## Canada's Gravest Menace is The Forest Fire

One Million Square Miles of Precious Forest Destroyed by Canada in 75 Years. The Remedy is the People's Hands.

This article concludes Dr. Howe's contribution in the November issue under the title, "The Forest as an Automatic Wood Factory."

(Originally addressed to the Forestry Students at Toronto)

TE have in Canada around 1.900.-000 square miles of soil covered with forests. That is over a billion acres. A billion acres of forest, that is a wonderful heritage. Let us see how we have treated this great free gift of nature. When we examine this matter our pride is touched at once for we come right up against a fact that involves our obligations of citizenship and this fact is that we have allowed from two-thirds to three-fourths of our great forest heritage to be destroyed by fire within the past 75 years. Forest fires have destroyed the same logs on more than 1,000,000 square miles of good Canadian territory.

A million square miles in 75 years burned; total forested area hardly twice that amount. It is only a problem of simple arithmetic to realize what that means for our forests, if these ravages continue. That isn't all. It takes nearly 75 years to produce a stick of spruce pulpwood and nearly twice that length of time to produce a 12-inch spruce sawlog, under the average growing conditions in the forest. Suppose the destruction by forest fire goes on at its present rate, then make another simple arithmetical calculation from the above statement, and you will realize what may become of our spruce pulpwood and spruce sawlog supplies, even within the period when you are still active foresters.

## Fires that Destroy the Soil.

There is still another, and more serious, aspect of our present forest fire situation. and that is the prevalence of repeated fires on the same area. There are undoubtedly many situations where one burning under proper control after the logging operations would improve the conditions from the standpoint of the next crop. It would accelerate regeneration both in time and in growth; it would remove many disease-spreading agencies and it would do away with the most dangerous fire hazard by the destruction of the slash. But the repeated burning of the same area is the great destroyer of future forests. The first fire may not destroy all the seed trees, but the second fire usually finishes the job besides killing the young growth that may have followed the fire. When both seed trees and the young growth have been killed there are no means by which nature unaided can re-establish the commercial species. After a few fires, the area becomes a manmade desert so far as the valuable pulp-



Destruction by fire of Spruce, Peace River watershed.

wood and timber are concerned. Thousands of acres of thrifty young growth are being transferred every year from the potential forest class to the desert class through the agency of the repeated fire. If we systematically kill the young growth of our commercial species, what can we expect of the future?

Fire protection is the most important problem in forestry policy to-day; in fact, it is one of the most important economic problems facing Canada at the present time. It transcends the tariff question in its its importance in relation to the future prosperity of the country, yet I doubt if you will hear it mentioned in any political speech.

I wish I had the power to use words that would sear your souls with the importance of forest protection. We have made great advances in this respect in the past few years, thanks to the untiring efforts of the Canadian Forestry Association and to various forest fire-fighting organizations throughout the country. Members of our own staff deserve much credit for their

part in it, but even at that the present conditions cannot be allowed to continue if we are to keep our forests continuously productive and our lumber industries prosperous, industries that increase our national wealth by a half billion dollars a year.

## Educate Against Fire.

I wish I could make you all missionaries to preach forest fire protection from the housetops, or better perhaps from soap boxes on the street corners because we will never accomplish adequate fire protection until public opinion is aroused on the subject to a greater extent than it has ever been done yet. You must help in educating the people to realize that every acre of forest land burned means a lost job for some one; you must help to educate the fool with his match out in the forest; you must help the railway corporations, especially the people's railways, to realize that burned forests mean reduced revenues; you must help educate the settler in the north country to realize that