

members of parliament. To cope adequately with the demands of this work, the need of a large increase in the staff at this point was apparent.

In the field the work has been placed under the supervision of Inspectors. For the administration of forest reserves, districts have been outlined in accordance with provincial boundaries. In each of them, the staffs in charge of the forest reserves are to be under the direction of a single field-officer. For these positions men have been selected who possessed large ability in administrative matters, and the highest qualifications for forest administration, and who were calculated to be fitted for developing the work along the best and most efficient lines.

Protection Work.

The duties of the Forestry Branch include the protection of the timber on all lands under the control of the Dominion government, no matter whether or not it is included in forest reserves. For the protection of the lands outside of the forest reserves, a special staff has been maintained. The work has been put, during the past year, under the supervision of an Inspector. A staff of Chief Fire Rangers have recently been permanently appointed, and they will be engaged throughout the year, in familiarizing themselves with, and planning for, the solution of the problems to be met in their respective districts. The advances made in this department of the work have been greater than in almost any other. The inauguration, through the Board of Railway Commissioners, of a patrol by the railway companies of the lines passing through timbered districts has enabled the Forestry Branch, which heretofore carried out this work, to extend the protection given by its staff to many new areas removed from the present railway lines. The attention of the Inspector of Fire Ranging during the present summer is to be devoted, for a considerable time, to the further extension of the fire patrols in regions hitherto untouched. A trip has been planned which will enable him to secure a first-hand knowledge of the vast needs of the timbered area draining into, and lying along, the lower reaches of the Mackenzie river and probably also of the Yukon Territory.

The increase of the area included in the forest reserves to take in the non-agricultural areas at present lying in the van of the rapidly extending settlement is a problem that is an ever-pressing one. Before any land is recommended to be included in a forest reserve a careful examination is made of it. Not only must the timber resources that may be comprised in it be determined, but there must also be investigated the nature and agricultural possibilities of the soil and the relation of the for-

est cover to the maintenance and regulation of the water-flow of the region. The information furnished in the preliminary reports made by the Dominion Land Surveyors is made available to the men carrying on these examinations. The decision as to the ultimate disposal of the land can then be based on a broad consideration of the best permanent use that the land can serve for the community. It is keenly felt that this examination should be made, and the decision reached, well in advance of any settlement in the region, in order that new settlers may be guided into the best agricultural regions and may be protected from attempting settlement on lands where agriculture cannot thrive. In all parts of the Dominion, and particularly in the Western Provinces, where settlement of new lands has of late progressed so rapidly, many unfortunate instances have come under observation of settlers locating, through ignorance, on lands unsuited to their occupation. The result has been a later abandonment of the land with a great loss to the individual and with a greater waste of capital and energy to the country. It may be seen, therefore, that this work of the Forestry Branch has a much broader scope than that connected with the mere management and protection of forest lands, as it includes the wise regulation of settlement. This last is one of the most important duties of the government.

As the areas to be examined are in most cases removed from the existing centres of forest reserve management or of fire patrol, this work is organized as a separate division. Men with technical training in forest and soil conditions and in the methods of forest reconnaissance are employed to carry on the field work. An agricultural expert with special training in regard to soils has recently been engaged to insure the bringing to bear of the most advanced knowledge on this phase of the problem. The results of the investigations are made available to the public in the form of government bulletins whenever new conditions and new problems are met.

The areas to receive special attention during the coming summer are the Peace River district, the mountainous regions of the Railway Belt in British Columbia, some of the areas of sandy, stony and swamp soils in the northern portion of Saskatchewan, and in Manitoba the area lying between Lakes Winnipeg and Manitoba.

Tree Planting.

Another important division of the work of the Forestry Branch is the extension of tree-growth in the treeless settled regions of the prairie Provinces. This is done by the encouragement of private planting. Seedlings of hardwood species