future of this great industry in Eastern Canada depends altogether upon a continuous and, in fact, an increasing supply of pulp wood at a price which will enable Canada to compete in the world's market. It is with this phase of the future of the industry, rather than with its more purely commercial aspect, that Canadian forestry is chiefly concerned. Unless steps are taken at once to ensure a more reasonable use of our forest wealth than in the past, and adequate provision is made for their replacement by either natural or artificial means, there is bound to come a time when the industries dependent on them will run short of their raw material and cease to expand and to keep pace with the world's constantly increasing demand for pulp and paper. The intelligent application or the withholding of these policies is bound to affect not only Canada's industrial status but also the price that the world consumers will ultimately pay for these commodities.

Lower Cost of Labor and Supplies

Labor and supplies play a large part in logging operations, but the cost of these two factors will not steadily increase. Logging is, after all, mainly a matter of transportation, and the farther from the mills and the more difficult the transport of logs is, the greater the logging cost. Also, as we go farther into the North for our timber, the time it takes to grow trees increases, the trees are smaller and give a smaller yield per acre, making the cost of logging greater. The cost of transporting wood, as logs, the handiest package of fibre we know, is so great that most of it must be borne by rivers. With proper methods of handling our forests and of replacing them by planting the above process becomes reversed and our curve of costs, while at first rising slightly, owing to increased costs of more conservative logging and the cost of planting, will soon commence to decline because the number and size of the trees per acre will increase and the plantations can be made in close proximity to mills, reducing the distance that the wood will have to be transported, decreasing the cost of logging and fire protection and enabling the employment of machinery for logging which will reduce the number of men. The planting and care of these forests will also give employment to large additional populations.

Pioneering in Forestry

In Eastern Canada the pioneer in forestry progress has been the Province of Quebec, which under Sir Lomer Gouin,

established a forest school and forest service. The Hon. Jules Allard, Minister of Lands and Forests, established the principle of cooperation with the holders of timber lands for fire protection which has given timber lands in Quebec a security from destruction by fire second to none. Steady progress has been made along lines of conservative forest management and the Provinces of Ontario, New Brunswick and Nova Scotia are following the lead of Quebec.

Co-operation With Mills.

The principle of co-operation with private interests, mentioned above, has shown the broad-mindedness of the Quebec Government, and has marked a most interesting development. Instead of tying everything up with red tape and trying to run everything by Government departments, great public works, such as storage dams, bridges and roads have been built co-operatively, that is, the Government has contributed part of the cost, approved the plans, and allowed the works to be carried out by several private companies working together. Fire protection of forests is handled now almost entirely by cooperative associations of timberland holders and the government has placed its own lands under the protection of these associations.

Forest Fire Protection

Another most interesting phase of the sentiment for the proper utilization of the forests on the basis of a sustained yield in Canada has been the interest taken by the great pulp and paper companies. They realized that with their large investments in plants of a permanent character, with towns and villages and often whole districts dependent on them, they must look to the permanence of their supplies of raw material. The first step along these lines was made in 1908 when the Laurentide Co. established a fire protective association to safeguard the forests along the line of the National Transcontinental Railway then building. Two years later this expanded to the St. Maurice Forest Protection Association, which was later followed by the Ottawa, Laurentian and Southern St. Lawrence Associations, which cover nearly the whole of the province.

5,000,000 Trees a Year

In 1908 the Laurentide Co. also commenced to plant trees and now has a nursery covering forty-six acres, is planting a million trees a year, and plans to plant five million per year by 1924. Its example has been followed by the Riordon Pulp & Paper Company, the Abitibi Company, and the Spanish River Company.

Air Craft for Pulpwood Limits

The Laurentide Co. was also the first to use air craft in forest patrol successfully, and for two seasons have carried on aerial reconnaissance and mapping of their timber holdings. Over a thousand square miles were photographically map-

ped last year, and plans for the coming year call for the mapping of twice that amount. Other companies have since adopted air-craft as part of their enterprise. The use of aircraft makes possible a rapid stocktaking of timber lands at a cost far below that of the same work on the ground. The wide-spread areas—several companies have five thousand square miles of forest—the utter lack of maps, the difficulties of transportation, have all hindered this work, which is of vital importance. Enormous areas have been burnt in the past, and until their size can be determined and a fairly accurate estimate of the amount of timber can be made, no intelligent plan of operation can be prepared.

Under Trained Foresters

Active steps are being taken by the Quebec Government to get the large companies to place their holdings under the management of trained foresters and to co-operate more closely with the Government in operating them for a sustained yield. The establishment of a school for forest rangers is under discussion and the Woodlands Section of the Canadian and American Pulp and Paper Associations are trying to establish an experiment station where new methods and machinery for reducing logging costs can be tried out co-operatively.

It will be seen by what has been said that the preservation and proper use of our forests is of vital importance to the country at large as well as to the provinces whose fortunes depend in large part on those of the pulp and paper industry and that these, in turn, depend upon the intelligent uses of our forests which the Canadian Forestry Association is doing so much to promote.

"PUSH THOSE CLOUDS AWAY."

Toronto, Ont.—Blunt criticism for business men "who sit down and wait for the clouds to roll by" was voiced by John O'Connor, general manager of the Murray-Kay, Limited, in the course of an address.

"Every business man today is confronted with the option of sitting down to wait for the clouds to roll by or to get up and push those clouds away," he said.

Mr. O'Connor made some pointed remarks about men "who put their spare money into tax-free bonds and then go out and play golf or something else, and think that is going to save the situation."

"Such a plan is so ephemeral, and so obviously not the solution to any country's financial problems that I am surprised that men who have built fortunes for themselves can become converts to it," he declared. "Capital cannot exist in a strong box. The only place that capital can keep its life is out in the open. Nothing would be more fatal to any community than the common adoption, by all who had savings, of such a plan."