

pioneering times the sawmill has formed one of the first steps from the pioneering community to the industrial centre. There is to-day practically no form of industrial activity in which wood is not used directly as a raw material or indirectly as, for example, in the form of paper. The primary operations in the woods provide work for at least 200,000 individuals, largely during a part of the year when employment in manufacturing industries is at its minimum, and have a valuable steadying effect on general labour conditions throughout the year.

The manufacture of lumber, which depends to a large extent on building and construction operations and the export markets, has shown wide fluctuations. The peak, reached in 1911 with a total cut of 4,918,000 M ft. b. m. has never been equalled. It was followed by a general decline to the 2,869,000 M ft. reported for 1921. Production then increased with fair regularity to a second peak in 1929 of 4,742,000 M ft. Production since 1929 has decreased annually to the 1,810,000 M ft. reported in 1932.

The manufacturing industries which draw their principal raw material from the sawmills reached their maximum production in 1929 with a gross value of \$146,950,000 and then declined to \$60,234,000 in 1932.

The pulp and paper industry is a comparatively recent development in Canadian industry. In 1881 there were only 36 paper and 5 pulp mills in operation in Canada. By 1923 the industry had displaced flour milling as Canada's most important manufacturing industry and in spite of recent vicissitudes has held that position ever since. The peak of production was reached in 1929 when 4,021,000 tons of wood pulp and 3,197,000 tons of paper were produced. In that year there were 108 pulp and paper mills in operation, consuming 5,278,000 cords of pulpwood and using hydro-electric power valued at more than \$13,000,000. During 1926, Canada, for the first time, produced more newsprint paper than the United States and became the world's chief producer and exporter of that commodity; she has maintained that position ever since in spite of decreases in production. During 1932 this industry produced 2,663,000 tons of pulp and 2,291,000 tons of paper. Of this paper 1,919,000 tons was newsprint and exceeded the production of the United States by over 104 p.c.

The manufacturing industries which draw their principal raw material from the pulp and paper mills reached their maximum production of \$187,882,000 in 1929. The value in 1932 for these industries was \$135,212,000.

Iron and Its Products.—The manufacture of iron and steel and their products is one of Canada's basic industries. Iron ore is not now produced in Canada, as the known deposits, though extensive, are not of sufficiently high grade to permit economic operation under present conditions. Yet there has been built up a primary steel industry of considerable importance, and the secondary or fabricating industries have been expanding steadily to meet the country's increasing requirements.

There are now four concerns which make pig iron in Canada, one being in Nova Scotia and three in Ontario. The former uses Nova Scotia coal and iron ore from the great Wabana deposits which it controls, on Bell island, Newfoundland, while the Ontario works are dependent on ore and coal brought from the United States. These companies have 11 blast furnaces with a total rated capacity of 1.5 million long tons of pig iron per annum, but the highest tonnage yet attained was 1,080,160 long tons in 1929. Open hearth steel furnaces and rolling-mills are also operated by these companies, which produce steel ingots, blooms and billets, bars, rods, rails, structural shapes, plates, sheets, rail fastenings, etc. Including electric