

PULPWOOD PRODUCTION

Average Price Has Increased—Quebec's Extensive Spruce and Balsam Fir Forests Gives the Province Premier Place

Pulpwood exported in the raw state during 1911 amounted to 847,939 cords, and fifty-four firms reporting to the forestry branch of the department of the interior used 672,288 cords, making a total cut of 1,520,227 cords valued at \$9,678,616. This is 21,401 cords less than was cut in 1910, but the quantity manufactured in Canada was larger, states Mr. H. R. MacMillan, B.S.A., M.T., in an interesting bulletin just issued. Over 95 per cent. of Canadian mills cut the pulpwood used by them from their own limits and consequently rose the wood themselves. Altogether 73,801 cords of wood (i.e., 12.3 per cent.) more were used in 1911 than in 1910. The average price of the wood also increased, so that the value of the domestic pulpwood industry was greater in 1911 by \$752,870, or 21 per cent. The average price per cord was \$6.07 in 1908; \$5.57 in 1909; \$6 in 1910; and \$6.45 in 1911. Only 22,229 tons more of pulp were produced in Canada in 1911 than in 1910.

There was a decrease of 93 pounds in the amount of pulp produced per cord of wood; it is difficult, however, to secure trustworthy data as to the output of pulp, since many firms do not give the air-dry weight.

Fifty-eight Per Cent. Produced in Quebec.

Quebec is the premier pulpwood province of Canada, because of its extensive spruce and balsam fir forests fit for pulpwood, its abundant and cheap water-power and its plentiful supply of labor. The 28 mills in Quebec reported a consumption of 58 per cent. of the total for Canada, or 47,671 cords more than in 1910. The quantity used was 13.9 per cent. more than in 1910, and the value 33.9 per cent. greater. Ontario, although suffering from the flooding of one mill, increased the amount consumed in its fourteen pulp-mills by 3,115 cords, and used nearly one third of the total production. New Brunswick is recovering from the depression of 1910, and contributed 45,824 cords, or 6.8 per cent. of the total. In 1909 it used 88,450 cords, being 14.2 per cent. of the total, so the recovery is still incomplete. In Nova Scotia, where one large mill was burned early in the year, the consumption has increased by 115 cords as compared with 1910. Low water prevented the mills of New Brunswick from manufacturing at full capacity during 1911. The province of British Columbia is still experimenting in pulpwood manufacture, and the negligible amount reported from this province is manufactured for test purposes only.

Pulpwood Cheaper in Ontario.

In Ontario the price of pulpwood was less by 21 cents in 1911 than in 1910. The increase in the price of wood throughout Canada is due almost entirely to Quebec, where the price increased 97 cents per cord. Of all the provinces Nova Scotia shows the lowest average price for pulpwood, namely, \$5.00 per cord.

The increase in the quantity of pulpwood used in 1911 was practically confined to spruce—78,046 cords more of this species being used than in 1910. Poplar increased by 578 cords, regaining third place among pulp woods, while hemlock and balsam fir decreased, the former by 2,140 cords, the latter by 3,075 cords. Most of these changes took place in the province of Quebec, which used 52,446 cords more of spruce, 3,718 cords less of balsam fir, 2,096 cords less of hemlock, and 641 cords more of poplar. New Brunswick also showed a large increase in the spruce used.

Proportion of Balsam Fir Used.

Although the reports furnished from the mills do not indicate it, the proportion of balsam fir used is yearly increasing. Balsam fir and spruce are used in mixture in the manufacture of news print. A few years ago it was thought that if the proportion of fir was increased above twenty-five per cent. an inferior paper would result. Greater skill in papermaking has shown that the proportion of fir may be increased to forty per cent. or over. This is now being done by some mills and the resulting paper has proved satisfactory. In various parts of Eastern Canada, particularly in Quebec, balsam fir forms from twenty to fifty per cent. of the forest. The practice of the companies now operating is to take spruce and balsam as they occur in the forest. On account of the prejudice still existing against balsam fir, it has not been expedient for the mills to keep track of or report the exact proportion of balsam fir used. Hemlock, which was third in 1910, has retired to fourth place in 1911. Although it has fallen off nearly 60 per cent. since 1910 more than twice as much of it was used as in 1909. There is reason to suppose that a larger export of hemlock took place. While more poplar manufactured in 1911 than in 1910,

it is still below the amount for 1909. Jack pine has not been reported as a pulp wood since 1908. Before that time it was used considerably by two large mills, but has proved unsatisfactory. Arrangements are now being made by mills in Ontario and Quebec for a further use of jack pine.

Items Which Add to Cost.

The average price of the different species used is the cost to the mill-owner, and so includes varying logging expenses and a wide difference in transportation charges. Maximum and minimum prices for a species in a single province may differ by 100 per cent. The great majority of pulp-mill owners have their own timber limits, and to them the cost of their pulp logs is merely the cost of carrying the limit and the operating charges. Other operators buy in the open market and add transportation charges. Thus the prices quoted are the purchase prices under different conditions, and do not show the relative value of the different woods for pulp manufacture.

The effect of an excessive hauling distance is demonstrated in Ontario, where the prices of spruce and balsam fir were \$6.75 and \$7.46 respectively. The high price paid for balsam fir and the sustained demand for this species proves its suitability for manufacture into pulpwood. Over the whole of Canada spruce was the most expensive species at \$6.47 or 42 cents more than in 1910. Balsam fir is at \$6.40, having risen 69 cents since 1910. Hemlock, though still the cheapest species, advanced 75 cents per cord, its average price in 1911 being \$5.18. Poplar has advanced 25 cents over 1910, the price last year being \$6.17. The cheapest pulpwood bought was a small quantity of poplar in Nova Scotia, which cost \$3 per cord. A small quantity of hemlock in British Columbia at \$7.60 was the most expensive wood, on the average, used in Canada for pulping; but as much as \$10 per cord was paid for spruce in some cases.

Should Practice Economy and Utilize Waste.

During 1911, no slabs or saw-mill waste were reported as being converted into wood-pulp in Canada, but from the reports made to the forestry branch by saw-mill operators it would appear that a very small quantity of mill waste is so utilized by three companies operating saw-mills and pulp mills under the same ownership. This is an economy practised to a greater extent in other countries, and by neglecting it Canada is losing greatly. It has been conservatively estimated that if all useful logs left in the bush by lumbermen, large-sized branches, slabs and other mill waste from the lumber industry in Canada, had been converted into pulpwood in 1911, the annual output of pulpwood would have been increased and not a single acre need have been cut over for logs to make wood-pulp only. During 1910, in the United States, six and a half per cent. of the total consumption was from slabs and mill waste. If economy had been practised to the same extent in Canada during the year 1911, as much pulp might have been produced, without cutting one additional pulp log, as is manufactured from over 43,000 cords of wood. This is almost as much pulp as New Brunswick produced in 1911. The sooner such practical economy and utilization of waste commences, the longer will Canada have an adequate supply of pulpwood.

CALGARY FOSTERS ECONOMY

A succession of defeats has met three money by-laws at Calgary to the extent of \$587,000, which were rejected by the property owners. Each of these apparently had a good fighting chance to be passed, for little criticism was turned upon them, yet the ratepayers seem determined upon a course of economy, and though the vote was small comparatively it was very much larger than any similar vote taken this year. The city hospital wanted \$150,000 for a new wing to relieve the pressure and accommodate the continually increasing demand; a small parcel of land for corporation storage purposes could be purchased for \$32,000; and the filtration plant together with the waterworks extension required \$405,000. But none of these would the ratepayers have.

The National Concrete Manufacturing Company has been reorganized with increased capital stock, and will henceforth be known by the above name, with the word "Limited" added. The incorporators are Howard Victor, dentist; Wm. McIlroy Flavelle, gentleman; Albert Edward Maybee, electrician; John Carew, lumberman, and Thomas Hubert Stinson, barrister-at-law, all of Lindsay. The reorganized firm will carry on the same line of business as at present, the manufacture of cement, drain tile, roofing tile, concrete sewer pipes, building blocks, chimney blocks, window sills, and all lines of cement and concrete articles. The capital stock is \$75,000, divided into shares of \$100 each, the headquarters are at Lindsay, and the provisional directors are Messrs. Pogue, Maybee and Carew, above mentioned.