

one-half forest and Germany and Austria, respectively, one-quarter and one-third of their area in forest. The above seems sufficient reply to those who argue that the making of forest reserves will hinder the development of Canada.

The wood manufactures of this Dominion have a total yearly value of \$177,000,000. In respect to capital invested, wages paid and cost of material they take first place, and the value of the product is one of the highest among the industries. Wood industries employ 110,000 employees, as compared with 66,000 for iron and steel, their nearest competitor.

In the present war wood is playing a great part. In the trenches it is used for walls, floors and braces. Behind the lines it is used for temporary buildings for the use of combatants and homeless non-combatants. For bridges, wharves and similar structures much is used and for replacing permanent structures destroyed by enemies it is indispensable. Wood cellulose is used for making a substitute for cotton for bandages, etc., crepe paper for slings and fibre board for splints. Paper clothing is worn to quite an extent in the Russian, Austrian and German armies, and in Austria paper is displacing many other textile products—from flour bags to twine. The chief products of the forest, in Canada, are lumber, wood for pulp, poles and railway ties.

In order to give the forest a chance to develop properly, it is necessary to ward off many injurious factors. Chief of these is fire. The average annual loss through forest fires in Canada is five million dollars, and it is estimated that two-thirds of Canada's forests have been burned over. Only seventeen per cent. of the forest area explored in the prairie provinces had been found to contain merchantable timber. The most important by far of the means of fire protection was the education of the inhabitants and frequenters of forest regions to guard against fire. After that, fire patrol, lookout stations, trails and various fire-fighting appliances had their places.

The forest must also be protected against insects and fungi. In British Columbia serious damage had been done to the western yellow pine by a bark-boring beetle. Poplar on Dominion lands had been much injured by a species of fungus, the chestnut in the United States had been almost exterminated by the chestnut tree blight, and a like fate was threatening the white pine of the east. The White Pine Blister Rust had obtained such a footing that much of the adult timber was threatened, and the planting of white pine put out of the question.

Improvements in forestry practice in the work of the Forestry Branch had been the marking of trees for removal, the disposal of brush after cutting and the study of natural regeneration and the natural mixture of species in the forest. The Forest Products Labora-