

In Canada as a whole about 6.6 p.c. of the total forest area has been permanently dedicated to forest production. Previous to the transfer of natural resources to the Western Provinces in 1930, some 33,023 square miles of this reserved area comprised National Forests. Most of these are likely to be continued as provincial forests. In British Columbia the forest reserves and parks include 11,890 square miles; in Ontario 23,855 square miles; and in Quebec 9,489 square miles, making a total of 78,257 square miles.

Of the total forest area 9.6 p.c. has been permanently alienated, being owned in fee simple by private individuals or corporations. On 13.2 p.c. of the area the Crown still holds title to the land but has alienated the right to cut timber under lease or licence. So far 77.2 p.c. has not been alienated in any way. It may be said that 90.4 p.c. of Canada's forest area is still owned by the State and, subject only to certain temporary privileges granted to limit holders, may at any time be placed under forest management and dedicated to forest production.

**Volume of Standing Timber.**—In 1928 the total stand of timber in Canada was estimated to be approximately 224,304 million cubic feet, of which 177,362 million cubic feet was of coniferous species and 46,942 million cubic feet of broad-leaved species.

During the years 1924-1928 the average annual depletion due to use was approximately 2,000 million cubic feet of conifers and 900 million cubic feet of hardwoods. The annual loss from fire is estimated at 240 million cubic feet of conifers and 60 million cubic feet of hardwoods. Though no widespread epidemics of insects or fungous diseases have occurred, two local infestations of hemlock looper in Ontario and Quebec were successfully checked by means of poison-dusting from aircraft. Nevertheless there is a constant and considerable endemic loss from both insects and decay. However, in the absence as yet of any basic data on which to estimate the depletion from these causes, it may be taken as perhaps 800 million cubic feet. The total annual depletion during the five-year period is therefore estimated to have been about 4,000 million cubic feet. To what extent this loss has been replaced by growth increment is not known, but, considering the preponderance of the younger age classes in the reproduction, it is believed there has been a considerable net depletion in the merchantable age classes.

Another real difficulty being met with is the matter of dividing the existing stand into merchantable timber and that which is inaccessible or unprofitable, since merchantability depends not only on the location, but on the density of the stand, the demands of the market for certain species or qualities of product, and the regulations governing cutting. Light stands covering large areas may in the aggregate carry very large amounts of timber and still not be exploitable at a profit. For some species, such as aspen and white birch, which comprise three-quarters of the hardwoods, there is very little demand, and therefore these cannot properly be classed as merchantable, though accessible as far as location is concerned.

In June, 1929, a conference of the Dominion and provincial forest authorities was held in Ottawa and it was decided to undertake a national inventory of the forest resources of Canada, each authority conducting the necessary stock-taking surveys on the land under its jurisdiction. In connection with the inventory, definite data are being secured regarding the depletion due to use, fire, insect