

629,000 h.p. Production of wood pulp in 1917 was 1,464,308 tons, and in 1922 2,150,251 tons. Production of newsprint in 1917 was 689,847 tons, in 1921, 805,114 tons and in 1923, 1,263,000 tons. The rate of expansion is increasing, newsprint output in the first seven months of 1924 being 788,628 tons, compared with 724,841 tons in the corresponding period of the preceding year.

Iron and Steel.—The primary production of iron and steel in Canada has always been handicapped by the fact that nowhere in Canada are workable deposits of coal and iron ore to be found in juxtaposition. The nearest approach is in Nova Scotia, where there is an abundant supply of coal, and iron ore is obtained from Newfoundland. In central Canada, particularly in Ontario where the secondary iron and steel industries are chiefly located, there are at present neither supplies of coal nor high-grade deposits of iron ore. There is a possibility, however, that high-grade bodies of ore may be found and eventually the huge reserves now known to exist, though they require an unduly expensive smelting process, will become more valuable. From the manufacturing or fabricating standpoint, conditions are much more favourable, as these areas are abundantly supplied with both hydro-electric power and the metals such as nickel, chromium, molybdenum, etc., used in the manufacture of alloy steels, which form an increasingly large part of the output from modern steel works. Many plants now specialize in the large-scale production of special steels that depend for their successful utilization on the forging and heat-treating operations to which they are submitted.

Iron ore, which was imported largely from Newfoundland and the State of Minnesota, was ultimately treated in 1922 in 25 active furnaces and rolling mills, with a capital of \$78,687,321 and a gross production valued at \$35,427,053. There were, in the last year for which complete returns are available, no fewer than 1,040 establishments handling iron and steel products, aside from the numerous custom and repair shops engaged in re-conditioning iron and steel goods. The plants represented a capital of \$526,109,953 and had a gross output valued at \$331,584,903. A great deal of this output is represented by agricultural implements, for which there is a large domestic demand, by factory equipment and commercial and passenger motor vehicles. Output of automobiles has in recent years advanced at a rapid rate, the total production in 1922 being 101,007 cars of various classes. The production of 1923 was valued at \$97,369,814, an increase of 47 p.c. over 1918; 147,582 cars were produced.

Non-Ferrous Metals.—During 1922 there were 325 plants in Canada manufacturing products from metals other than iron and steel. The depression which was general throughout this group of industries in the preceding year continued during 1922, but toward the close of the year considerable improvement was noted. The aluminium, brass and copper products, lead, tin and zinc products and miscellaneous non-ferrous metal goods industries all showed slight increases over the previous year's production, but these were more than offset by the decrease in the electrical apparatus industry. The trend in employment showed a gradual improvement from a minimum of 12,762 wage earners on the rolls in January to the maximum for the year, attained in December, when 15,563 persons were employed. It is noteworthy that primary non-ferrous metals having a value on the world's markets of \$61,601,789 were produced from Canadian ores in 1922.

The aluminium industry in America dates from 1890, when the first successful process was worked out for the economical extraction of the metal from its ores.