

carried out in co-operation with the various Dominion and provincial forest protection services already on the ground. The requirements imposed on the railways under the Board's regulations include special patrols through forest sections on lines under construction or in operation, the safe disposal of inflammable debris on rights of way, frequent inspection and repair of spark-arresting devices on locomotives, prompt extinguishing and reporting of fires burning along the railway line, etc. Under the instructions issued by the railways, the entire railway organization shares directly in the responsibility for full compliance with the Board's requirements.

About four-fifths of the entire railway mileage of Canada is subject to the Board's jurisdiction and thus to these requirements. The Transcontinental and Intercolonial are not so subject, nor are certain minor railways holding provincial rather than Dominion charters. Such



Railway right-of-way in process of clearing. Note large piles of inflammable debris ready for burning. A clean right-of-way is an essential factor in railway fire prevention, but its beneficial effects are largely neutralized if the immediately adjacent lands constitute a fire-trap, through the presence of logging slash and other highly inflammable debris. The safe disposal of logging and other slash in proximity to railway lines should be strictly enforced, in the public interest and as a matter of fair play to the railways.



A fire near a railway line in Ontario. Note large amount of highly inflammable logging slash, constituting a fire-trap of the worst character. Fires spread very rapidly under such conditions and are difficult to control, notwithstanding efficient railway patrol organizations, the use of tank cars with pumping outfits, etc. Where such conditions exist near railway lines, the railways are subjected to an enormous and unfair handicap in their efforts to prevent and control fires.

lines are nevertheless playing an important part in forest protection, either independently or under provincial requirements.

Small Loss Due to Railways.

The fire season of 1921 was one of the driest and most dangerous of which we have record, and forest fire losses throughout the country as a whole were exceedingly heavy. Notwithstanding this, the total estimated damage caused by all fires in forest sections directly attributed to railways under the Board's jurisdiction was only some \$64,000. This damage was caused by 1,188 fires which burned over a total of 75,642 acres, of which 11,008 acres was timber land, 17,316 acres young forest growth, 24,151 acres slashing or old burn, and 23,167

acres other classes of land. Fires originating within 300 feet of track, due to known causes other than railways, totalled 106, burning over 18,247 acres valued at \$69,113. Fires of unknown origin originating within 300 feet of track in forest sections on lines subject to the Board totaled 245, burning over 9,159 acres valued at \$29,683.

These losses are, of course, sufficiently serious, and continued efforts must and will be made to reduce them. Nevertheless, considering all the circumstances of the situation, they show clearly that the railways are making a very real and, on the whole, a very effective effort to prevent and control fires along their lines. They have, as a matter of fact, done a great deal in fighting fires for the origin of which they were in no way responsible.

The greatest handicap against which the railways have to contend in forest protection is the extremely hazardous condition created by the presence of vast amounts of highly inflammable debris on lands immediately adjacent to their rights of way. For the most part, these are Crown lands, upon which, to a considerable extent, logging operations have been carried on, with little or no provision for the disposal of the logging slash. Such areas constitute a fire-trap of the worst character, and are responsible for the rapid spread of fires in very many cases. In the interest of effective protection, adequate steps should be taken to give the railways a fair chance to control fires along their lines, by decreasing instead of constantly increasing the hazardous conditions on adjoining lands. There is already legislation along this line, but it has been made effective to only a small extent as yet.

An Unfair Handicap.

Nor is logging slash on Crown lands the only hazard of this character along railway lines. It exists also on privately-owned lands, whether timber berths or settlement lands; and is created as well by the construction of colonization roads, power transmission lines, etc., where the slash is piled in windows and left to constitute a fire-trap for an indefinite period of years. Where such hazards are deliberately created in close proximity to railway lines, the difficulties of the railways in controlling the spread of fires are immeasurably increased. Any program for the construction of such projects should obviously provide for the safe disposal of all inflammable debris in proximity to railway lines, to say nothing of other fire-setting agencies.