In few industries did manufacture add, in 1936, a higher percentage to the material used than in the wood- and paper-using industries; in the manufacture of pulp and paper this percentage was 121 and in the lumber industry 81. In the manufacture of planing-mill products this percentage was 86 p.c. For the wood and paper group as a whole the value added by manufacture in 1936 was \$261,020,034,* or 111 p.c. of the value of materials used. Further details are given in Chapter XIV—Manufactures—of the present volume.

The forests of Canada contribute substantially to her export trade values. During the fiscal year ended Mar. 31, 1937, exports of wood and paper products amounted to \$223,918,476 and made up 21·1 p.c. of the total value of exports for the period, amounting to \$1,061,181,906. Exports of wood and paper products were exceeded by those of mineral products, which made up 29·1 p.c. of the total, and agricultural and vegetable products with 45·3 p.c. Wood and paper products are prominent among the individual items of exportation. Newsprint paper is second only to wheat on the list, with planks and boards fifth and wood-pulp eighth. The gross contribution of wood and paper products toward a favourable trade balance for Canada amounted to \$195,271,604 during the same period.

Subsection 5.—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 more than 60 p.c. of the original forest has been burned, about 14 p.c. has been cut for use and about 25 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.

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 year's 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. During a period of dry years from 1883 to 1893, a series of disastrous fires destroyed immense areas of timber in eastern and northern Manitoba and in northern Saskatchewan. Two other fires in 1891 and 1896 devastated more than 2,000 square miles of country in the southern Algoma district; in Quebec, 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. The average area burned over for the ten-year

^{*} See footnote (†) p. 304.