

CANADA'S 500,000,000,000 FEET TIMBER

Work of Forest Product Laboratories Show Value of Canadian Woods in Construction

That Canada's timber resources are the third largest in the world is suggested in a report on Canadian woods, prepared by the Forest Products Laboratories. Mr. R. H. Campbell, director of forestry, has estimated that Canada's present supply of commercial timber is from 500 to 800 billion feet, board measure, covering an area of approximately 250,000,000 acres. This estimate, which is about one-half the forested area of the Dominion refers only to saw-timber, material suitable for pulpwood, firewood, poles etc., not being included.

British Columbia, with 50 million acres, containing 400 billion feet, board measure, has more large saw-timber than any other province in the Dominion. In 1915 more than two-thirds of the total lumber cut of the province was Douglas fir, with red cedar, 8 per cent.; spruce, 8 per cent.; western yellow pine, 5 per cent.; western larch, 4 per cent.; western hemlock, 3 per cent.; and the remainder mostly western white pine, fir, and lodgepole pine. The coast region of British Columbia contains the bulk of the best timber, Douglas fir, western hemlock, western yellow or soft pine, spruce, and western red cedar being the important species. The interior produces spruce, Douglas fir, western yellow pine, mountain fir, and lodgepole pine. The quantity of lumber cut in this province was very much below normal in 1915.

From the Prairies.

Alberta is estimated to contain 5,400,000 acres of commercial saw-timber, amounting to 21 billion feet, board measure. In 1915 spruce formed almost 80 per cent. of the timber cut, lodgepole pine and jack pine, 17 per cent.; and Douglas fir, tamarack, and hardwoods the balance. Engelmann spruce, white spruce, mountain fir, balsam fir, lodgepole pine, Douglas fir, tamarack, jack pine, and black spruce are the important species growing within the limits of the province.

Saskatchewan's timber area is 3,584,000 acres, and contains about 14 billion feet, board measure. The lumber at present cut consists almost entirely of spruce, with a small proportion of larch, jack pine, and poplar.

Manitoba contains some 1,920,000 acres of saw-timber land, with about 6,850,000,000 feet, board measure of timber. Spruce formed 93 per cent. of the lumber sawn in 1915, tamarack, jack pine, and balsam fir being the other coniferous woods reported.

Eastern Canada's Resources.

Ontario is one of Canada's largest lumber-producing provinces, its productive forest area being from 70 to 90 million acres, containing approximately 150 billion feet, board measure, of merchantable timber. White pine, spruce, red pine, jack pine, balsam fir, tamarack, hemlock, white cedar, and in the southern part, a large variety of hardwoods are to be found within the limits of the province. In 1915 white pine formed 60 per cent. of the timber cut; hemlock, over 10 per cent.; red pine, 10 per cent.; spruce, 8 per cent.; maple, elm, and twenty other species supplied the remaining 12 per cent.

Quebec in 1915 produced a little more timber than Ontario, and contains about 80 to 100 million acres of merchantable saw-timber, the species present being the same as in Ontario, as far as conifers are concerned. The province is estimated to contain about 160 billion feet, board measure, of saw-timber. In 1915 spruce formed over 55 per cent. of the timber cut; balsam fir, almost 16 per cent.; white pine, 15 per cent.; hemlock, about 3.5 per cent., the remainder being birch and mixed woods similar to Ontario. It will be noticed that Quebec is the province producing the greatest amount of spruce, while Ontario produces most of the white pine.

Maritime Woods.

New Brunswick has a total forest area of about 12 million acres, with standing timber estimated at 22 billion feet, board measure. Spruce, balsam fir, pine, hemlock and white cedar are the important coniferous trees. In 1915 the timber cut consisted of spruce, 82 per cent.; balsam fir, 7 per cent.; white pine, almost 6 per cent.; hemlock, 2.4 per cent., and the remainder largely hardwoods.

Nova Scotia is estimated to have 5,744,000 acres of forested land, with about 10 billion feet, board measure, of coniferous saw-timber. The species are much the same as in New Brunswick. In 1915 spruce formed practically 63 per cent., hemlock 18 per cent., white pine, nearly 9 per cent., with birch and fourteen other species supplying the remaining 10 per cent.

Prince Edward Island has 1,397,760 acres, only a small part of which is forested. Spruce supplied about half and balsam fir one-third of the 7,543 thousand feet, board measure, of lumber produced in 1915.

The estimated total supply of merchantable timber in Canada is from 500 to 800 billion feet, board measure, while the United States* has 2,500 billion feet, or about four times as much. Russia is believed to have the largest timber resources of any country in the world; the United States is second, and Canada third on the list.

Principal Structural Woods.

The heavy structural species of Canada named in order of merit and resources are: Douglas fir, western hemlock, eastern hemlock, western yellow pine, western larch, red pine and eastern larch.

Beside the above the spruces are used largely in the east for all except the heaviest purposes, and certain pines, true firs, and cedars are sometimes employed. These woods, however, are in many cases more valuable for other purposes and will probably be less used for structural purposes as the stronger woods become more available.

Work of Laboratories.

The Forest Products Laboratories of Canada, established at Montreal by the department of the interior, in co-operation with McGill University, have undertaken an investigation of the woods of the different species of trees in Canada so that reliable and authoritative information may be available as to the strength, durability, and other qualities of Canadian woods and their adaptability for use in structural work and manufactures of various kinds. Such investigations have only begun at the Canadian laboratories, and the only Canadian species in regard to which fairly complete information has been obtained is Douglas fir, but as there is a special interest at the present time in information in regard to structural timbers, particularly in a comparison between Canadian and foreign timbers, a preliminary study on structural timbers, using the information now available from many sources, and particularly the results of investigations made at the laboratory of the Forest Service of the United States, has been issued. Canadian timbers rank high for structural purposes. The results of an exhaustive series of mechanical and physical tests of Douglas fir made at the Forest Products Laboratories of Canada are now in course of publication and similar tests of other important Canadian woods are in progress, the results of which will be published as soon as they are available.

*United States Forest Service Bulletin 83, "Forest Resources of the World," by Raphael Zon, 1910.

ANOTHER UNITED STATES COMPANY IN CANADA

The National Abrasive Company, of Boston and Amesbury, Mass., manufacturers of carbolon, an abrasive material for grinding and polishing purposes, have bought an acre and a half of land on Biggar Avenue, near Lottridge Street, Hamilton, and will build a factory there. They expect to start operations in ninety days, and will employ 75 men. The company's selling agents in Canada are the Ritchey Supply Company, Toronto, and the erection of the plant and supply of the equipment is in that company's charge.

Mr. Nathan C. Harrison, treasurer of the Harrison Supply Company, through which concern they market their products in the United States, is also president of the National Abrasive Company.

A Minneapolis despatch says that Mr. R. A. Garrett, representing the Canadian government in St. Paul, sent 1,000 men to western Canada during the past week and has been sending 100 a day for farm work. Men were offered \$50 a month with keep and opportunity to acquire 160-acre homestead free in two years. These offers were understood in St. Paul to represent determination of the Canadian government to produce a record crop this year despite the heavy war drain of farm laborers.