

about a quarter of a cent per acre per year. Relatively speaking, the results are excellent, and justify a much heavier expenditure for a correspondingly more complete fire protection service. With the expenditure per acre incurred in Ontario, practically complete protection from fire can be secured.

At a quarter of a cent per acre, the entire 10,000,000 acres said to be under license in Ontario could be patrolled for \$25,000 and patrolled about as thoroughly as the lands of the private associations in Quebec. The Ontario licensees now pay \$70,000 annually for a protective service that, frankly speaking, is not in the same class. The Quebec associations are far from full-grown, but they avoid at least the costly overlapping incident to the "every man for himself" plan to which the Ontario licensees are bound. Some of the Ontario licensees pay as high as \$5 per square mile for fire patrol per year. The highest assessment yet made against the members of the St. Maurice Forest Protective Association in Quebec is \$1.92 per square mile, but that low rate is obtained by unification of ranger control, the mapping of patrol districts on economical and proper lines, and improved methods of communication and transportation, through the construction of trails, telephone lines and lookout stations. In Ontario, however, every licensee shifts for himself. Co-ordination of patrol service is practically unknown, and the limit holder pays dearly for a small degree of protection, or sometimes fails to get it at all on account of the fire ranger being used primarily for other work. Apparently only in the parks and in some of the reserves has even a small beginning been made in the construction of trails, telephone lines and lookout stations. And yet this mechanical foundation is absolutely essential to any well-organized forest fire protection service. Surely the interests

of the wood-using industries of present and future demand that the Ontario Government **organize** the licensed lands for patrol purposes. It does not seem an exaggeration to predict that if such action were taken, the amount of protection to the best timber in the province would be quadrupled, without a penny of additional cost to either licensee or taxpayer.

On Unlicensed Lands.

The situation on unlicensed lands is far worse than on licensed lands. The Dominion Forestry Branch estimates that Ontario has 70 million acres of land, containing more or less merchantable timber, in addition to a very large area which is relatively non-productive on account of muskeg, repeated fires, climatic conditions, etc. Of this probably about 20 million acres are included in forest reserves, parks and timber limits, leaving something like 50 million acres of unlicensed Crown timber land not included in parks and reserves, and exclusive of non-productive areas such as muskegs, lakes, areas repeatedly burned, and lands too far north to produce timber of commercial value. On this vast area, there is a very large amount of merchantable timber, largely pulpwood, which has not been placed under license on account of relative inaccessibility to transportation or for other reasons. Enormous quantities of timber have been destroyed by fire, and great areas have been rendered unproductive by the great conflagrations which have swept over them time after time.

Each year, lands under license are surrendered by the limit-holders, usually because the timber has been cut out. In other cases, the area under license is reduced because of failure of the limit-holder to pay ground rent or stumpage dues. To a certain extent, these losses are made up by the issuance of licenses