

For the wood and paper group as a whole the net value of production, or the value added by manufacture, in 1933 was \$207,175,377, or 153 p.c. of the value of raw materials used. Further details are given in the Manufactures chapter of the present volume.

The forests of Canada contribute an important part to her export trade. During the fiscal year ended Mar. 31, 1934, exports of forest origin amounted to \$143,142,398 and made up 25 p.c. of the total value of exports for the period, amounting to \$579,343,145. Exports of forest origin were exceeded only by those of farm origin, which made up 35 p.c. of the total and were followed by products of mineral origin with 21 p.c. Forest products are also prominent among the individual items of exportation. Newsprint paper is second only to wheat on the list, with wood-pulp fourth and sawn lumber fifth. The gross contribution of the forest toward a favourable trade balance for Canada amounted to \$143,710,162 during the same period, exceeding all other groups in this respect.

Subsection 7.—Forest Depletion and Increment.

Fire Losses.—No accurate summing up of forest fire losses in Canada's forests has ever been made, but it has been estimated that 60 p.c. of the original forest has been burned, 13 p.c. has been cut for use and 27 p.c. remains. Though the loss of merchantable timber has been greatly reduced in recent years by forest protective services and the education of the public, it still constitutes a serious drain on our resources. At a low estimate fire destroys annually about 230,000,000 cubic feet of merchantable timber and the young growth on 550,000 acres.

Since the historic Miramichi fire, which burned along the valley of the Miramichi river in New Brunswick in 1825, there have been a number of disastrous fires. About the year 1845 vast areas, west of lake Superior, were burned over. Some years later a very extensive fire burned along the height of land from lake Timiskaming to Michipicoten. In 1871 a fierce fire swept over more than 2,000 square miles of forest from lake Nipissing westward along the north shore of Georgian bay. About the same time the greater part of the Saguenay and Lake St. John district, in Quebec, was swept by one of the most destructive fires on record. Two other fires in 1891 and 1896 devastated more than 2,000 square miles of country in the southern Algoma district; in Quebec, the country along the line of the Quebec and Lake St. John Railway also suffered by a number of disastrous forest fires about this time.

During more recent times a series of disastrous fires swept over northern Ontario. A number of isolated fires around the mining camp of Porcupine culminated, on July 11, 1911, in a conflagration which resulted in the loss of 72 lives and property damage estimated at \$3,000,000. In 1916 fires in the same general region were responsible for the deaths of at least 224 people. In 1922 a third fire destroyed the town of Haileybury and other centres. In 1908 a fire originating in the forest around Fernie, B.C., destroyed that city. Every year thousands of acres are devastated by fires of less individual importance, which in the aggregate are rapidly depleting our forest resources. In 1923 there were unusually disastrous fires, chiefly in Eastern Canada. A total area of over 6,000,000 acres was burned over with a loss of approximately \$46,000,000.

Speaking generally, there are annually two periods in Canada when the forest fire hazard is highest—in the spring, after the disappearance of the snow, when the forest floor is dry and the green underbrush has not yet developed, and again in the fall when the herbaceous growth is dead and the ground covered with dry leaves.