

Subsection 5.—Power and Fuel.

Power.—The power equipment installed in manufacturing establishments is a very good barometer of the industrial development of Canada, inasmuch as the production is increasingly dependent on the power equipment. Increases and decreases in productive capacity, measured in horse-power, are not the result of temporary fluctuations in costs and values in the same manner as capital investments, values of products, etc. Power equipment will not reflect temporary depressions, but over a period of several years will indicate industrial growth or decline.

Central electric stations, which generate electricity for both lighting and power purposes, are included in Table 30 with the other groups of industries and are included also with the industries of each province. Internal combustion engines include all gasolene engines, natural, coal and producer gas engines, and diesel and semi-diesel or other engines which produce power by burning the fuel in the cylinder.

Comparisons with the data for 1928 show an increase of 331,783 h.p. or 5.3 p.c. in 1929 in the total primary power equipment installed in manufacturing establishments, by far the largest increase amounting to 310,543 h.p. being in the central electric stations, there being a decrease in primary power installation in some of the other groups due to the replacement of steam equipment by electrical equipment operated by purchased power. The water-power development of central electric stations increased by 273,396 h.p., while steam power installed increased by 31,330 h.p. and internal combustion engines by 5,817 h.p. Provinces with large water-power developments usually show the greatest primary power increases. In 1929, however, while Quebec still led with an increase of 161,148 h.p., New Brunswick came second with an increase of 58,552 h.p., Ontario third with an increase of 43,588 h.p., British Columbia fourth with an increase of 36,143 h.p. and Alberta fifth with an increase of 24,304 h.p. In the utilization of hydraulic power Quebec exceeded Ontario for the first time in 1925. In 1927, Quebec exceeded Ontario or any other province in the total of installed primary power from all sources and has been the leading province since then largely owing to its extensive water-power resources, 92 p.c. of its primary power in 1929 being derived from water.

The rapid increase in the development of power in Canada and in its utilization in manufacturing industries is illustrated by the summary figures for the years 1921 to 1929 in Table 30. The abundance of readily available water power in many parts of Canada, facilitating the development of low-cost hydro-electric power, has no doubt played a large part in this rapid growth. Of the total primary power increase of 3,434,581 h.p. in the 8 years, no less than 3,045,562 h.p. or 89 p.c. was in water power. However, some sections of Canada are not so well provided with water-power resources and chiefly in such sections primary power derived from steam engines and turbines and internal combustion engines has also increased rapidly during the period covered. In the provinces of Prince Edward Island, Nova Scotia, Saskatchewan and Alberta primary power produced from fuels exceeded that from water in 1929. The total installation of electric motors increased 2,120,322 h.p. or 209 p.c. in the 8 years covered, by far the greatest part of this increase being in motors operated by power purchased from central electric stations.