

1930 employees included 92,943 salaried employees, this figure being obtained from the manufacturers at the end of the year, and 551,496 wage-earners, the average number employed as derived from the manufacturers' records of the numbers on the pay-rolls on the 15th of each of the twelve months. Prior to 1925 the number of wage-earners was computed as the sum of the number recorded each month divided by 12 whether the establishment was operating the 12 months or not. Beginning with the statistics for 1925, in seasonal industries which are in operation only a limited number of months in each year, such as sawmilling, fruit and vegetable canning, etc., the average was computed by dividing the sum of the wage-earners reported on the 15th of each month by the number of months in operation. This change of method increased the apparent number of employees, especially in seasonal industries but also in the groups containing such seasonal industries and in provincial and Dominion totals. Consequently, the change of method exerted a reducing influence on apparent average wages and on all other averages per wage-earner and per employee.

The number of salaried employees and of wage-earners, as thus ascertained, is given for each of the years since 1917, the year of the first annual census of manufacturing production, in Table 21. Then, taking the percentages of the wage-earners and the total employees in each year to those in 1917, and dividing these percentages into the volume of manufacturing production in each year (see pp. 412 to 416 for the index of volume), the quotients give tentative conclusions regarding the efficiency of production per wage-earner and per employee in years subsequent to 1917, as compared with that year. Since central electric stations were excluded in computing the index of the volume of production, employees in these establishments have been excluded also in computing the percentages relative to 1917 for both wage-earners and total employees, and consequently from the indexes of efficiency of production. These indexes of the efficiency of production are, of course, affected by the change explained above in the method of computing the number of employees in 1925 and subsequent years as compared with 1924 and previous years. Inasmuch as the change increased the apparent number of employees in 1925 and later years, it proportionately decreased the index of the efficiency of production. The table illustrates the development of modern industry which has accomplished a large increase in production with a comparatively small increase in wage-earners by better organization and the use of improved equipment. Capital invested in manufacturing industries, exclusive of central electric stations, has increased by 73.8 p.c. from 1917 to 1930, compared with a decrease of 1.2 p.c. in wage-earners, while the horse power used per wage-earner has increased from 3.04 in 1917 to 7.49 in 1930. The factor of better organization is not susceptible of measurement. However, salaried employees have increased by 35.2 p.c. since 1917, or more nearly in proportion to the growth in production than wage-earners. The result of these developments has been the increase of 44.5 p.c. in the volume of production per wage-earner and the somewhat smaller increase of 39.7 p.c. per employee, owing to the increased proportion of salaried employees in the total. The indexes may be considered as supplying satisfactory evidence of a general gain in volume of production per person employed. In this connection it should be remembered, however, that in 1917, owing to the large numbers overseas, many persons of low efficiency were being employed, their inefficiency being concealed at the time by the prevailing inflation of prices; it is possible that the sudden rise in the indexes of efficiency from 1920 to 1921 may be partly accounted for by their elimination in the contraction of industrial operations which occurred at that time.