

**Subsection 2.—Summary Statistics of Manufacturing Production.**

**Summary Statistics of Manufactures.**—In Table 4 will be found an analysis of the most important statistics of manufacture for the period 1917 to 1934, here brought together in order that the tendencies in Canadian manufacturing industries may be traced as clearly as possible through this latest period of their development. In analysing statistics of production and materials used, it should be borne in mind that, due to the inflation of values during the war and immediate post-war periods and the drop in prices of commodities during the depressions of 1921 and 1930, the figures for these years become largely incomparable. One very important figure, however, where the trend of development proceeds clearly and uninterruptedly, is concerned with the use of power. In the analysis here given the aim is to show the position of power as a factor in general manufacturing production. Therefore, the power installation of central electric stations has been excluded. The total horse-power employed increased from 1,664,578 in 1917 to 4,157,420 in 1932, or an increase of 150 p.c. in 15 years. In the same period the number of horse-power used per establishment increased from 75 to 177 and the number of horse-power per wage-earner from 3.04 to 10.62, indicating the rapidly increasing utilization of power in manufacturing production. The figures for 1934 show a small decrease from 1932. The increase from \$118,056 to \$185,850 in average capital per establishment between 1917 and 1933, and the decrease from 27.2 to 19.6 in the average number of employees are very significant figures. Another important comparison is the persistent decrease in the value added by manufacture per employee and the average salaries and wages paid since 1929. Between 1917 and 1929 the value added by manufacture per employee increased from \$2,143 to \$2,877 and then declined in 1933 to \$2,263, while average salaries and wages increased from \$819 in 1917 to \$1,171 in 1929 with a decline to \$943 in 1933. Compared with 1917, the figures for average salaries and wages in 1933, represent an increase of 15 p.c., while the increase in the value added by manufacture per employee was only 5.6 p.c. and wholesale prices of commodities declined 41.3 p.c. in the same period.

**Value of Products.**—The gross value of manufactured products in 1933 was reported as \$2,086,847,847; the cost of materials was \$969,188,574, leaving \$1,117,659,273 as the value added by manufacture. As the finished products of one branch of manufacture are constantly used as materials in other branches in the ascending scale of modern industry, it follows that they are counted over and over again, swelling in this manner the total gross value of products. The total value of manufactured products, strictly defined, would include: (1) the value of all raw materials obtained from the extractive and primary production industries which have entered into the manufacturing output; and (2) the entire value added to these raw materials by manufacturing processes from the time they first entered any factory up to the close of the census year. This total value would be very much greater than the \$1,117,659,273 shown as having been added by manufacture, but not so great as the \$2,086,847,847 shown as the gross value of production.

**Volume of Manufacturing Production in Recent Years.**—\*An investigation of the greatest importance, especially in a period when values are rapidly changing, is that of the volume of manufacturing production as distinguished from its value. Since real income is ultimately measured in goods and services, the growth of the volume of manufactures, therefore, becomes a matter of great

\* For a much more detailed and comprehensive treatment of this subject, see the study "The Quantity of Manufacturing Production in Canada 1923-29" by A. Cohen, B. Com., Acting Chief, General Manufactures Branch, Dominion Bureau of Statistics.