owners, is appointed to advise on matters of policy. At present timber lands are disposed of as in the other provinces, but in the past several grants of forest land were made to railway companies, private concerns and individuals, who now own in fee simple about 10,675 square miles of forest land.

Nova Scotia.—In Nova Scotia the greater part of the forest land, amounting to 12,300 square miles, has passed into private ownership. What remains vested in the Crown is administered by the Chief Forester under the Minister of Lands and Forests. Under the Minister, the Chief Forester has charge of forest protection, surveying and scaling throughout the province.

Subsection 2.—Forest Fire Protection.

The protection of forests from fire is undoubtedly the most urgent and most important part of the work of the different agencies administering forest lands in Canada. In the case of the Dominion Government, this duty falls chiefly on the Forest Service of the Department of the Interior for all Dominion Crown timber lands, whether within forest reserves or not. Certain officers of the various forest authorities are appointed *ex-officio* officers of the Board of Railway Commissioners and are responsible for fire protection along railway lines. These guards co-operate with the railway fire rangers employed by the various railway companies, the compulsory patrol of all lines throughout the country being a Dominion law. Other Dominion legislation regulates the use of fire for clearing and other legitimate purposes and provides for closed seasons during dangerous periods.

Each of the Provincial Governments maintains a fire protection organization which co-operates with owners and licensees for the protection of all timbered areas, the cost being distributed or covered by special taxes on timber lands. An interesting development in this connection in the province of Quebec is the organization of a number of co-operative protective associations among lessees of timber limits. These associations have their own staffs, which co-operate with those of the Board of Railway Commissioners and the Provincial Government. This latter contributes in the way of money grants and also pays for the protection of vacant Crown lands lying within the areas of the association's activities.

The most important single development in forest fire protection in late years has been in the use of aircraft for the detection and suppression of incipient forest fires, constituting a measure of prevention rather than a cure. Where lakes are numerous flying boats can be used both for detection and for the transportation of fire-fighters and their equipment to fires in remote areas. Where safe landing places are few, land machines are used for the detection and inspection of fires only. The aircraft are equipped with wireless and can report the exact location of a fire as soon as it has been detected. These aircraft can be used incidentally for exploring remote areas and mapping them by means of aerial photography.

As a general rule aircraft are used in the more remote districts, while lookout towers connected by telephone lines and equipped with wireless are established in the more settled and more travelled forest areas. While these agencies have to a large extent supplanted the old canoe, horseback and foot patrol for detection of fires, a large ground staff with its equipment stored at strategic points will always be necessary for the fighting of larger fires and the maintenance of systems of communication and transportation and of fire lanes and fire guards in the forest.

The most important improvement in forest fire fighting equipment has been the portable gasolene fire pump. These pumps, which weigh a little over a hundred