

1.5 million 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 steel furnaces, there were 27 steel plants in operation in 1934, which, with the 17 rolling mills, 4 pig iron plants, and 3 ferro-alloy plants, represented a capital of \$90,079,004 and employed 7,400 hands to produce primary products worth \$29,101,463. This output value was \$10.6 millions above the 1933 total and \$12.9 millions above the 1932 figures, which was the lowest recorded since the Bureau commenced to collect annual statistics in 1918. The value for 1933 was \$18,492,549, for 1932, \$16,197,526, for 1931, \$36,911,245 and for 1930, \$52,588,935.

Automobile manufacturing was the most important of the secondary iron and steel industries in 1934, and the production value of \$76,133,448 was 78 p.c. over the 1933 figure and the highest reported for this industry since 1930. Sixteen companies manufactured or assembled motor cars in Canada in 1934 and 21 separate factories were in operation. The capacity of these plants was reported at 234,000 automobiles and 33,500 trucks annually, from which it is calculated that the industry operated at about 44 p.c. of capacity during 1934 when 116,852 cars and trucks were produced. In 1929, the year of highest production, the plants operated at 66 p.c. of their estimated capacity. Production in 1929 totalled 262,625 cars at \$163,497,675; in 1930 the output was 153,372 cars at \$91,766,806; in 1931, 82,559 cars at \$52,964,936; in 1932, 60,789 cars at \$38,560,796; and in 1933, 65,852 cars at \$38,630,463. Exports of automobiles and parts declined from \$47,005,671 in 1929 to \$20,386,354 in 1930 and to \$7,091,994 in 1932; there was an increase of 39 p.c. in 1933 to \$9,843,361 and a gain in 1934 over 1933 of 99 p.c. to \$19,619,016.

There are also numerous works in Canada for the manufacture of machinery, agricultural implements, railway rolling-stock, automobile parts, boilers and engines, castings and forgings, sheet metal products, hardware and tools, wire and wire goods, etc., and the variety of products made in these establishments is increasing yearly.

The iron and steel industries which are engaged almost entirely in the production of capital goods have been severely affected by the depressed economic conditions of the past few years. In 1934, the 1,255 operating factories reported production valued at \$308,303,352 compared with \$211,961,908 in 1933, \$225,832,185 in 1932, \$374,725,068 in 1931, \$569,745,973 in 1930, and \$738,012,980 in 1929.

**Non-Ferrous Metals.**—Production from this group of manufactures, which includes non-ferrous smelters and refineries, electrical equipment factories, brass foundries, etc., advanced 44 p.c. in 1934 to a value of \$237,233,670 compared with \$164,765,604 in 1933, \$152,111,317 in 1932 and \$250,458,721 in 1930. Capital employed in the 488 operating factories in 1934 was reported at \$263,488,479 and the number of employees was given at 30,177.

The smelting and refining of non-ferrous metals was the leading industry of the group in 1934. Fourteen plants were operated in that year by 11 different companies and products were valued at \$149,936,239. Capital employed amounted to \$146,047,422 and the average number of workers was 8,298. Products included aluminium, nickel, cobalt, copper, zinc, lead, silver, gold, bismuth, cadmium, selenium, radium, and other refinery products. Output value in 1934 was the best on record and 49 p.c. higher than in 1933.

The electrical apparatus industry showed a considerable increase in 1934, due chiefly to better demand for heavy electrical machinery, wire and cable, and radios. Output in 1934 totalled \$50,234,811 compared with \$37,012,509 in 1933. Radio