

and certain similar classes of turnery. The tough resinous bark of this tree has supplied the aborigines for centuries with the material for covering their famous birch-bark canoes.

Maple.—The maple, whose leaf is the national emblem of Canada, is our second most important hardwood, and is represented in Canada by nine or more species scattered from the Atlantic to the Pacific. Only one species, however, can be considered here. The sugar maple, or hard maple (*Acer saccharum*), produces the most valuable lumber and, like birch, is used for furniture, vehicle stock, and interior house finishing. The sap of this tree is the principal source of the maple syrup and sugar of commerce.

Basswood.—Basswood (*Tilia americana*) is a valuable wood for cabinet-work of all kinds, but being restricted in distribution and in great demand, the available supply is rapidly disappearing.

Minor Species.—Elm, represented by three species in Canada, is a valuable vehicle wood. Beech, ash, oak, butternut, chestnut, hickory, cherry, black walnut, tulip, black gum, red alder, sycamore, and sassafras are all valuable woods and are still sawn into lumber in Canada, but in many cases the supply, which was never large, has dwindled almost to insignificance.

The poplar species (*Populus sp.*), of which there are seven native to Canada, like paper birch and jack pine, produces great quantities of material which will eventually become valuable, when its qualities are better appreciated and when the scarcity of the more valuable of the better understood woods will make its careful utilization imperative.

4.—Forest Resources.

The total land area of Canada is approximately 3,600,000 square miles. Land suitable for agriculture, including pastoral land, has been estimated at 469,000 square miles, of which about 90,000 square miles are at present devoted to field crops. The area covered by existing forests covers approximately 950,000 square miles, some of which is agricultural land. Less than half of this carries merchantable timber (6 inches in diameter), and only about a quarter carries saw timber (10 inches in diameter). The balance of the forested area carries young stands which have come up after fire or cutting. On a considerable proportion of this area the succeeding stands are inferior to the original forests. Under present conditions about a quarter of the timber of commercial size is commercially inaccessible, so that the forests on about two-thirds of our forest area are either too small or too expensive to be operated profitably. This is not a permanent condition, since accessibility depends primarily on market standards, current prices and transportation facilities, and all these factors are tending to increase the extent to which standing timber can be utilized. Young stands, as they reach maturity, also increase the area of accessible timber, and areas of farm land unsuitable for agriculture are eventually abandoned and revert to forest.

On the other hand, forest fires, windfall, insect and fungus damage and commercial operations tend to reduce the area. Certain forest areas are cleared and devoted to agriculture. Only when systematic land classification has been completed can the total area of absolute forest land, be determined *i.e.* land capable of forest production but not suitable for agriculture.

About 245,000 square miles of forest land in Canada has been set aside in forest reserves or parks or otherwise permanently dedicated to forest production. Dom-