

**Fuel and Electricity.**—Fuel and electricity consumed by the manufacturing industries of Canada in 1934 was valued at \$79,838,002. Of this amount \$41,462,574 was for fuel and \$38,375,428 for electric power. The fuel used in industrial establishments in 1934 included 4,301,110 tons of bituminous coal valued at \$22,954,485, constituting 55.4 p.c. of the total fuel cost. The other chief fuels in order of value were: gas (principally manufactured gas) comprising 13.9 p.c.; fuel oil 13.3 p.c.; coke 4.1 p.c.; wood 3.7 p.c.; and anthracite coal 3.0 p.c. Out of a fuel account of \$41,462,574, Ontario expended \$19,930,555 or 48.1 p.c. of the total. The manufacturing plants of Quebec expended \$11,037,217, Nova Scotia \$2,758,321, and British Columbia \$2,308,154.

The groups of industries in which fuel was most extensively used in 1934 were: wood and paper \$8,609,695; non-metallic minerals \$8,379,700; iron and steel products \$6,964,888; and vegetable products \$5,735,808. Fuel is used quite generally throughout the industrial field for the generation of power by means of internal combustion and steam engines. The most important industries where heat is applied directly to materials to transform them or to facilitate their manipulation are foundries and machine shops, blast furnaces and steel mills, smelting plants, brick, tile, lime and cement-making, petroleum refining, and the glass industry. In such industries as the manufacture of coke and gas the coal used as a material which enters into the actual composition of the product is not treated as a fuel but as a raw material and is not, therefore, included in the figures of Table 33.

The total annual expenditure on fuel decreased by \$10,178,338 or 19.7 p.c. in the thirteen years 1921-34 covered by the summary figures in Table 33. During this period prices of fuel generally have declined; thus with an increase of 4.8 p.c. in the quantity of bituminous coal used, the value decreased 33.9 p.c.

The wood and paper products group is the largest user of electric power, the consumption in 1934 being valued at \$17,196,111 or 44.8 p.c. of the total cost of power used by all manufacturing industries. The non-ferrous metal products group ranks second with only 10.7 p.c. of the total. Other principal users were iron and steel industries, vegetable products, and textiles.

In the provinces of Quebec and British Columbia, the cost of electricity exceeds that of fuel. For Quebec, which is the largest user of electrical power, the electricity used was \$17,255,397 as against \$11,037,217 for fuel, while in British Columbia electric power totalled \$3,279,127 and fuel \$2,308,154. Ontario, which ranks second as a user of electrical energy, expended \$13,605,476 for electricity and \$19,930,555 for fuel.

At the Conference of British Commonwealth Statisticians, held in Ottawa, Sept. 13 to Oct. 9, 1935, Canadian representatives agreed with those of the United Kingdom and other British countries that fuel and power used in manufacture should be logically regarded as a material of production, and their cost, therefore, should be deducted from the gross in arriving at the net value of production. This procedure has, therefore, been followed in the compilation of manufacturing statistics for 1934.