

CANADA'S TIMBER FAMINE

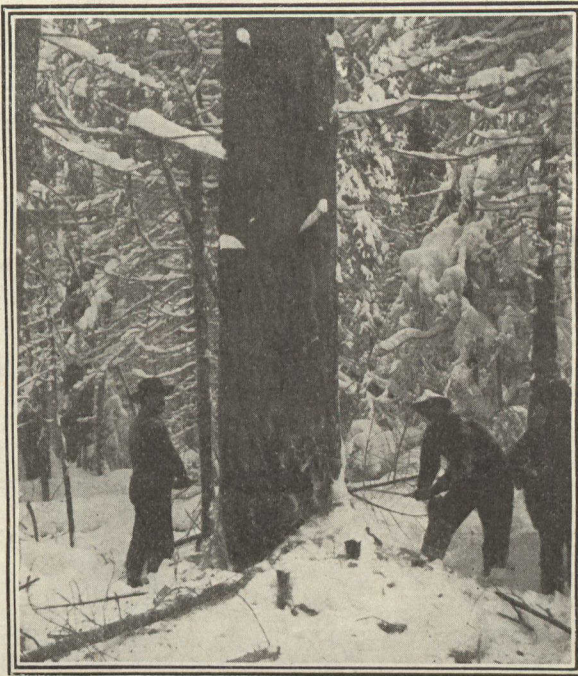
First of Four Articles on the Vanishing of the Forest

By A. H. D. ROSS, Faculty of Forestry, University of Toronto

AT the present stage of our national development, wood is an absolute necessity. In one form or another, our people use enormous quantities of it. During the present century the extension of our railway systems, the building of homes for our rapidly increasing population and the development of our mineral resources will necessitate the use of still larger quantities. Even with our present population of seven million, our annual output of sawn stuff alone averages 4,016,000,000 board feet, or 670 feet for every man, woman and child in the country. That much lumber would build a two-inch plank walk 4 feet in width and 72 feet in length—stringers and all.

To the annual output of four billion feet of sawn stuff we must still add at least ten million cords of firewood, one million cords of pulpwood, fourteen million railway ties, innumerable fence posts, telephone and telegraph poles, and about seventeen million cubic feet of piling and construction timber for culverts, trestles, bridges, etc. These figures are not mere guess-work. They are the result of a careful investigation carried on for the Dominion Forestry Branch during the summer of 1908. Expressed in board foot equivalents, the annual consumption of wood for various purposes is somewhere between sixteen and seventeen billion feet, or 1,375,000,000 cubic feet. This volume of wood is equal to that in a four-foot walk of two-inch plank (including 2x4 stringers) long enough to girdle the earth 13½ times!

If we now make allowance for the enormous



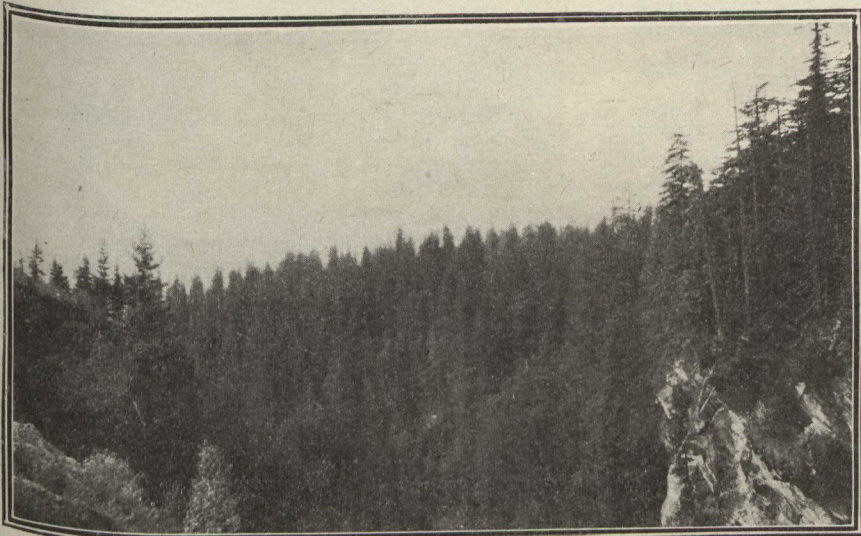
Felling White Pine. Trees of this size are rapidly disappearing in Canada.

Photo by R. H. Campbell.

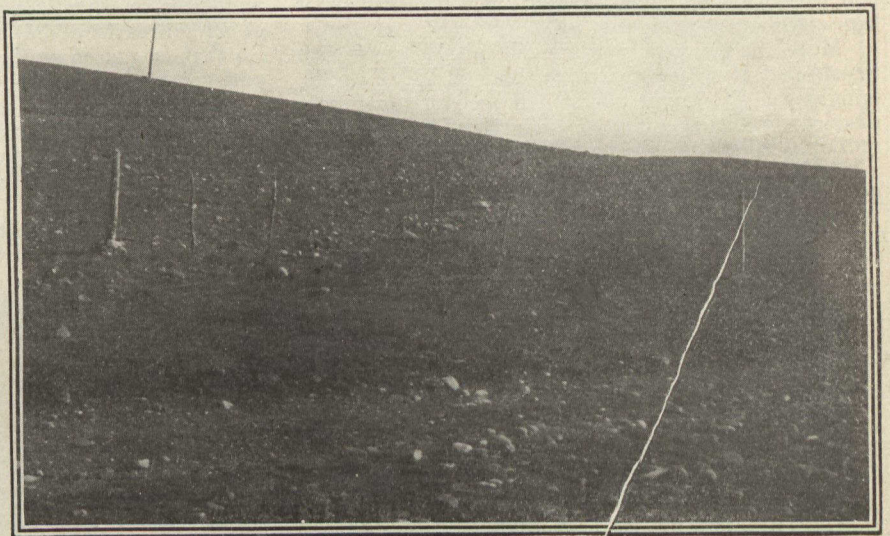
she is importing large quantities of timber to supply the demands of her increasing population.

With the completion of the Grand Trunk Pacific and Canadian Northern Railway systems, and the opening of the Panama Canal, Canada will be tempted to export very large quantities of timber. Can she afford to do so? Should she not profit by the experience of older nations? About a century ago Germany found out that she could not continue her wasteful methods, and set to work to devise better methods. Later she found that she was actually compelled to import timber, and is now importing about one-quarter of her total consumption. The fact of the matter is, that there is a growing scarcity of timber all over the world.

In 1906 Sir Dietrich Brandis, the eminent forester of British India, wrote our Dominion Superintendent of Forestry, saying: "I cannot sufficiently urge upon you Canadians the necessity of concentrating all your energies upon one point, and that is the constitution of as large an area of state forests as possible, to enable Canada to supply permanently the greater portion of the coniferous timber imported into Great Britain. Prices will rise steadily, and it is for you in Canada now to seize the opportunity of laying the foundation for a magnificent development of your future wealth." This opinion is supported by M. Melard, one of the leading forestry experts of France, who says: "The forestry situation throughout the civilised world is summed up in the statement that the consumption of wood is greater than the normal production of the accessi-



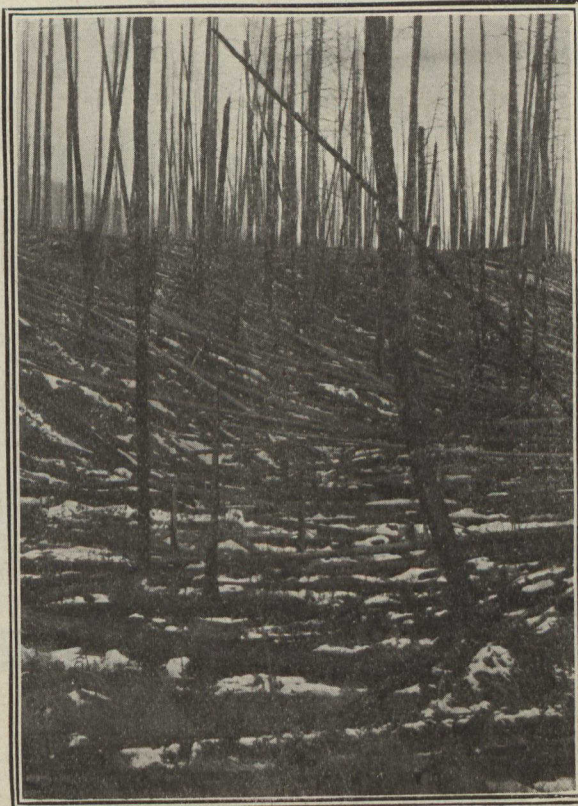
A typical Timbered Valley in the Rockies, in its virgin beauty.



In Crow's Nest Pass district where fire has done its deadly work.

amount of wood that is either wasted or left in the bush it is evident that axe and saw are felling our timber at the rate of something like twenty billion feet a year. With a population of eighty million people, how much wood will we use? Perhaps I had better ask, "How much wood will we have left to use?" For, gentle reader, I have, as yet, only told you part of the story.

During the year 1907 the United States produced 40,256,154,000 feet of lumber, besides lath and shingles, which bring the total up to about 41 billion feet—exactly ten times what Canada produced. The best informed officers in the United States Forest Service state that their timber is being cut three or four times as fast as it is growing, and that at the present rate of consumption, it will not last more than twenty-five or thirty years. Consequently they are looking to us for what they lack. We have boasted so long about our "inexhaustible timber supply" that they naturally expect to draw upon it when they get hard up. The fact of the matter is that we have no accurate knowledge of either the acreage or the amount of our timber. In 1891 it was placed at 799 million acres. More recent estimates place it at 550 million, including areas not at present merchantable. The merchantable supply is probably confined to about 250 million acres and probably amounts to between 500 and 600 billion feet, board measure. One of our first duties is to find out what we have, where it is and to carefully protect it from waste. At the present moment there are only six nations in a position to export timber, namely, Canada, the United States, Russia, Norway, Sweden, Finland and Austro-Hungary, and it cannot be many years before at least two of these will prohibit the export of timber. Germany has the best system of forest management in the world, yet



Effect of Fire. Eastern Slope of the Rockies.

Photo by H. R. MacMillan.

ble forests, the deficit being supplied by the destruction of the forests themselves," and by Dr. Wm. Schlich, the leading English authority, who says: "The great standby for coniferous timber will be Canada, provided her governments do not lose time in introducing a rational system of managing her forests." This is pretty straight talk from a man who knows. It should certainly raise the question, "What are we going to do about it?" Shall we continue in our easy-going policy of allowing wasteful methods of lumbering, exporting raw materials for the building up of foreign industries, and, still worse, the senseless destruction of enormous quantities of wood by forest fires? Is it not high time that every Canadian citizen who takes an intelligent interest in matters pertaining to the building up of this fair Dominion of ours should do all in his power to arrest the dissipation of our forest resources?

Only slowly does it seem to dawn upon us as a nation that the loss of our forests, without adequate restoration, will be the deadliest imaginable blow to our future progress and prosperity. All history teaches us that a prosperous nation cannot be built up in a desert. It also proves that a people cannot continue in power and affluence when the territory from which it draws its sustenance shall have receded into barrenness by the ruthless destruction of the forest cover — by the removal of "Nature's balance wheel." The forest is the most highly organised portion of the vegetable kingdom, and its effects upon its surroundings are so important and far-reaching that we may well liken it to Nature's balance wheel. By retarding evaporation, checking the effects of drying winds, rendering the soil more porous and fertile, retaining the moisture favourable to agriculture, and regulating the flow of water in