

FOREST FIRES AND FOREST PROTECTION.

BY ELLWOOD WILSON, B.A., B.S., C.E., FOREST ENGINEER
LAURENTIDE PAPER CO.

The greatest risk attached to timber holdings both from an investment standpoint and that of the production of raw material is undoubtedly from fire. This is especially true of coniferous areas which burn more rapidly and are more completely destroyed than hard wood lands. While it is true that the timber in a forest is seldom destroyed by fire, it being possible in many cases to cut the timber and utilize it within two years, still after every fire there is a delay in growth from seed and of young trees, owing to the destruction of humus and seed beds, and also most of the trees under ten to fifteen years of age are killed, so that after the burnt timber is cut, nothing is left and the area is very likely to burn over the following year.

Within the last twenty years destructive fires have swept up the river valleys, St. Maurice, Mattawin, Vermilion, Manouan, Du Post in the Province of Quebec, and through the newly mapped lakes to the north, which burnt off everything and regeneration has only just commenced again.

Every practical man will, I think, agree with me that some system of fire protection is absolutely essential. The wealth of Canada is so largely in her forests, which cover a vast territory absolutely unfitted for agriculture, that their destruction would mean tremendous loss, not only now but for the next century. This is particularly true of the Province of Quebec which, were her forests properly conserved and managed, could supply her industries and those of the northeastern section of the United States with their raw material practically forever.

There are at present only two practical systems of fire protection, both of which require that the fire be discovered and extinguished before it has become a conflagration. Allow it to get well started before a wind, practically no power on earth can stop it, since it will leap across broad rivers, cross high ranges of hills and large swamp areas.

The system mostly used is the ranger or patrol system, in which as much territory as possible is patrolled by guards, who go at once to any place where smoke is seen and endeavor to extinguish the fire. A watch is kept on all persons entering the territory and they are not only warned to be careful of their fires, but the rangers follow them around as much as possible to see that they *are* careful. In the West this service can best be performed by men on horseback whose routes are laid out along the ridges where as broad a view as possible is obtained.