

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, not only in seasonal industries but also in the groups containing such seasonal industries and in provincial and Dominion totals. Consequently, the change of method had a reducing influence on apparent average wages and on all other averages per wage-earner and per employee. In 1931, however, the old method of computing the average number of wage-earners was again adopted. A change was also made in the compilation of the number of salaried employees. Prior to 1931, owners who were working as ordinary wage-earners, such as small bakers, reported themselves as wage-earners. In 1931, however, all such owners were required to report themselves as salaried employees. In 1931, also, travelling salesmen who were attached to the plant and devoted all or the greater part of their time in selling the products of that plant were included with salaried employees. Prior to this they were not reported at all. These changes, therefore, explain the apparent increase in the number of salaried employees in 1931 as compared with the previous year; actually there was a decrease, this apparent increase being attributable in part to a decrease in the number of wage-earners.

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 20. Then, taking the percentages of the wage-earners and the total employees in each year to those of 1917, and dividing these percentages into the volume of manufacturing production in each year (see p. 388 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. These indexes of the efficiency of production are, of course, affected by the changes in the method of computing the number of employees adopted in 1925, and then again in 1931. Inasmuch as the change increased the apparent number of employees between 1925 and 1930, 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 has increased by 40 p.c. from 1917 to 1936, compared with a decrease of 9.5 p.c. in wage-earners, while the horse-power used per wage-earner has increased from about 3 in 1917 to 9 in 1936. The factor of better organization is not susceptible of measurement. However, salaried employees have increased 61 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 65.1 p.c. in the volume of production per wage-earner and a smaller increase of 52.4 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 in 1921 and 1922 may be partly accounted for by the elimination of less competent workers in the contraction of industrial operations which occurred at that time. During the recent depression years the reduced volume of production lowered the indexes of efficiency.