
UNITED STATES DEPARTMENT OF LABOR
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BUREAU OF LABOR STATISTICS
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Wages, Hours, and Working Conditions
in the Folding-Paper-Box Industry
1933, 1934, and 1935

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Compiled by
Division of Wages, Hours, and Working Conditions
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P R E F A C E

This survey of wages, hours, and working conditions in the folding-paper-box industry is the first ever made for that industry by the Bureau. It is part of a broader survey, which also includes the set-up paper-box branch of the converted paper-products industry.

The survey was prompted by two considerations: (1) A desire on the part of the Bureau to extend its detailed surveys of wages, hours, and working conditions to smaller industries; and (2) a desire to obtain a picture in several industries covering pre-code, code, and post-code conditions, in order to see what changes occurred in wages and hours as a consequence of the adoption of the code under the National Recovery Administration and later as a result of the abolition of the code.

The Bureau wishes to express its appreciation to the various employers who furnished the information upon which this bulletin is based. It also desires to thank the Folding Paper Box Association of America for its cooperation in this undertaking.

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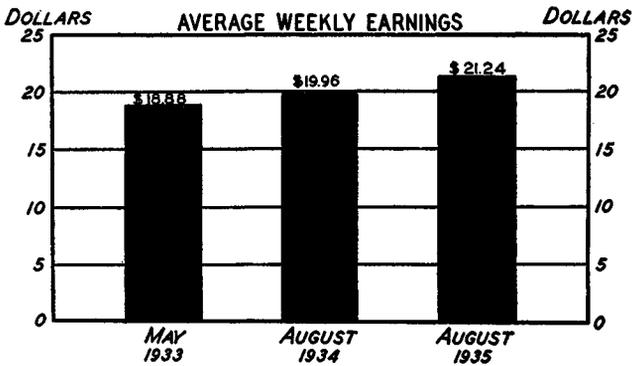
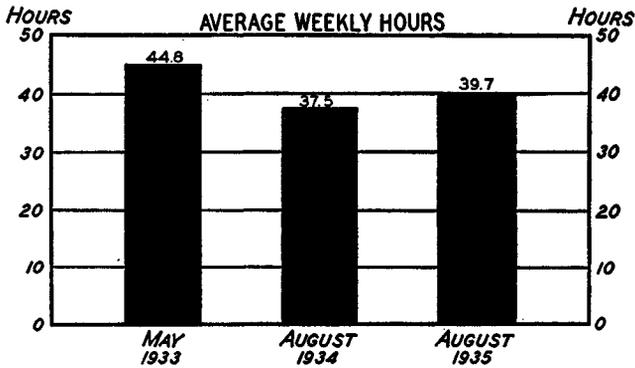
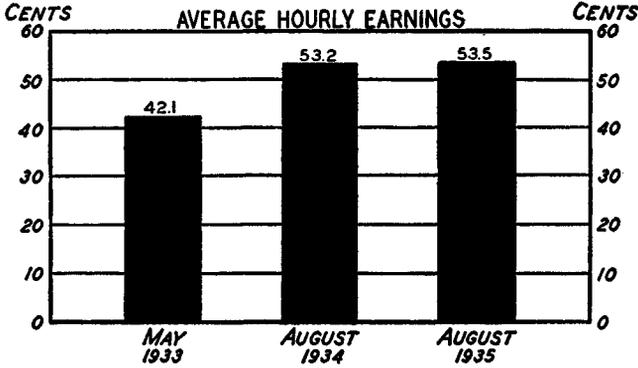
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CHART I

AVERAGE HOURLY EARNINGS, AVERAGE WEEKLY HOURS,
AND AVERAGE WEEKLY EARNINGS OF EMPLOYEES
IN THE FOLDING - PAPER - BOX INDUSTRY
MAY 1933, AUGUST 1934, AND AUGUST 1935



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Wages, Hours, and Working Conditions in the Folding-Paper-Box Industry, 1933, 1934, and 1935

Summary and Conclusions

1. The survey covers a pre-code period, May 1933; a code period, August 1934; and a post-code period, August 1935. For the last period, the sample included 7,865 employees (estimated to be 45 percent of total in industry) in 204 plants, which were selected on a representative basis as to region, type of plant, size of plant, etc.

2. Average hourly earnings increased from 42.1 cents in May 1933 to 53.2 cents in August 1934, a rise of 26.4 percent. Between the latter period and August 1935, average earnings per hour advanced to 53.5 cents, an additional gain of 0.6 percent. The net increase for the entire period was 11.4 cents, or 27.1 percent.

3. In August 1934, only 0.4 percent of the employees earned less than 30 cents per hour, the lowest code minimum, whereas in May 1933 there were 28.0 percent being paid less than that amount. In August 1935 the percentage earning less than 30 cents increased only slightly, advancing to 1.5.

4. Over the entire period the relative increases in average earnings per hour were greater in the South than in the North and greater for females than for males. Absolute changes, however, differed but little.

5. The average hourly-earnings differentials in favor of the North declined somewhat between May 1933 and August 1934 but increased between the latter period and August 1935. The differentials in favor of males, on the other hand, remained more or less constant throughout all three periods.

6. The code provided a minimum hourly rate of 40 cents for males in the North, 35 cents for females in the North and males in the South, and 30 cents for females in the South. As a result of these provisions, between May 1933 and August 1934 the percentage of workers receiving less than the respective code minima was reduced

from 37.6 to 2.0 for males in the North, from 85.8 to 6.5 for females in the North, from 59.6 to 5.9 for males in the South, and from 88.2 to 5.5 for females in the South. Decided concentrations took place at the code minima in each case. Thus, the percentages earning exactly the minimum amounts established in the code rose from 3.9 to 17.4 for males in the North, from 0.4 to 32.8 for females in the North, from 1.6 to 32.9 for males in the South, and from 0 to 39.8 for females in the South. During the same period increases took place in the percentages of those earning more than the code minima.

7. Substantial increases in average hourly earnings took place in all of the occupational classes between May 1933 and August 1934. It appears that skilled occupations had the smallest relative increases and unskilled occupations the greatest. Among the semi-skilled occupations, the trend was decidedly mixed. Most of the gains made between May 1933 and August 1934 were still being maintained in August 1935.

8. Under the code, maximum weekly hours were set at 40 for most of the folding-paper-box workers. As a result, the industry average dropped from 44.8 in May 1933 to 37.5 in August 1934. Following the discontinuance of the code, the average weekly hours increased to 39.7 in August 1935.

9. The decreases in average weekly hours, which followed the adoption of the code, were much sharper in the South than in the North. Thus, between May 1933 and August 1934, the absolute decline in average weekly hours in the South amounted to 11.1 hours for males and 9.9 hours for females, whereas in the North it was 7.8 hours for males and 5.1 hours for females. On the other hand, the increases in average weekly hours between August 1934 and August 1935 were greater in the South than in the North. Thus, during this period the average workweek in the South increased by 2.6 hours for males and by 3.2 hours for females, while in the North it increased by 2.5 hours for males and by 1.2 hours for females.

10. One of the chief effects of the code was to reduce sharply the number of employees working over 40 hours per week, this number dropping from 71.7 percent in May 1933 to 14.9 percent in August 1934. At the same time, a decided concentration appeared at the code level, the percentage working exactly 40 hours rising from 5.9 to 53.2. However, with the lifting of the code limitations, the percentage of employees working over 40 hours rose from 14.9 in August 1934 to 32.0 in August 1935, and the percentage working exactly 40 hours dropped from 53.2 to 42.1.

11. Between May 1933 and August 1934, the percentage working a week in excess of 40 hours dropped from 74.6 to 18.3 for males in the North, from 62.7 to 5.8 for females in the North, from 76.3 to 12.7 for males in the South, and from 61.7 to 0 for females in the South. At

the same time, the number working exactly 40 hours rose from 6.3 to 52.0 percent for males in the North, from 6.4 to 58.7 percent for females in the North, from 0.8 to 48.8 percent for males in the South, and from 1.1 to 43.0 percent for females in the South. Between August 1934 and August 1935, the percentage working exactly 40 hours declined in both regions for each sex, and the percentage working over 40 hours increased.

12. In all occupational classes the average weekly hours declined between May 1933 and August 1934. Between the latter period and August 1935, however, the average hours per week increased in practically all of the occupational classes.

13. Average weekly earnings advanced from \$18.88 in May 1933 to \$19.96 in August 1934 and to \$21.24 in August 1935. The first increase was due to a substantial gain in average hourly earnings, which more than counteracted a decrease in hours worked; while the latter advance was due almost exclusively to an increase in weekly hours, as average hourly earnings changed but very little during this period.

14. Between May 1933 and August 1934 the average weekly earnings advanced from \$21.78 to \$22.16 for males in the North, from \$11.76 to \$14.19 for females in the North, from \$16.24 to \$17.02 for males in the South, and from \$9.21 to \$10.90 for females in the South. Between the latter period and August 1935 these earnings rose to \$23.68 for males in the North, \$14.86 for females in the North, \$17.52 for males in the South, and \$11.44 for females in the South.

15. The lifting of workers in the industry as a whole from lower to higher weekly wage classes is evidenced by the fact that the percentage earning less than \$16 per week was reduced from 45.8 in May 1933 to 34.0 in August 1934 and to 27.2 in August 1935. Most of these employees were shifted to the \$16-and-under-\$20 class, the percentages in this class rising from 16.3 in May 1933 to 26.8 in August 1934 and to 27.5 in August 1935. The percentage of the workers earning \$20 and over rose from 37.9 in the first period to 39.2 in the second period and to 45.3 in the last period. The same upward trend obtains in each region and for each sex.

16. In nearly all of the occupational classes the average weekly earnings increased between May 1933 and August 1934 and again between the latter period and August 1935.

17. Folding-paper-box plants recruit their workers from among the semiskilled and unskilled labor of the nearby locality. Males constitute about three-fourths of the employees.

18. Formal policies governing selection and placement, separation from service, training, and promotion are unusual in this industry. Employment and discharge are in most cases exercised by a single company official. Less than 10 percent of the paper-box employees surveyed had either union recognition or employee representation.

19. The usual workweek is 5 days and 40 hours, with one-shift operation. Suspension of work for lunch is a uniform practice, as is also holiday observance. The time in both cases is usually granted without pay. Vacations with pay for wage earners are provided in 10 of the 200 plants, for foremen and other key workers in 70, and for office employees in 114. Paid sick leave for wage earners is provided in 14 plants, for foremen and similar key workmen in 55, and for office workers in 106.

20. Straight-time rates prevailed in all occupational classes, piece rates being found in less than one-third and bonus systems in one-eighth of the plants. A pronounced shift from production to time rates accompanied the introduction of minimum-time rates under the code. Average hourly earnings were consistently higher under production rates than under straight-time rates.

Overtime work is common in the industry. The usual overtime rate in March 1933 was the regular time or piece rate, and in August 1934 and 1935 it was time and one-third as fixed by the code. Non-compliance in the matter of overtime pay was frequent during August 1934. A decided shift back to pro-rata pay for overtime was shown for the August 1935 period.

21. Welfare work is decidedly restricted both in quantity and kind in this industry, it being generally limited to the larger plants. Insurance was the most commonly used form of welfare work, and it was provided in 79 plants, usually on a contributory basis.

22. Taking the period as a whole, employment in the industry increased by 28.3 percent, most of the advance taking place between May 1933 and August 1934. The large gain (24.0 percent) in employment between May 1933 and August 1934 may be attributed largely to the restrictions on weekly hours imposed by the code, as the total man-hours increased only 3.0 percent during this period. Between August 1934 and August 1935, however, employment increased only 3.5 percent, as compared with a gain of 9.5 percent in total man-hours. Thus, it would seem that with the lifting of the code restrictions on hours the industry preferred to meet expansion by working longer hours rather than by hiring more employees.

23. As a result of the combined influence of greater employment and increased average earnings per hour, pay rolls advanced 30.7 percent between May 1933 and August 1934. The smaller gain between the latter period and August 1935, namely 10.1 percent, was largely the result of increased man-hours caused by a longer average workweek. The total gain in pay rolls amounted to 43.9 percent.

Chapter I.—Scope and Method

The object of this survey was to determine what changes had occurred in wages and hours of labor in the industry¹ as the result (1) of the adoption of the President's Reemployment Agreement and the code, and (2) of the elimination of the code following the decision by the United States Supreme Court in the *Schechter case*. The President's Reemployment Agreement went into effect during the latter part of July 1933, although substitute provisions covering this industry were adopted shortly thereafter. The code became effective on January 8, 1934, and was discontinued on May 27, 1935. The three pay-roll periods for which information was obtained fell within the last half of May 1933, August 1934, and August 1935. Accordingly, the first period was 2 months prior to the President's Reemployment Agreement, the next one about 8 months after the adoption of the code, and the last one 3 months after the termination of the code regulations.

There are no separate figures published by the Bureau of the Census on the folding-paper-box industry.² However, in the letter of Administrator Hugh S. Johnson to the President, under date of December 20, 1933, recommending the approval of the code, it was stated that there were in this industry 370 firms with approximately 15,500 employees.³ In May 1933 the total coverage of this survey was 161 plants with 4,546 employees. During the two succeeding periods, however, the sample was extended to 204 identical plants, the number of employees scheduled being 7,601 in August 1934 and 7,865 in August 1935.⁴ On the basis of the above figures, the coverage is estimated conservatively to be at least 45 percent of the total number of employees in the industry. Table 1 presents a detailed picture of the coverage for each of the three pay-roll periods.

Folding paper boxes are used primarily for the packaging of goods, thus being utilized in a variety of industries.⁵ As a result, the plants making such boxes are widely distributed over the country. This survey covered 31 States. As the code made a distinction between

¹ This industry was defined by the code as including "the manufacture and sale of containers (other than fiber or corrugated shipping containers), which, or the integral parts of the multipiece units of which, are made from a single piece of one or more plies of boxboard and in the primary joints and/or closures of which the final outer surface of the blank is in direct contact with the final inner surface of the blank, when assembled."

² The Census of Manufactures includes folding paper boxes in "Boxes, paper, not elsewhere classified," which in 1933 reported 1,104 establishments with a total of 53,111 employees (5,891 salaried workers and 47,220 wage earners).

³ See Code of Fair Competition for the Folding-Paper-Box Industry.

⁴ No plant was scheduled unless it had records available for the last two pay-roll periods. However, 161 of the 204 plants also had records for May 1933. (See footnote 27, p. 43.)

⁵ Folding boxes should not be confused with shipping containers, which are made from solid fiber or corrugated board.

the North and the South, a similar geographical breakdown was employed here, with the Southern region including 8 and the Northern 23 of the States covered.⁶ In August 1935, according to table 1, the sample included only 24 plants with 547 employees in the South, as compared with 180 plants and 7,318 workers in the North.

TABLE 1.—Coverage of survey during each of three pay-roll periods

Pay-roll period	United States				North				South			
	Number of plants	Number of employees			Number of plants	Number of employees			Number of plants	Number of employees		
		Total	Males	Fe-males		Total	Males	Fe-males		Total	Males	Fe-males
May 1933.....	161	4,546	3,396	1,150	137	4,199	3,143	1,056	24	347	253	94
August 1934....	204	7,601	5,794	1,807	180	7,096	5,417	1,679	24	505	377	128
August 1935....	204	7,865	6,034	1,831	180	7,318	5,616	1,702	24	547	418	129

Not all of the 204 plants covered in August 1935 were strictly folding-paper-box establishments. Some also manufactured either set-up or solid-fiber and corrugated boxes in addition to folding boxes, others were either paper mills or printing establishments which made folding boxes only as a side line, and a small number of plants were engaged primarily in some other line of business but made folding boxes for their own use.⁷ The last-named group has been termed "consumer plants", all remaining establishments having been classified here as "independent plants." In fact, out of more than 27,000 workers employed in all of the above establishments only about 8,000, or less than one-third, were engaged in the manufacture of folding boxes. This indicates clearly to what extent the folding-paper-box industry is integrated with other industries.

In selecting the sample, it was endeavored to make the plant coverage fully representative as to size. In classifying plants according to size, however, the total employment rather than just the folding-box employment was used as the basis. The classification employed is shown in table 2.⁸

⁶ The code designated the States of Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia as belonging to the Southern zone. Of these, the only States that are not represented in this survey are Florida, Mississippi, and South Carolina. The remaining 23 States, which are classed here as belonging to the Northern zone, are California, Colorado, Connecticut, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Washington, and Wisconsin.

⁷ More than 75 percent of the total number of establishments covered were engaged principally in the manufacture of converted paper products, about 20 percent were either paper mills or printing establishments, and the remaining 5 percent were consumer plants.

⁸ A more detailed analysis of the distribution of plants according to size indicates that those engaged primarily in the manufacture of converted paper products are generally small: 65 percent of these plants had fewer than 50 employees, 90 percent had fewer than 100 employees, 9 percent between 100 and 300 employees, and only 1 plant had over 300 employees. On the other hand, the plants in which the manufacture of folding paper boxes was a secondary line were much larger, as 80 percent of them had over 100 employees and 50 percent over 300 employees.

TABLE 2.—*Coverage of survey according to size of plant, August 1935*

Size of plant (total employment)	Number of establishments	Number of folding-paper-box employees
Under 20 employees.....	47	445
20 and under 30 employees.....	23	385
30 and under 50 employees.....	35	890
50 and under 100 employees.....	45	1,842
100 and under 300 employees.....	27	1,707
300 employees and over.....	27	2,596
Total.....	204	7,865

The information for this survey, which was collected by field representatives of the Bureau, covered wages and hours, personnel policies, and technological processes and occupational descriptions. The wages and hours data were obtained from actual time and payroll records, including for each worker the occupation, color,⁹ sex, method of wage payment, the total hours actually worked, and total earnings. These figures were used to compile averages and distributions covering average hourly earnings, weekly hours, and weekly earnings¹⁰ by region, sex, and occupation. A tabulation was also made by independent and consumer plants. An analysis of the wages and hours data appears in chapters II, III, and IV. The information pertaining to personnel policies, which was obtained by means of interviews with plant officials, has been summarized in chapter V. Appendix I summarizes the changes in employment, man-hours, and pay rolls; appendix II contains an analysis of the technological processes and occupational descriptions in this industry; and appendix III presents in detail the wages and hours information upon which this bulletin is based.

⁹ Colored workers constituted only about 1 percent of the total covered, and as a result no separate tabulations were made for them.

¹⁰ The average hourly earnings were computed by dividing the earnings received during the pay-roll period covered by the actual hours worked. If the pay period exceeded 1 week, the actual hours worked in 1 week within the pay-roll period were also obtained, which, multiplied by the average hourly earnings, gave the weekly earnings.

Chapter II.—Average Hourly Earnings

Changes for the Country as a Whole

The average earnings per hour of all employees in the industry, according to table 3, amounted to 42.1 cents in May 1933, 53.2 cents in August 1934, and 53.5 cents in August 1935. This represents a total increase of 11.4 cents, or 27.1 percent, of which 11.1 cents, or 26.4 percent, occurred between the pre-code period of May 1933 and the code period of August 1934, there being hardly any change between the latter and the post-code period of August 1935.

TABLE 3.—Average hourly earnings by region and sex

Region and sex	Average hourly earnings			Percentage change		
	May 1933	August 1934	August 1935	May 1933 to August 1934	August 1934 to August 1935	May 1933 to August 1935
United States.....	\$0. 421	\$0. 532	\$0. 535	+26. 4	+0. 6	+27. 1
Males.....	. 466	. 576	. 577	+23. 6	+ . 2	+23. 8
Females.....	. 278	. 386	. 389	+38. 8	+ . 8	+39. 9
North.....	. 431	. 539	. 544	+25. 1	+ . 9	+26. 2
Males.....	. 476	. 584	. 586	+22. 7	+ . 3	+23. 1
Females.....	. 283	. 389	. 395	+37. 5	+1. 5	+39. 6
South.....	. 307	. 430	. 415	+40. 1	-3. 5	+35. 2
Males.....	. 338	. 461	. 444	+36. 4	-3. 7	+31. 4
Females.....	. 214	. 330	. 316	+54. 2	-4. 2	+47. 7

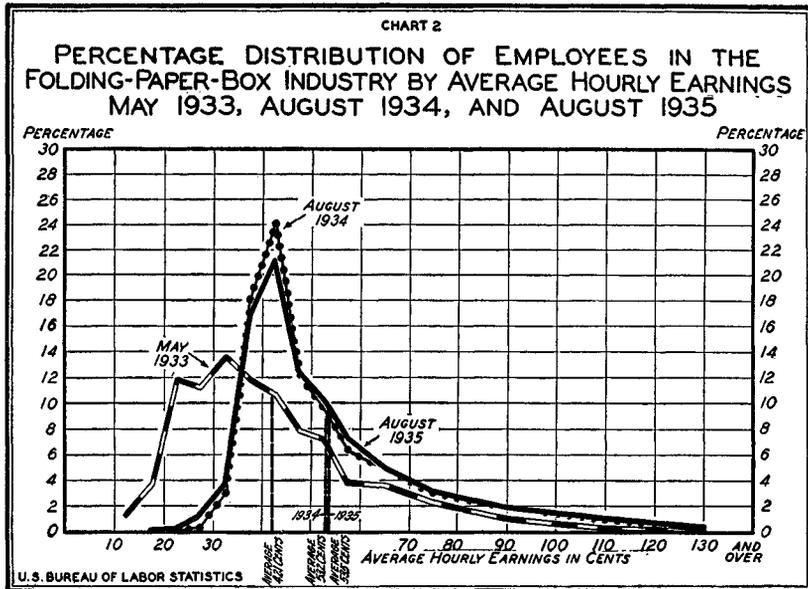
The same story is told by the percentage distribution as to average hourly earnings (see table 4 and chart 2); namely, a radical change between the first two periods and only a slight difference between the last two periods. The adoption of the President's Reemployment Agreement and of the code seems to have affected particularly the low-paid workers. Thus, in August 1934, only 3.4 percent of the employees earned less than 35 cents per hour, as compared with 41.6 percent receiving less than that amount in March 1933. Most of these low-paid workers were shifted to the class of 35 and under 45 cents, as may be seen from the fact that the percentage in that class rose from 22.6 in 1933 to 42.1 in 1934. That the gain in average hourly earnings also extended to the higher-paid employees is brought out by the fact that between the two periods the increases were from 18.9 to 28.1 percent in the class of 45 and under 60 cents, from 15.6 to 22.3 percent in the class of 60 cents and under \$1, and from 1.3 to 4.1 percent in the class of \$1 and over.

On the other hand, the chief effect of the discontinuance of the code was a slight increase in the relative number of low-paid workers. Hence, the percentage of employees paid less than 35 cents increased from 3.4 in August 1934 to 5.2 in August 1935. This was accompanied by a reduction in the class earning 35 and under 45 cents from 42.1 percent in 1934 to 38.1 percent in 1935, there being very little shift in each of the two higher-paid classes mentioned above.

TABLE 4.—Percentage distribution of all employees according to average hourly earnings

Average hourly earnings	May 1933		August 1934		August 1935	
	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage
10 and under 15 cents.....	1.3	1.3	(1)	(1)	0.1	0.1
15 and under 20 cents.....	3.7	5.0			.2	.3
20 and under 25 cents.....	11.8	16.8	0.1	0.1	1.2	1.5
25 and under 30 cents.....	11.2	28.0	.3	.4	3.7	5.2
30 and under 35 cents.....	13.6	41.6	3.0	3.4	16.9	22.1
35 and under 40 cents.....	11.9	53.5	18.0	21.4	21.2	43.3
40 and under 45 cents.....	10.7	64.2	24.1	45.5	12.3	55.6
45 and under 50 cents.....	7.9	72.1	12.1	57.6	10.2	65.8
50 and under 55 cents.....	7.2	79.3	9.6	67.2	7.2	73.0
55 and under 60 cents.....	3.8	83.1	6.4	73.6	9.7	82.7
60 and under 70 cents.....	7.2	90.3	9.7	83.3	5.8	88.5
70 and under 80 cents.....	4.6	94.9	5.5	88.8	7.1	95.6
80 and under 100 cents.....	3.8	98.7	7.1	95.9	3.4	99.0
100 and under 120 cents.....	.9	99.6	3.0	98.9	1.0	100.0
120 cents and over.....	.4	100.0	1.1	100.0		
Total.....	100.0		100.0		100.0	

¹ Less than 1/10 of 1 percent.



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Changes by Sex and Region

From May 1933 to August 1934, as appears from table 3, the South led the North both in relative and absolute increases in average hourly earnings. During this period the average hourly earnings in the South rose 36.4 percent (12.3 cents) for males and 54.2 percent (11.6 cents) for females, while in the North they advanced 22.7 percent (10.8 cents) for males and 37.5 percent (10.6 cents) for females. In both districts the gains made by females were relatively, but not absolutely, greater than those of males. The above phenomena were due in a large measure to the low wages of both sexes in the South and of females in the North prior to the President's Reemployment Agreement and the code, thus making it necessary to bring these earnings in line with the minimum rates set up under the National Recovery Administration.

In August 1935, when the code was no longer in effect, most of the increases in average hourly earnings made under the National Recovery Administration were still being maintained. While in the South the averages declined 3.7 percent (1.7 cents) for males and 4.2 percent (1.4 cents) for females, the averages in the North increased 0.3 percent (0.2 cent) for males and 1.5 percent (0.6 cent) for females. These gains, coupled with the large number of workers in the North, were responsible for the slight rise in the industry average between August 1934 and August 1935.

The changes in average earnings per hour between each of the periods affected to some extent both the regional and sex differentials. On a regional basis, the differentials declined between May 1933 and August 1934 but increased between the latter period and August 1935. Thus, the average of males in the North exceeded that in the South, respectively, by 13.8, 12.3, and 14.2 cents, while the average of females in the North was greater than that in the South, respectively, by 6.9, 5.9, and 7.9 cents. As regards the sex differential within each region, it appears that it was more or less constant (approximately 19 cents in favor of northern males and 13 cents in favor of southern males) throughout the entire period.

As in other codes, the one¹¹ for this industry also set up minimum rates of wages per hour, varying with region and sex. For "any laborer, mechanical worker, or artisan", these rates were 40 cents for males in the North, 35 cents for females in the North and males in the

¹¹ The substitute provisions of the President's Reemployment Agreement relating to rates of pay were as follows: "Factory or mechanical workers or artisans shall be paid not less than 40 cents per hour unless the rate for the same class of work on July 15, 1929, was less than 40 cents per hour, and in the latter case such employees shall be paid not less than the rate on July 15, 1929; but in no case shall the minimum rate be less than 32½ cents per hour in the North and 30 cents per hour in the South. All overtime shall be at the rate of time and one-third. This paragraph establishes a guaranteed minimum rate of pay regardless of whether the employee is compensated on a basis of a time rate or on piece-work performance."

South, and 30 cents for females in the South.¹² Piece workers were to be paid "at rates which will yield a worker for an hour's work not less than the minimum rate above prescribed." Women doing practically the same work as men were to receive the same rates as the latter. It was also provided that minors in the office under 18 years,¹³ as well as substandard workers, could be paid not less than 80 percent of the minimum. The code also stipulated that the wage rates of those already earning more than the minimum were to be "reviewed and such adjustments, if any, made therein as are equitable in the light of all the circumstances."

Among the males in the North, who constituted about 70 percent of the total employees scheduled during each period, the influence of the code is quite evident from an examination of table 5. With a minimum of 40 cents per hour, the percentage earning less than that amount was reduced from 37.6 in May 1933 to only 2.0 in August 1934. The latter must have been composed either of substandard workers or those paid in violation of the code, although it is interesting to note that very few were found at less than 32 cents, which is the lowest possible rate (80 percent of the minimum) allowed for any male in this region. Another effect of the 40-cent code minimum was to bring about a concentration of employees at that rate, with 17.4 percent earning exactly that figure in August 1934 as against 3.9 percent in May 1933. The effect of the code was also to produce a continual shift of the remaining employees from lower- to higher-paid classes, as evidenced by the fact that beginning with 40 cents every wage class showed an increase in the relative number of workers between the two periods. Following the discontinuance of the code, however, the percentage of employees receiving less than 40 cents per hour advanced from 2.0 in August 1934 to 5.2 in August 1935. This was accompanied by a reduction in the class of 40 and under 45 cents from 27.6 percent in the former period to 21.9 percent in the latter period, the drop being largely due to the decrease in the earnings of a number of workers who had been receiving exactly 40 cents under the code.¹⁴ In the classes above 45 cents there was very little change in the respective percentages between the two periods, thus indicating that, with the exception of the rather minor shift noted above, there was little disturbance in the wage structure after the code passed out of existence.

¹² The minimum rates of wages set for the remaining employees were \$16 per week in the North and \$14 per week in the South.

¹³ Their number was limited to 5 percent of the total number of employees.

¹⁴ The decline in the percentage was from 17.4 in August 1934 to 13.0 in August 1935.

TABLE 5.—Percentage distribution of employees according to average hourly earnings by region and sex

Region, sex, and average hourly earnings	May 1933		August 1934		August 1935	
	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage
<i>North</i>						
Males receiving—						
10 and under 15 cents.....	0.4	0.4	(1)	(1)	.....	.....
15 and under 20 cents.....	1.0	1.4	.....	.....	.....	.....
20 and under 25 cents.....	4.5	5.9	(1)	(1)	0.1	0.1
25 and under 30 cents.....	6.7	12.6	0.1	0.1	.4	.5
30 and under 35 cents.....	11.2	23.8	.5	.6	1.5	2.0
35 and under 40 cents.....	13.8	37.6	1.4	2.0	3.2	5.2
40 cents.....	3.9	41.5	17.4	19.4	13.0	18.2
Over 40 and under 45 cents.....	9.9	51.4	10.2	29.6	8.9	27.1
45 and under 50 cents.....	10.6	62.0	15.0	44.6	15.0	42.1
50 and under 55 cents.....	9.6	71.6	12.0	56.6	12.6	54.7
55 and under 60 cents.....	5.1	76.7	8.5	65.1	9.5	64.2
60 and under 70 cents.....	9.7	86.4	12.5	77.6	12.6	76.8
70 and under 80 cents.....	6.5	92.9	7.4	85.0	7.7	84.5
80 and under 100 cents.....	5.4	98.3	9.4	94.4	9.6	94.1
100 and under 120 cents.....	1.2	99.5	4.0	98.4	4.5	98.6
120 cents and over.....	0.5	100.0	1.6	100.0	1.4	100.0
Total.....	100.0	.....	100.0	.....	100.0	.....
Females receiving—						
Under 15 cents.....	.9	.9	.....	.....	.....	.....
15 and under 20 cents.....	8.5	9.4	.1	.1	.1	.1
20 and under 25 cents.....	28.9	38.3	.3	.4	.1	.2
25 and under 30 cents.....	24.5	62.8	.2	.6	3.4	3.6
30 and under 35 cents.....	23.0	85.8	5.9	6.5	5.9	9.5
35 cents.....	.4	86.2	32.8	39.3	26.1	35.6
Over 35 and under 40 cents.....	6.8	93.0	32.6	71.9	28.7	64.3
40 and under 45 cents.....	2.6	95.6	16.8	88.7	21.8	86.1
45 and under 50 cents.....	.9	96.5	4.6	93.3	5.8	91.9
50 and under 55 cents.....	1.6	98.1	3.0	96.3	4.5	96.4
55 and under 60 cents.....	.5	98.6	1.0	97.3	1.2	97.6
60 cents and over.....	1.4	100.0	2.7	100.0	2.4	100.0
Total.....	100.0	.....	100.0	.....	100.0	.....
<i>South</i>						
Males receiving—						
10 and under 15 cents.....	6.3	6.3	.....	.....	.....	.....
15 and under 20 cents.....	9.5	15.8	.....	.....	.....	.....
20 and under 25 cents.....	23.6	39.4	.....	.....	2.1	2.1
25 and under 30 cents.....	10.7	50.1	1.6	1.6	1.4	3.5
30 and under 35 cents.....	9.5	59.6	4.3	5.9	3.4	6.9
35 cents.....	1.6	61.2	32.9	38.8	32.1	39.0
Over 35 and under 40 cents.....	7.9	69.1	14.1	52.9	17.2	56.2
40 and under 45 cents.....	9.5	78.6	12.7	65.6	14.6	70.8
45 and under 50 cents.....	5.5	84.1	7.1	72.7	5.9	76.7
50 and under 55 cents.....	4.0	88.1	6.4	79.1	4.3	81.0
55 and under 60 cents.....	2.4	90.5	2.4	81.5	3.1	84.1
60 and under 70 cents.....	4.3	94.8	10.6	92.1	7.2	91.3
70 and under 80 cents.....	2.8	97.6	2.1	94.2	3.6	94.9
80 and under 100 cents.....	1.6	99.2	4.2	98.4	3.4	98.3
100 cents and over.....	.8	100.0	1.6	100.0	1.7	100.0
Total.....	100.0	.....	100.0	.....	100.0	.....
Females receiving—						
Under 15 cents.....	20.2	20.2	.....	.....	.....	.....
15 and under 20 cents.....	24.5	44.7	.....	.....	5.4	5.4
20 and under 25 cents.....	31.8	76.5	.8	.8	.8	6.2
25 and under 30 cents.....	11.7	88.2	4.7	5.5	8.5	14.7
30 cents.....	.....	88.2	39.8	45.3	36.4	51.1
Over 30 and under 35 cents.....	3.2	91.4	29.7	75.0	29.4	80.5
35 and under 40 cents.....	6.4	97.8	14.8	89.8	10.9	91.4
40 and under 45 cents.....	1.1	98.9	5.5	95.3	3.9	95.3
45 and under 50 cents.....	.....	98.9	1.6	96.9	3.1	98.4
50 cents and over.....	1.1	100.0	3.1	100.0	1.6	100.0
Total.....	100.0	.....	100.0	.....	100.0	.....

¹ Less than 1/10 of 1 percent.

The changes pertaining to males in the South were even more striking, although this group made up only about 5 percent of the employees covered. With a code minimum of 35 cents per hour, the percentage earning less than that amount dropped from 59.6 in May 1933 to 5.9 in August 1934.¹⁵ The percentage receiving exactly 35 cents rose from only 1.6 in the former period to 32.9 in the latter period. Practically every wage class above 35 cents also showed a larger relative number of workers in August 1934 as compared with May 1933. The percentage paid under 35 cents increased from 5.9 in August 1934 to 6.9 in August 1935. There was also a gain in those earning 35 and under 45 cents from 59.7 to 63.9 percent, which was accompanied by a decrease in the percentages in the group of 45 and under 70 cents from 26.5 to 20.5, thus indicating that the cutting of wages after the code extended to the higher-paid classes. The percentage of employees earning 70 cents and over advanced slightly, from 7.9 in August 1934 to 8.7 in August 1935.

The most striking shifts in workers from lower to higher wage classes, however, occurred among females in both districts. In the North, where the females constituted approximately 22 percent of the total employees scheduled, those earning less than the code minimum of 35 cents declined from as high a figure as 85.8 percent in May 1933 to only 6.5 percent in August 1934. During the latter period less than 1 percent were paid under 28 cents, or 80 percent of the minimum, which was the lowest possible rate under the code. The percentage receiving exactly 35 cents rose from 0.4 in May 1933 to 32.8 in August 1934. Whereas in the former period more than three-quarters of the employees were paid 20 and under 35 cents per hour, in the latter period more than four-fifths (82.2 percent) of the total were earning 35 and under 45 cents. This compared with only 9.8 percent falling in the latter class in 1933. Likewise, the percentage receiving 45 cents and over increased from 4.4 to 11.3 between the two periods. From August 1934 to August 1935, however, the percentage of employees rose from 6.5 to 9.5 for the various classes under 35 cents, decreased from 65.4 to 54.8 in the 35-and-under-40-cents class, and increased from 28.1 to 35.7 for the classes of 40 cents and over. In other words, it seems that after the code there was a tendency for some of the medium-paid employees to be shifted to lower and others to higher wage classes.¹⁶

The female workers in the South constituted only about 2 percent of the total employees scheduled. The effect of the 30-cent code minimum upon this group was to reduce the percentage earning less than that amount from 88.2 in May 1933 to 5.5 in August 1934. While no female worker earned exactly 30 cents per hour in May

¹⁵ There were only 2 employees who were paid less than 28 cents (80 percent of minimum) in that period.

¹⁶ The number earning exactly 35 cents per hour declined from 32.8 percent in August 1934 to 26.1 percent in August 1935, which indicates that it was largely this group that suffered wage reductions after the discontinuance of the code.

1933, actually 39.8 percent received that amount in August 1934. At the same time the percentage in the class of 30 and under 35 cents rose from 3.2 to 69.5. The percentage earning 35 cents and over advanced from 8.6 in May 1933 to 25.0 in August 1934. With the discontinuance of the code in August 1935, those earning under 30 cents increased to 14.7 percent, while those paid 30 and under 35 cents and 35 cents and over declined respectively to 65.8 and 19.5 percent, thus indicating clearly that the retrogression affected all the relatively higher-paid employees.

Changes by Occupational Classes

The extent of the changes in average hourly earnings by individual occupations and occupational groupings¹⁷ is shown in table 6.

Among the males in the North, the average hourly earnings in May 1933 for the 17 individual occupations shown ranged from 35.1 cents for die makers' helpers to 68.4 cents for die makers. If the occupational groupings were included, the range would be from 33.5 cents for miscellaneous service workers to 75.4 cents for miscellaneous skilled indirect employees. The percentages of change between May 1933 and August 1934 extended from 13.2 for automatic gluing- and folding-machine operators to 36.8 for die makers' helpers. On the whole, the skilled occupations had the smallest relative increases, while the unskilled occupations showed the greatest relative gains; in the semi-skilled group the trend varied, the percentage rises varying from 15.6 for automatic gluing- and folding-machine feeders to as high as 36.8 for die makers' helpers.¹⁸ In August 1934 the average earnings per hour for the 17 individual occupations extended from 44.5 cents for automatic gluing- and folding-machine feeders to 80.6 cents for die makers, the range for all occupational classes being from 43.5 cents for miscellaneous service workers to 93.5 cents for office and plant supervisory employees. Between August 1934 and August 1935 only six individual occupations and occupational groupings showed slight decreases (the largest was 2.0 percent for semiskilled workers in the power and maintenance group), the remaining classes having increases from 0.2 percent for strippers, bundlers and packers, and laborers, to 9.0 percent for die makers' helpers. The highest and lowest average hourly earnings in August 1935 were for the same occupations and occupational groupings as in August 1934.

¹⁷ These consist of occupations not sufficiently large to justify the presentation of separate averages.

¹⁸ The skilled occupations are hand and machine compositors, die makers, pressmen, pressmen and feeders, machine adjusters and repairmen, automatic gluing- and folding-machine operators, truck drivers, office and plant supervisory employees, office and plant clerical workers, skilled miscellaneous direct workers, skilled miscellaneous indirect workers, and skilled power and maintenance workers; the semiskilled occupations are pressfeeders, cutter feeders, automatic gluing- and folding-machine feeders, machine feeders, die makers' helpers, pressmen's helpers, semiskilled miscellaneous direct workers, semiskilled miscellaneous indirect workers, and semiskilled power and maintenance workers; the unskilled occupations are strippers, machine helpers, bundlers and packers, laborers, unskilled miscellaneous indirect workers, and miscellaneous service workers.

TABLE 6.—Average hourly earnings by region, sex, and occupational class

Region, sex, and occupational class	Average hourly earnings			Percentage change		
	May 1933	August 1934	August 1935	May 1933 to August 1934	August 1934 to August 1935	May 1933 to August 1935
<i>North</i>						
Males:						
Compositors, hand and machine.....	\$0.640	\$0.770	\$0.790	+20.3	+2.6	+23.4
Die makers.....	.684	.806	.815	+17.8	+1.1	+19.2
Pressmen.....	.650	.789	.798	+21.4	+1.1	+22.8
Pressfeeders.....	.401	.604	.506	+25.7	+4	+26.2
Pressmen and feeders.....	.509	.619	.621	+21.6	+3	+22.0
Machine adjusters and repairmen.....	.624	.714	.733	+14.4	+2.7	+17.5
Cutter feeders.....	.445	.650	.549	+23.6	-.2	+23.4
Strippers.....	.364	.482	.483	+32.4	+2	+32.7
Automatic gluing- and folding-machine operators.....	.538	.609	.618	+13.2	+1.5	+14.9
Automatic gluing- and folding-machine feeders.....	.385	.445	.442	+15.6	-.7	+14.8
Machine helpers.....	.354	.448	.453	+26.6	+1.1	+28.0
Bundlers and packers.....	.364	.491	.492	+34.9	+2	+35.2
Laborers (loaders, unloaders, etc.).....	.300	.453	.454	+25.8	+2	+26.1
Machine feeders.....	.357	.461	.466	+29.1	+1.1	+30.5
Truck drivers.....	.465	.536	.533	+15.3	-.6	+14.6
Die makers' helpers.....	.351	.480	.523	+36.8	+9.0	+49.0
Pressmen's helpers.....	.417	.530	.554	+27.1	+4.5	+32.9
Supervisory employees, office and plant.....	.752	.935	.933	+24.3	-.2	+24.1
Clerical employees, office and plant.....	.485	.586	.590	+20.8	+7	+21.6
Miscellaneous direct workers, skilled.....	.585	.700	.706	+20.0	+7.9	+20.7
Miscellaneous direct workers, semiskilled.....	.350	.472	.486	+34.9	+3.0	+38.9
Miscellaneous indirect workers, skilled.....	.754	.930	.919	+23.3	-1.2	+21.9
Miscellaneous indirect workers, semiskilled.....	.438	.520	.546	+18.7	+5.0	+24.7
Miscellaneous indirect workers, unskilled.....	.367	.467	.482	+27.2	+3.2	+31.3
Power and maintenance workers, skilled.....	.602	.725	.727	+20.4	+3	+20.8
Power and maintenance workers, semiskilled.....	.437	.509	.499	+16.5	-2.0	+14.2
Service workers, miscellaneous.....	.335	.435	.440	+29.9	+1.1	+31.3
Total.....	.476	.584	.586	+22.7	+3	+23.1
Females:						
Press feeders.....	.274	.382	.384	+39.4	+5	+40.1
Strippers.....	.294	.382	.376	+28.9	-1.6	+27.9
Automatic gluing- and folding-machine feeders.....	.256	.370	.386	+44.5	+4.3	+50.8
Stitcher operators.....	.273	.379	.396	+38.8	+4.5	+45.1
Machine helpers.....	.245	.367	.369	+49.8	+5	+50.6
Bundlers and packers.....	.278	.382	.381	+37.4	-.3	+37.1
Machine feeders.....	.291	.376	.385	+28.2	+2.4	+32.3
Gluers, folders, etc., hand.....	.270	.378	.387	+40.0	+2.4	+45.3
Clerical employees, office and plant.....	.427	.491	.503	+15.0	+2.4	+17.8
Miscellaneous other employees ¹.....	.344	.449	.468	+30.5	+4.2	+36.0
Total.....	.283	.389	.395	+37.5	+1.5	+39.6
Total, both sexes.....	.431	.539	.544	+25.1	+9	+26.2
<i>South</i>						
Males:						
Compositors, hand and machine, and die makers.....	.577	.697	.695	+20.8	-.3	+20.5
Pressmen.....	.496	.624	.620	+25.8	-.6	+25.0
Press feeders.....	.311	.412	.405	+32.5	-1.7	+30.2
Strippers.....	.206	.360	.348	+74.8	-8.3	+68.9
Machine helpers.....	.213	.361	.346	+69.5	-4.2	+62.4
Bundlers and packers.....	.218	.362	.368	+66.1	+1.7	+68.8
Miscellaneous direct employees.....	.397	.517	.496	+30.2	-4.1	+24.9
Miscellaneous indirect employees.....	.353	.475	.472	+34.6	-.6	+33.7
Total.....	.338	.461	.444	+36.4	-3.7	+31.4
Females:						
Miscellaneous machine operators.....	.221	.319	.319	+44.3	-----	+44.3
Miscellaneous machine feeders.....	.234	.328	.343	+40.2	+4.6	+46.6
Miscellaneous direct employees.....	.182	.320	.308	+75.8	-3.8	+69.2
Miscellaneous indirect employees.....	.212	.340	.305	+60.4	-10.3	+43.9
Total.....	.214	.330	.316	+54.2	-4.2	+47.7
Total, both sexes.....	.307	.430	.415	+40.1	-3.5	+35.2

¹ Includes mostly indirect workers.

As for males in the South, the range in average hourly earnings in May 1933 was from 20.6 cents for strippers to 57.7 cents for hand

and machine compositors and die makers. The percentage increases between that period and August 1934 varied from 20.8 for the latter occupation to 74.8 for the former occupation, the lowest average earnings per hour in August 1934 being 36 cents for strippers and the highest 69.7 cents for hand and machine compositors and die makers. From August 1934 to August 1935, during which time the code was abandoned, there was a reduction in average earnings per hour in all but 1 of the 8 occupational classes shown, the largest relative decrease being 4.2 percent for machine helpers. Bundlers and packers had a slight gain of 1.7 percent. In August 1935 machine helpers showed the lowest (34.6 cents) and hand and machine compositors and die makers the highest (69.5 cents) average hourly earnings.

There are five identical occupations among males with large enough numbers of workers to show average hourly earnings. In May 1933 the differentials in favor of the North for these occupations were 15.4 cents for pressmen, 9 cents for pressfeeders, 15.8 cents for strippers, 14.1 cents for machine helpers, and 14.6 cents for bundlers and packers. The respective differentials in August 1935 amounted to 17.8, 10.1, 13.5, 10.7, and 12.4 cents, thus being higher for the first two and lower for the last three occupations. In every case the percentage gain in the South was greater than in the North, but it was especially so for strippers, machine helpers, and bundlers and packers, which explains the reduction in the differentials for these three jobs.

With the exception of the office and plant clerical workers and miscellaneous other employees, there was very little variation in average hourly earnings among the various occupational classes shown for females in the North during each of the three pay-roll periods. The range was from 24.5 cents for machine helpers to 29.4 cents for strippers in May 1933, from 36.7 cents for machine helpers to 38.2 cents for press feeders, strippers, and bundlers and packers in August 1934, and from 36.9 cents for machine helpers to 39.6 cents for stitcher operators in August 1935. The percentage gains between the first two periods varied from 15.0 for office and plant clerical employees to 49.8 for machine helpers; between the last two periods, only two occupations had slight reductions, the remaining showing increases, of which the highest relative gain was 4.5 percent for stitcher operators. In the South there was also very little difference between the average hourly earnings of the four occupational groupings shown. Between May 1933 and August 1934 the largest percentage rise of any occupational class in table 6 was 75.8 for female miscellaneous direct employees in this region. The sharpest reduction, namely, 10.3 percent, between August 1934 and August 1935 was for female miscellaneous indirect employees.

There are six identical occupations in the North for which comparisons in average hourly earnings may be made by sex. In May 1933

the differentials favoring the males amounted to 12.7 cents for press-feeders, 7 cents for strippers, 12.9 cents for automatic gluing- and folding-machine feeders, 10.9 cents for machine helpers, 8.6 cents for bundlers and packers, and 6.6 cents for machine feeders. The respective differentials for the same occupations were 12.2, 10.0, 7.5, 8.1, 10.9, and 8.5 cents in August 1934 and, in August 1935, they were 12.2, 10.7, 5.6, 8.4, 11.1, and 8.1 cents. These differentials are interesting, as the code stipulated that females doing the same work as males should get the same pay.

The actual distribution of employees by occupational classes is presented in table A of appendix III.

Comparison by Type of Plant

Another interesting comparison of average hourly earnings can be made by type of plant. As previously stated (see p. 6), the folding-paper-box industry contains two types of establishments, namely, independent and consumer¹⁹ plants. Each type is subject to different economic influences. On the one hand, the independent establishments must dispose of their products in an open market, which means that average hourly earnings are likely to be determined by competitive conditions. On the other hand, the consumer plants dispose of their output to the parent companies manufacturing products other than paper boxes. In this closed market, average hourly earnings are affected not only by conditions in the industry, but they are also probably influenced by wage conditions obtaining in the parent company. Due to the limited coverage in the South and a desire to eliminate the influence of the regional differential, the comparison has been limited to northern establishments.

The average hourly earnings in independent plants were 42.6 cents in May 1933, 53.6 cents in August 1934, and 54.1 cents in August 1935. For the same periods, the average hourly earnings in consumer plants were, respectively, 49.8 cents, 59.3 cents, and 61.1 cents. Thus, the average hourly earnings in consumer plants exceeded by a fair margin those in independent plants during each of the three pay-roll periods. In May 1933 consumer plants paid on the average 7.2 cents more per hour than independent plants. This differential was reduced to 5.7 cents in August 1934, because hourly earnings advanced more in independent plants (11.0 cents or 25.8 percent) than in the better paying group, the consumer plants (9.5 cents or 19.1 percent). In August 1935 the differential amounted to 7.0 cents, this advance being due to the somewhat greater increase in the average of consumer plants as against that of independent plants.

¹⁹ Of the total number of folding-paper-box employees scheduled in the North in this survey, the percentages found in consumer plants were only 7.1 percent in May 1933, 5.3 percent in August 1934, and 4.8 percent in August 1935. While such a coverage is perhaps too small to permit the formulation of definite conclusions, the findings may nevertheless be considered as indicative of the trend.

Chapter III.—Weekly Hours

Changes in Averages

The decided increase in average hourly earnings from May 1933 to August 1934 was accompanied by an important decrease in average weekly hours, as may be seen in table 7. The average hours per week for all employees in the industry dropped from 44.8 to 37.5 during this period, a decline of 7.3 hours or 16.3 percent. The reduction extended to both sexes in each region, and in no instance did the August 1934 average exceed 38 hours, or 2 less than the maximum set by the code for most employees. The decreases, both absolute and relative, were substantially greater in the South than in the North. In the North the reduction was greater, both relatively and absolutely, for males (7.8 hours or 17.1 percent) than for females (5.1 hours or 12.3 percent). In the South, while both sexes had the same relative decrease (23.1 percent), the absolute drop was also greater for males (11.1 hours) than for females (9.9 hours).

TABLE 7.—Average weekly hours by region and sex

Region and sex	Average weekly hours			Percentage change		
	May 1933	August 1934	August 1935	May 1933 to August 1934	August 1934 to August 1935	May 1933 to August 1935
United States.....	44.8	37.5	39.7	-16.3	+5.9	-11.4
Males.....	45.9	37.9	40.3	-17.4	+6.3	-12.2
Females.....	41.6	36.2	37.5	-13.0	+3.6	-9.9
North.....	44.7	37.6	39.7	-15.9	+5.6	-11.2
Males.....	45.7	37.9	40.4	-17.1	+6.6	-11.6
Females.....	41.5	36.4	37.6	-12.3	+3.3	-9.4
South.....	46.6	35.9	38.7	-23.0	+7.8	-17.0
Males.....	48.0	36.9	39.5	-23.1	+7.0	-17.7
Females.....	42.9	33.0	36.2	-23.1	+9.7	-15.6

With the discontinuance of the code and the removal of the maximum-hour provisions, there was a gain in the average weekly hours. Thus, the average for the industry rose from 37.5 hours in August 1934 to 39.7 in August 1935, an advance of 2.2 hours or 5.9 percent. Increases are shown for each sex-region group. The females in the South had the greatest advance (3.2 hours or 9.7 percent), while the females in the North showed the smallest gain (1.2 hours or 3.3 percent). The males in each region had practically the same absolute as well as relative increases (about 2.5 hours or 7 percent) during this period.

Although higher than in August 1934, the average hours per week in August 1935 were still substantially lower than in May 1933. For the industry as a whole, the reduction amounted to 5.1 hours or 11.4 percent. The decreases were 5.3 hours (11.6 percent) for males in the North, 8.5 hours (17.7 percent) for males in the South, 3.9 hours (9.4 percent) for females in the North, and 6.7 hours (15.6 percent) for females in the South.

In May 1933 the males in the South were employed a longer week than those in the North. Likewise, the females in the South worked a greater number of hours per week than did the females in the North. The opposite was true for each sex in August 1934 and August 1935. In each of the three periods the males worked longer hours per week than the females in each region. However, the effect of the code was to level off these variations somewhat, as one may see from the averages for the last two periods.

Changes in Percentage Distribution of Employees

A more detailed picture of the changes in weekly hours between the three periods may be obtained from the percentage distribution of employees shown in table 8. In order fully to appreciate these changes, however, it is advisable to examine the code provisions relating to hours.

TABLE 8.—Percentage distribution of employees according to weekly hours by region and sex

Region, sex, and weekly hours	May 1933		August 1934		August 1935	
	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage
<i>United States</i>						
All employees:						
Under 16 hours.....	2.9	2.9	2.8	2.8	2.2	2.2
16 and under 24 hours.....	2.6	5.5	3.1	5.9	2.6	4.8
24 and under 32 hours.....	4.5	10.0	6.5	12.4	4.7	9.5
32 and under 40 hours.....	12.4	22.4	19.5	31.9	16.4	25.9
40 hours.....	5.9	28.3	53.2	85.1	42.1	68.0
Over 40 and under 48 hours.....	27.9	56.2	11.5	96.6	19.0	87.0
48 and under 56 hours.....	33.4	89.6	2.8	99.4	11.1	98.1
56 hours and over.....	10.4	100.0	.6	100.0	1.9	100.0
Total.....	100.0	-----	100.0	-----	100.0	-----
<i>North</i>						
Males:						
Under 16 hours.....	2.6	2.6	2.7	2.7	1.8	1.8
16 and under 24 hours.....	2.7	5.3	2.7	5.4	2.1	3.9
24 and under 32 hours.....	3.8	9.1	5.8	11.2	4.2	8.1
32 and under 40 hours.....	10.0	19.1	18.5	29.7	15.2	23.3
40 hours.....	6.3	25.4	52.0	81.7	40.7	64.0
Over 40 and under 48 hours.....	27.8	53.2	13.8	95.5	20.8	84.8
48 and under 56 hours.....	34.5	87.7	3.7	99.2	12.6	97.4
56 hours and over.....	12.3	100.0	.8	100.0	2.6	100.0
Total.....	100.0	-----	100.0	-----	100.0	-----

TABLE 8.—Percentage distribution of employees according to weekly hours by region and sex—Continued

Region, sex, and weekly hours	May 1933		August 1934		August 1935	
	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage
<i>North—Continued</i>						
Females:						
Under 16 hours.....	3.4	3.4	2.8	2.8	3.4	3.4
16 and under 24 hours.....	3.1	6.5	3.6	6.4	4.3	7.7
24 and under 32 hours.....	5.7	12.2	8.3	14.7	5.6	13.3
32 and under 40 hours.....	18.7	30.9	20.8	35.5	17.6	30.9
40 hours.....	6.4	37.3	58.7	94.2	49.4	80.3
Over 40 and under 48 hours.....	33.2	70.5	5.4	99.6	13.8	94.1
48 and under 56 hours.....	27.8	98.3	.4	100.0	5.9	100.0
56 hours and over.....	1.7	100.0				
Total.....	100.0		100.0		100.0	
<i>South</i>						
Males:						
Under 16 hours.....	2.0	2.0	4.0	4.0	1.0	1.0
16 and under 24 hours.....	.8	2.8	3.7	7.7	2.4	3.4
24 and under 32 hours.....	7.9	10.7	5.3	13.0	4.5	7.9
32 and under 40 hours.....	12.2	22.9	25.5	38.5	26.3	34.2
40 hours.....	.8	23.7	48.8	87.3	35.2	69.4
Over 40 and under 48 hours.....	11.1	34.8	10.3	97.6	17.2	86.6
48 and under 56 hours.....	43.5	78.3	2.4	100.0	12.4	99.0
56 hours and over.....	21.7	100.0			1.0	100.0
Total.....	100.0		100.0		100.0	
Females:						
Under 16 hours.....	7.4	7.4	7.8	7.8	5.4	5.4
16 and under 24 hours.....		7.4	9.4	17.2	5.4	10.8
24 and under 32 hours.....	5.3	12.7	14.8	32.0	11.6	22.4
32 and under 40 hours.....	24.5	37.2	25.0	57.0	17.8	40.2
40 hours.....	1.1	38.3	43.0	100.0	36.5	76.7
Over 40 and under 48 hours.....	17.0	55.3			16.3	93.0
48 and under 56 hours.....	34.1	89.4			7.0	100.0
56 hours and over.....	10.6	100.0				
Total.....	100.0		100.0		100.0	

The code ²⁰ had very definite provisions concerning maximum hours of work in the industry. Under it, laborers, mechanical workers, or artisans, who constitute most of the plant employees, were not to work more than 8 hours per day or 40 hours per week. There were two exceptions to this general rule: (1) Up to 10 percent of the labor force might be utilized in machine and plant cleaning and maintenance over and above those hours, whenever this work could not be done while the machines were in operation, provided that all time in excess of 10 hours per day and 48 hours per week should be paid for at least at time and one-third; and (2) additional time up to 8 hours per week could

²⁰ The substitute provisions relating to hours in the President's Reemployment Agreement were as follows:

Employees (other than factory or mechanical workers or artisans and truck drivers) shall not be employed for more than 40 hours per week; *Provided, however*, That in the case of truck drivers they may be employed for not more than a 40-hour week averaged over a 2 months' period; *and provided further*, that such employees may be employed for not more than 48 hours per week, and the hours worked over 40 hours per week shall be considered overtime.

No factory or mechanical worker or artisan (except engineers, watchmen, and firemen) shall be employed for more than a 40-hour week, averaged over a 13-week period: *Provided, however*, That such employees may be employed not more than a maximum of 48 hours per week, and hours worked over 40 per week shall be considered overtime; *and provided further*, that these employees may be employed extra in cleaning and maintenance of plant and/or equipment not in operation, which work cannot be performed during regular working hours; but all work in excess of 40 hours per week shall be considered overtime. No engineer, watchmen, or firemen shall be employed more than a maximum week of 42 hours

be allowed for plant operation, with time and one-third to be paid for such extra time. In addition to the above, there were special provisions pertaining to certain groups of employees. Thus, watchmen were permitted to work 56 hours per week; chauffeurs and truckmen 192 hours in 4 consecutive weeks;²¹ engineers, firemen, and electricians 168 hours in 4 consecutive weeks,²¹ and all other employees an average of 40 hours in 13 consecutive weeks but not more than 48 hours per week.²² The code also contained the usual exemption covering emergency repairs or maintenance work.

Taking the industry as a whole, the effect of the above provisions upon the distribution of workers by weekly hours between May 1933 and August 1934 was to reduce the percentage employed over 40 hours and to bring about a concentration of the workers in the class of exactly 40 hours. Thus, the percentage of employees working over 40 hours dropped from 71.7 to 14.9. Under the code the long hours worked prior thereto were practically eliminated. Only 2.8 percent of the employees worked 48 and under 56 hours in August 1934, as compared with 33.4 in May 1933, and only 0.6 percent were employed 56 hours and over in August 1934, as compared with 10.4 percent in May 1933. During the same interval, the percentage working over 40 and under 48 hours dropped from 27.9 to 11.5. Not all of the employees working more than 40 hours per week in August 1934, however, can be said to have worked in excess of code hours, owing to the numerous exceptions found in the code. On the other hand, the workers employed exactly 40 hours soared from 5.9 percent in May 1933 to 53.2 percent in August 1934. There was likewise an increase in the percentage working 32 and under 40 hours from 12.4 in the former to 19.5 in the latter period. Those employed under 32 hours, nearly all of whom were undoubtedly part-time workers, increased slightly, from 10.0 percent in May 1933 to 12.4 percent in August 1934. (See chart 3.)

With the lifting of the limitations of maximum hours after the code, however, there was a decrease in the relative number of employees working 40 hours or less per week, which was accompanied by an increase in the percentage of those employed over 40 hours. Between August 1934 and August 1935, the workers with a week of exactly 40 hours dropped from 53.2 to 42.1 percent. Similarly, there were reductions in the lower classes, namely, from 19.5 to 16.4 percent in the 32 and under 40 hours class and from 12.4 to 9.5 percent in the class of under 32 hours. In contrast, the percentages increased from 11.5 to 19.0 in the class of over 40 and under 48, from 2.8 to 11.1 in the group of 48 and under 56, and from 0.6 to 1.9 in the class of 56 hours and over.

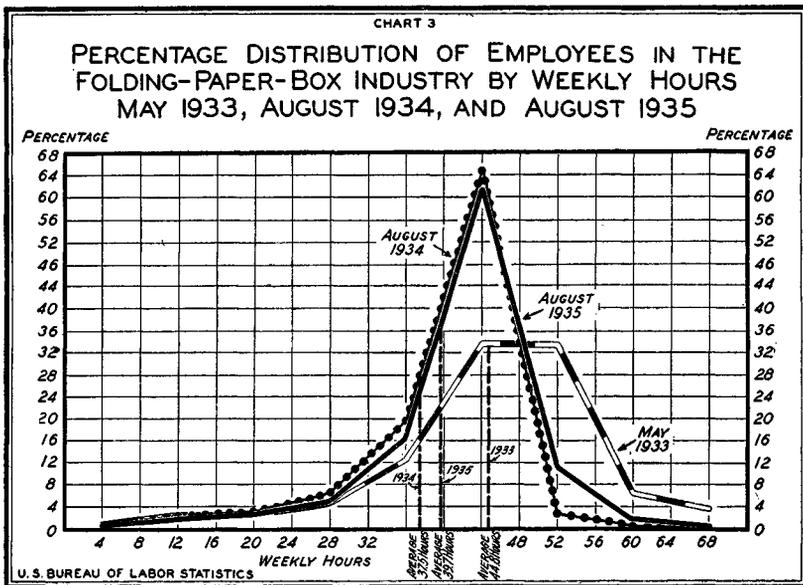
²¹ Time and one-third was to be paid for all hours in excess of 9 per day and 48 per week.

²² There was no limitation placed on the hours of executives, their secretaries, outside salesmen, and supervisory employees receiving \$35 or more per week. Nearly all these persons, however, were excluded from this survey.

A similar story is told by each of the percentage distributions of employees in the various sex-region groups, the sole difference being in the sharpness of the changes.

Among males in the North, the employees working 40 hours and under per week constituted 25.4 percent in May 1933, 81.7 percent in August 1934, and 64.0 percent in August 1935. The respective percentages working exactly 40 hours were 6.3, 52.0, and 40.7. Those employed over 40 and under 56 hours were 62.3 percent in May 1933, 17.5 percent in August 1934, and 33.4 percent in August 1935. The percentage working 56 hours and over was 12.3 in 1933, as contrasted with 0.8 in 1934 and 2.6 in 1935.

In the South the number of males employed a week of 40 hours or less amounted to 23.7 percent in May 1933, 87.3 percent in August



1934, and 69.4 percent in August 1935. The percentages working exactly the code maximum were 0.8 in 1933, 48.8 in 1934, and 35.2 in 1935. Those employed over 40 and under 56 hours amounted to 54.6 percent in May 1933, 12.7 percent in August 1934, and 29.6 percent in August 1935. Whereas there were 21.7 percent working 56 hours and over during the first period, there were none during the second and only 1.0 percent during the last period.

As for females in the North, the percentage having a week of 40 hours and under amounted to 37.3 in May 1933, 94.2 in August 1934, and 80.3 in August 1935, with 6.4, 58.7, and 49.4 percent respectively working exactly 40 hours. Those employed over 40 and under 48 hours amounted to 33.2 percent in May 1933, only 5.4 percent in

August 1934, and 13.8 percent in August 1935. There were as many as 29.5 percent employed a week of 48 hours and over in 1933, as against 0.4 percent in 1934 and 5.9 percent in 1935.

Of the small number of female workers found in the South, the percentage employed a week of 40 hours and under was 38.3 in May 1933, 100 in August 1934, and 76.7 in August 1935. Those working exactly 40 hours increased from 1.1 percent in 1933 to 43.0 percent in 1934, dropping to 36.5 percent in 1935. It is significant that more than one-half of the employees had a week of less than 40 hours in August 1934, while none worked more than the maximum in the code, which may be compared with 61.7 percent employed over 40 hours in May 1933. However, in August 1935, or after the code, there were again 23.3 percent working a week of over 40 hours.

Changes by Occupational Classes

The average weekly hours by individual occupations and occupational groupings are shown in table 9.

In all of the 27 occupational classes shown for male workers in the North, substantial decreases in average weekly hours took place between May 1933 and August 1934. In the 17 individual occupations, hand and machine compositors had the smallest relative decline (11.0 percent) as well as the smallest absolute reduction (4.9 hours), while machine helpers showed the greatest relative decrease (20.8 percent) and the greatest absolute drop (9.5 hours). Both the absolute and relative reductions in the 10 occupational groupings were smallest for the semiskilled miscellaneous direct workers (3.4 hours and 8.8 percent) and largest for the miscellaneous service workers (13.1 hours and 23.6 percent). Whereas in May 1933, out of the 27 occupational classes all but 1 showed averages in excess of 40 and 3 in excess of 50, in August 1934 only 8 occupational classes had averages greater than 40, and most of these were excepted from the 40-hour maximum under the code. Thus, while the average of truck drivers in August 1934 was 42.6 hours, it was still considerably under the code maximum of 48 hours for chauffeurs and truckmen. Likewise, the average of 42.3 hours for miscellaneous service workers was still well within the code limit, as watchmen, who make up most of this group, were allowed to work as high as 56 hours under the code. Similarly, power and maintenance workers, whose average weekly hours decreased from over 50 in May 1933 to less than 42 in August 1934, were as a group also observing the code, as they were permitted to work a week of 42 hours.

As a result of the discontinuance of the code, the average hours per week increased in each of the occupational classes for males in the North between August 1934 and August 1935. The gains ranged from 0.4 hour or 1.1 percent for machine feeders to 4.7 hours or 11.6

percent for skilled miscellaneous indirect workers. In that period 16 out of the 27 occupational classes had averages in excess of 40 per week, the highest being 45.6 for truck drivers.

TABLE 9.—Average weekly hours by region, sex, and occupational class

Region, sex, and occupational class	Average weekly hours			Percentage change		
	May 1933	August 1934	August 1935	May 1933 to August 1934	August 1934 to August 1935	May 1933 to August 1935
<i>North</i>						
Males:						
Compositors, hand and machine.....	44.4	39.5	40.9	-11.0	+3.5	-7.9
Die makers.....	46.0	39.7	41.7	-13.7	+5.0	-9.3
Pressmen.....	45.2	38.0	40.6	-15.9	+6.8	-10.2
Press feeders.....	44.7	37.1	40.0	-17.0	+7.8	-10.5
Pressmen and feeders.....	45.1	38.5	39.8	-14.6	+3.4	-11.8
Machine adjusters and repairmen.....	49.6	40.9	42.5	-17.5	+3.9	-14.3
Cutter feeders.....	45.7	38.7	39.5	-15.3	+2.1	-13.6
Strippers.....	43.5	35.6	38.6	-18.2	+8.4	-11.3
Automatic gluing- and folding-machine operators.....	45.3	39.4	41.5	-13.0	+5.3	-8.4
Automatic gluing- and folding-machine feeders.....	44.8	38.2	39.8	-14.7	+4.2	-11.2
Machine helpers.....	45.6	36.1	39.5	-20.8	+9.4	-13.4
Bundlers and packers.....	44.6	36.3	39.5	-18.6	+8.8	-11.4
Laborers (loaders, unloaders, etc.).....	44.7	37.8	39.1	-15.4	+3.4	-12.5
Machine feeders.....	42.4	36.8	37.2	-13.2	+1.1	-12.3
Truck drivers.....	48.4	42.6	45.6	-12.0	+7.0	-5.8
Die makers' helpers.....	45.6	38.4	41.5	-15.8	+8.1	-9.0
Pressmen's helpers.....	46.8	38.7	40.9	-17.3	+5.7	-12.6
Supervisory employees, office and plant.....	47.8	40.8	42.2	-14.6	+3.4	-11.7
Clerical employees, office and plant.....	48.0	40.5	42.1	-15.6	+4.0	-12.3
Miscellaneous direct workers, skilled.....	47.5	38.9	39.7	-18.1	+2.1	-16.4
Miscellaneous direct workers, semiskilled.....	38.5	35.1	36.3	-8.8	+3.4	-5.7
Miscellaneous indirect workers, skilled.....	47.5	40.6	45.3	-14.5	+11.6	-4.6
Miscellaneous indirect workers, semiskilled.....	46.6	38.4	41.8	-17.6	+8.9	-10.3
Miscellaneous indirect workers, unskilled.....	46.2	38.3	41.2	-17.1	+7.6	-10.8
Power and maintenance workers, skilled.....	51.0	41.7	44.0	-18.2	+5.5	-13.7
Power and maintenance workers, semiskilled.....	50.5	41.5	43.4	-17.8	+4.6	-14.1
Service workers, miscellaneous.....	55.4	42.3	44.0	-23.6	+4.0	-20.6
Total.....	45.7	37.9	40.4	-17.1	+6.6	-11.6
Females:						
Pressfeeders.....	40.9	35.6	37.9	-13.0	+6.5	-7.3
Strippers.....	37.9	36.3	36.7	-4.2	+1.1	-3.2
Automatic gluing- and folding-machine feeders.....	42.7	37.5	38.5	-12.2	+2.7	-9.8
Stitcher operators.....	41.5	35.8	37.0	-13.7	+3.4	-10.8
Machine helpers.....	43.7	35.3	37.4	-19.2	+5.9	-14.4
Bundlers and packers.....	39.1	37.0	39.5	-5.4	+6.8	+1.0
Machine feeders.....	40.5	34.4	37.7	-15.1	+9.6	-6.9
Gluers, folders, etc., hand.....	39.6	36.1	35.7	-8.8	-1.1	-9.8
Clerical employees, office and plant.....	44.4	39.5	40.0	-11.0	+1.3	-9.9
Miscellaneous other employees ¹	42.5	38.2	36.2	-10.1	-5.2	-14.8
Total.....	41.5	36.4	37.6	-12.3	+3.3	-9.4
<i>South</i>						
Males:						
Compositors, hand and machine, and die makers.....	45.6	39.7	42.9	-12.9	+8.1	-5.9
Pressmen.....	46.8	37.9	37.0	-19.0	+2.4	-20.9
Press feeders.....	47.6	38.0	38.6	-20.2	+1.6	-18.9
Strippers.....	48.7	35.0	39.0	-28.1	+11.4	-19.9
Machine helpers.....	49.1	34.9	38.6	-30.3	+10.6	-23.0
Bundlers and packers.....	49.7	36.1	39.0	-27.4	+8.0	-21.5
Miscellaneous direct employees.....	47.9	37.5	40.5	-21.7	+8.0	-15.4
Miscellaneous indirect employees.....	48.4	36.9	42.0	-23.8	+13.8	-13.2
Total.....	48.0	36.9	39.5	-23.1	+7.0	-17.7
Females:						
Miscellaneous machine operators.....	48.1	32.4	35.6	-32.6	+9.9	-26.0
Miscellaneous machine feeders.....	44.2	31.5	37.6	-28.7	+19.4	-14.9
Miscellaneous direct employees.....	42.0	29.6	33.1	-29.5	+11.8	-21.2
Miscellaneous indirect employees.....	40.5	36.1	37.2	-10.9	+3.0	-8.1
Total.....	42.9	33.0	36.2	-23.1	+9.7	-15.6

¹ Includes mostly indirect workers.

Every one of the eight occupational classes for males in the South was employed over 45 hours per week in May 1933, but in August 1934 the highest worked by any one of these classes was slightly under 40. This was due to decreases between the two periods, varying from 5.9 hours or 12.9 percent for hand and machine compositors and die makers to 15.2 hours or 30.3 percent for machine helpers. From August 1934 to August 1935, however, all but one of the occupational classes showed gains, which ranged from 0.6 hour or 1.6 percent for pressfeeders to 5.1 hours or 13.8 percent for miscellaneous indirect employees. At the same time, the average for pressmen declined 0.9 hour or 2.4 percent. In August 1935, three of the occupational classes had an average in excess of 40, the highest being 42.9 hours for hand and machine compositors and die makers.

Each of the five identical occupations among males for which regional comparisons may be made, namely pressmen, press feeders, strippers, machine helpers, and bundlers and packers, worked longer hours in the South than in the North during May 1933. However, the opposite was generally true in August 1935, due to the greater relative reductions shown in the South as compared with the North for the entire period.

The decreases in average weekly hours between May 1933 and August 1934 in the 10 occupational classes for females in the North extended from 1.6 hours or 4.2 percent for strippers to 8.4 hours or 19.2 percent for machine helpers. In May 1933, 7 of these classes had hours in excess of 40, but in August 1934, all of them averaged less than that figure. The discontinuance of the code resulted in rises between August 1934 and 1935 in all but two of the occupational classes, ranging from 0.4 hour or 1.1 percent for strippers to 3.3 hours or 9.6 percent for machine feeders. In fact, in one of the occupations, bundlers and packers, the average in August 1935 exceeded slightly the one in May 1933. The decreases from 1934 to 1935 were 0.4 hour or 1.1 percent for hand gluers, folders, etc., and 2.0 hours or 5.2 percent for miscellaneous other employees. In August 1935 none of the averages in the occupational classes were over 40 hours per week.

In the six identical occupations in the North for which comparisons are possible by sex, namely, pressfeeders, strippers, automatic gluing- and folding-machine feeders, machine helpers, bundlers and packers, and machine feeders, the averages for males exceeded respectively those for females in May 1933. The same was still generally true in August 1935, in spite of the fact that the males in nearly all cases had greater relative decreases than the females for the period as a whole.

In May 1933 the averages covering the four occupational groupings of females in the South varied from 40.5 hours per week for miscella-

neous indirect employees to 48.1 for miscellaneous machine operators. By August 1934, however, their averages declined from 4.4 hours or 10.9 percent for miscellaneous indirect employees to 15.7 hours or 32.6 percent for miscellaneous machine operators, so that the range in the averages was from 29.6 hours for miscellaneous direct employees to 36.1 hours for miscellaneous indirect employees. All of the occupational groupings showed a rise between August 1934 and August 1935, extending from 1.1 hours or 3.0 percent for miscellaneous indirect employees to 6.1 hours or 19.4 percent for miscellaneous machine feeders. Yet, in August 1935, all of the averages were still below 38 hours.

In table B of appendix III will be found the actual distribution of employees by occupational class.

Comparison by Type of Plant

Not only did folding-paper-box workers in consumer plants receive higher average hourly earnings than similar workers in independent plants, but they also had a shorter workweek both before the code was adopted and after it was discontinued.

Average weekly hours in independent plants were 44.9 in May 1933, 37.6 in August 1934, and 39.9 in August 1935. In consumer plants, they were respectively 41.9 hours, 38.0 hours, and 37.3 hours. These averages, it should be noted, are for northern workers only.

As may be seen, in May 1933 the employees in independent plants worked on the average 3.0 more hours per week than those in consumer plants. During the period of the code, the hours worked in the two plants were essentially equalized, this being due to the fact that between May 1933 and August 1934 average weekly hours declined much more in independent plants than in consumer plants. From August 1934 to August 1935, however, while the weekly hours in consumer plants showed another small drop, those in independent plants rose by 1.9 hours or 6.1 percent and exceeded the average for workers in consumer plants by 2.6 hours.

Chapter IV.—Weekly Earnings

Changes in Averages

As already stated, between May 1933 and August 1934 the relatively sizable gain in average hourly earnings was accompanied by a drop in average weekly hours. As a result, the average weekly earnings of employees in the entire industry increased only slightly, that is from \$18.88 to \$19.96, which was a rise of \$1.08 or 5.7 percent. From August 1934 to August 1935 the average earnings per week again advanced, but for a different reason. During this period the increase in hours worked per week was largely responsible for the rise, as the average earnings per hour remained practically at a standstill. The gain was from \$19.96 to \$21.24, an advance of \$1.28 or 6.4 percent. The rise for the entire period under consideration amounted to \$2.36 or 12.5 percent. These changes are shown in table 10.

TABLE 10.—Average weekly earnings by region and sex

Region and sex	Average weekly earnings			Percentage change		
	May 1933	August 1934	August 1935	May 1933 to August 1934	August 1934 to August 1935	May 1933 to August 1935
United States.....	\$18.88	\$19.96	\$21.24	+5.7	+6.4	+12.5
Males.....	21.37	21.83	23.25	+2.2	+6.5	+8.8
Females.....	11.54	13.95	14.62	+20.8	+4.8	+26.6
North.....	19.26	20.28	21.63	+5.3	+6.7	+12.3
Males.....	21.78	22.16	23.68	+1.7	+6.9	+8.7
Females.....	11.76	14.19	14.86	+20.7	+4.7	+26.4
South.....	14.33	15.47	16.08	+8.0	+3.9	+12.2
Males.....	16.24	17.02	17.52	+4.8	+2.9	+7.9
Females.....	9.21	10.90	11.44	+18.3	+5.0	+24.2

The increase in the industry figure between May 1933 and August 1934 was largely due to the fact that the average weekly earnings of females rose \$2.41 or 20.8 percent. This compares with a gain of only \$0.46 or 2.2 percent for males. The decided gain in the average of females was the result of a smaller relative decrease in their average weekly hours and a greater relative increase in their average hourly earnings. Thus, the average hours per week of females dropped 13.0 percent, as against a reduction of 17.4 percent for males, while the average earnings per hour of the former increased 38.8 percent, as compared with an advance of 23.6 percent for the latter. As regards regional comparisons, the gains for male workers in the South were higher than those of male workers in the North, but the earnings of female employees in the North advanced more than did those of female employees in the South.

The increase in the industry average between August 1934 and August 1935 was for the most part due to the rise in the average weekly earnings of males in the North, which amounted to \$1.52 or 6.9 percent. With respect to regional comparisons by sex, the males in the North made larger gains than those in the South, and the females in the North showed a slightly higher absolute but not relative increase than those in the South.

If the entire period from May 1933 to August 1935 is considered, the total increases amounted to \$1.90 or 8.7 percent for males and \$3.10 or 26.4 percent for females in the North and to \$1.28 or 7.9 percent for males and \$2.23 or 24.2 percent for females in the South.

The tendency of the above changes was to increase the regional but to decrease the sex differentials between May 1933 and August 1935. Thus, for males the average weekly earnings in the North exceeded those in the South by \$6.16 in 1935, as against \$5.54 in 1933; likewise, the females in the North received on an average in 1935 \$3.42 more than females in the South, as against \$2.55 in 1933. In the North the differential in favor of the males as compared with the females dropped from \$10.02 in 1933 to \$8.82 in 1935, while in the South the reduction in this differential was from \$7.03 in 1933 to \$6.08 in 1935.

Changes in Percentage Distribution of Employees

Although not so pronounced as in the case of average hourly earnings, the shift of employees from lower to higher average weekly earnings was nevertheless important. This is clearly shown in table 11, which presents the distribution of employees by earnings per week for each of the three periods.

TABLE 11.—Percentage distribution of employees according to weekly earnings by region and sex

Region, sex, and weekly earnings	May 1933		August 1934		August 1935	
	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage
<i>United States</i>						
All employees, earning—						
Under \$4.....	1.9	1.9	1.4	1.4	1.2	1.2
\$4 and under \$8.....	6.4	8.3	2.6	4.0	2.4	3.6
\$8 and under \$12.....	17.5	25.8	6.7	10.7	4.9	8.5
\$12 and under \$16.....	20.0	45.8	23.3	34.0	18.7	27.2
\$16 and under \$20.....	18.3	62.1	26.8	60.8	27.5	54.7
\$20 and under \$24.....	12.8	74.9	14.8	75.6	16.7	71.4
\$24 and under \$28.....	8.4	83.3	8.9	84.5	10.2	81.6
\$28 and under \$32.....	5.8	89.1	4.5	89.0	5.7	87.3
\$32 and under \$36.....	4.2	93.3	4.6	93.6	4.7	92.0
\$36 and under \$40.....	2.3	95.6	2.1	95.7	2.5	94.5
\$40 and under \$44.....	2.2	97.8	1.7	97.4	2.1	96.6
\$44 and under \$48.....	.9	98.7	1.1	98.5	1.3	97.9
\$48 and over.....	1.3	100.0	1.5	100.0	2.1	100.0
Total.....	100.0		100.0		100.0	

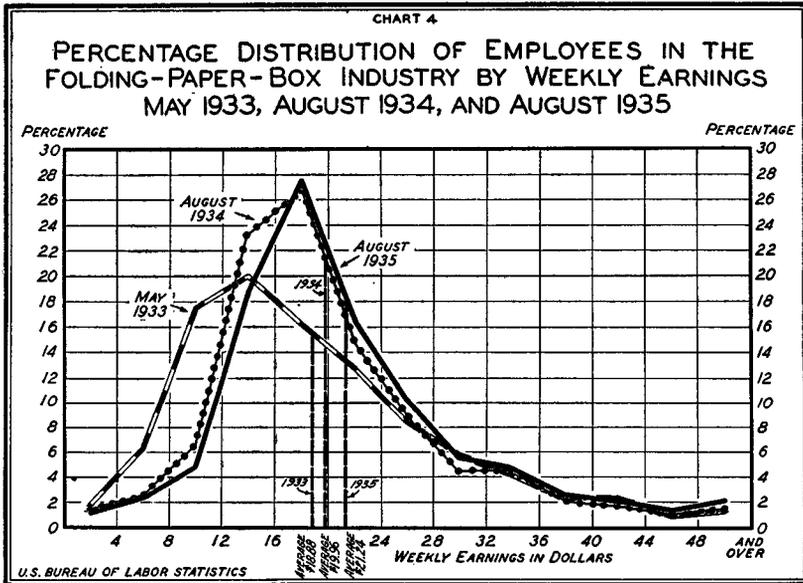
TABLE 11.—Percentage distribution of employees according to weekly earnings by region and sex—Continued

Region, sex, and weekly earnings	May 1933		August 1934		August 1935	
	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage
<i>North</i>						
Males earning—						
Under \$4.....	1.2	1.2	1.2	1.2	0.9	0.9
\$4 and under \$8.....	3.8	5.0	2.1	3.3	1.5	2.4
\$8 and under \$12.....	8.6	13.6	3.9	7.2	2.8	5.2
\$12 and under \$16.....	15.4	29.0	9.8	17.0	6.9	12.1
\$16.....	.3	29.3	10.7	27.7	6.9	19.0
Over \$16 and under \$20.....	19.6	48.9	20.6	48.3	22.1	41.1
\$20 and under \$24.....	16.9	65.8	19.4	67.7	21.0	62.1
\$24 and under \$28.....	11.2	77.0	11.3	79.0	13.2	75.3
\$28 and under \$32.....	8.0	85.0	6.0	85.0	7.6	82.9
\$32 and under \$36.....	5.8	90.8	6.1	91.1	6.1	89.0
\$36 and under \$40.....	3.2	94.0	2.9	94.0	3.4	92.4
\$40 and under \$44.....	2.9	96.9	2.3	96.3	2.9	95.3
\$44 and under \$48.....	1.3	98.2	1.6	97.9	1.8	97.1
\$48 and over.....	1.8	100.0	2.1	100.0	2.9	100.0
Total.....	100.0	-----	100.0	-----	100.0	-----
Females earning—						
Under \$4.....	3.5	3.5	1.6	1.6	2.0	2.0
\$4 and under \$8.....	9.7	13.2	3.3	4.9	4.7	6.7
\$8 and under \$12.....	41.9	55.1	13.5	18.4	9.5	16.2
\$12 and under \$14.....	23.3	78.4	13.6	32.0	11.8	28.0
\$14.....	.3	78.7	21.2	53.2	17.3	45.3
Over \$14 and under \$16.....	9.8	88.5	25.7	78.9	19.9	65.2
\$16 and under \$20.....	7.0	95.5	15.7	94.6	25.4	90.6
\$20 and under \$24.....	2.5	98.0	2.5	97.1	6.6	97.2
\$24 and under \$28.....	1.0	99.0	1.5	98.6	.5	98.7
\$28 and under \$32.....	.5	99.5	.6	99.2	.5	99.2
\$32 and under \$36.....	.2	99.7	.5	99.7	.6	99.8
\$36 and under \$40.....	.....	99.7	.1	99.8	.....	99.8
\$40 and under \$44.....	.2	99.9	.1	99.9	.1	99.9
\$44 and under \$48.....	.....	99.9	.....	99.9	.....	99.9
\$48 and over.....	.1	100.0	.1	100.0	.1	100.0
Total.....	100.0	-----	100.0	-----	100.0	-----
<i>South</i>						
Males earning—						
Under \$4.....	2.4	2.4	2.1	2.1	1.0	1.0
\$4 and under \$8.....	15.0	17.4	4.8	6.9	1.4	2.4
\$8 and under \$12.....	20.8	38.2	6.6	13.5	10.3	12.7
\$12 and under \$14.....	9.5	47.7	15.1	28.6	12.4	25.1
\$14.....	.4	48.1	15.1	43.7	13.7	38.8
Over \$14 and under \$16.....	10.7	58.8	14.1	57.8	16.5	55.3
\$16 and under \$20.....	13.8	72.6	17.3	75.1	21.1	76.4
\$20 and under \$24.....	9.1	81.7	8.5	83.6	6.7	83.1
\$24 and under \$28.....	7.5	89.2	8.2	91.8	8.1	91.2
\$28 and under \$32.....	4.0	93.2	2.1	93.9	2.9	94.1
\$32 and under \$36.....	3.2	96.4	2.9	96.8	2.6	96.7
\$36 and under \$40.....	.8	97.2	1.3	98.1	1.4	98.1
\$40 and under \$44.....	2.0	99.2	1.1	99.2	1.0	99.1
\$44 and under \$48.....	.....	99.2	.5	99.7	.7	99.8
\$48 and over.....	.8	100.0	.3	100.0	.2	100.0
Total.....	100.0	-----	100.0	-----	100.0	-----
Females earning—						
Under \$4.....	7.4	7.4	6.3	6.3	5.4	5.4
\$4 and under \$8.....	34.1	41.5	7.0	13.3	13.2	18.6
\$8 and under \$12.....	34.1	75.6	37.5	50.8	17.3	36.4
\$12.....	.....	75.6	9.4	60.2	16.3	52.7
Over \$12 and under \$16.....	17.0	92.6	32.0	92.2	38.8	91.5
\$16 and under \$20.....	7.4	100.0	7.0	99.2	8.5	100.0
\$20 and under \$24.....	.....	.....	.8	100.0	.....	.....
Total.....	100.0	-----	100.0	-----	100.0	-----

Between May 1933 and August 1934, the relative number of employees in the industry as a whole declined in each of the wage classes under \$12 and increased in each class from \$12 up to \$28. As a

result, the percentage of those earning less than \$12 dropped from 25.8 to 10.7, and the percentage receiving \$12 and under \$28 advanced from 57.5 to 73.8. In the classes paid \$28 and over, the trend varied, resulting in a slight decrease from 16.7 to 15.5 percent (see chart 4).

The decrease in the relative number of workers in the lower wage classes continued even after the code. In each of the wage classes under \$16, the percentages in August 1935 were smaller than in the same month in 1934. Actually, 27.2 percent of the employees earned less than \$16 per week in August 1935, as compared with 34.0 percent in August 1934 and 45.8 percent in May 1933. The greatest reduction between August 1934 and August 1935 took place in the wage



class \$12 and under \$16. On the other hand, every class of \$16 and over showed an increase, there being a total of 72.8 percent earning that much in 1935 as against 66.0 percent in 1934.

In the North the percentage of males earning less than \$16 per week, the full-time minimum under the code, dropped from 29.0 in May 1933 to 17.0 in August 1934. In the latter period, an important concentration took place at the code level, 10.7 percent earning exactly \$16 in August 1934, as compared with only 0.3 percent in May 1933. The relative number earning over \$16 increased only slightly between the two periods. As a result of the decreases in each of the classes under \$16 and the shifting of workers to higher wage classes, 87.9 percent earned \$16 or more per week in August 1935, whereas 83.0 percent in August 1934 and 71.0 percent in May 1933 received that amount or more.

Under the code, the minimum full-time weekly earnings for male workers in the South were \$14. The percentage earning less than that figure per week declined from 47.7 in May 1933 to 28.6 in August 1934. This sharp decrease was largely the result of reductions in the relative number of workers in the wage classes of \$4 and under \$8 and \$8 and under \$12. There was also a decided concentration of employees at the code level, 15.1 percent being paid exactly \$14 in 1934, as compared with only 0.4 percent in 1933. The relative number of workers receiving over \$14 per week did not increase materially between May 1933 and August 1934. Although a slightly higher percentage earned \$14 or more in August 1935 than in August 1934, a decidedly varied trend obtained in 1935.

In the case of females in the North, whose minimum full-time weekly rate was also \$14, the percentage earning less than that amount declined sharply, from 78.4 in May 1933 to 32.0 in August 1934. At the same time, the percentage receiving exactly \$14 increased decidedly, 21.2 percent earning that amount in 1934, as compared with only 0.3 in 1933. An important concentration also occurred in the over \$14 and under \$16 class, 25.7 percent being found here in August 1934, as compared with 9.8 percent in May 1933. Likewise, the percentage receiving \$16 and under \$20 increased from 7.0 in 1933 to 15.7 in 1934. The relative number earning \$20 and over rose only slightly between the two periods. The percentage paid \$14 or over further increased from 68.0 in August 1934 to 72.0 in August 1935, having been only 21.6 in May 1933. The greatest shift of workers between August 1934 and August 1935 was from the \$14 and under \$16 class to the \$16 and under \$20 class.

Female employees in the South had the lowest minimum full-time weekly rate under the code, namely \$12. Between May 1933 and August 1934, the percentage earning less than this minimum declined from 75.6 to 50.8. In 1934, there were 9.4 percent receiving exactly \$12, whereas in 1933 no workers were found in that particular class. During the same period, there was also a decided rise in the percentage earning over \$12 and under \$16, from 17.0 in May 1933 to 32.0 in August 1934. There was, however, only a slight rise between the two periods in the relative number paid \$16 and over. The principal changes from August 1934 to August 1935 were a sharp decline in the wage class \$8 and under \$12 (from 37.5 to 17.8 percent) and an important increase in the \$12 and under \$16 class (from 41.4 to 55.1 percent).

Changes by Occupational Classes

Table 12 presents the average weekly earnings by individual occupations and occupational groupings.

TABLE 12.—Average weekly earnings by region, sex, and occupational class

Region, sex, and occupational class	Average weekly earnings			Percentage change		
	May 1933	August 1934	August 1935	May 1933 to August 1934	August 1934 to August 1935	May 1933 to August 1935
<i>North</i>						
Males:						
Compositors, hand and machine.....	\$28.42	\$30.42	\$32.28	+7.0	+6.1	+13.6
Die makers.....	31.48	32.05	33.98	+1.8	+6.0	+7.9
Pressmen.....	29.38	29.98	32.38	+2.0	+8.0	+10.2
Pressfeeders.....	17.92	18.69	20.25	+4.3	+8.3	+13.0
Pressmen and feeders.....	22.98	23.82	24.76	+3.7	+3.9	+7.7
Machine adjusters and repairmen.....	30.96	29.22	31.15	-5.6	+6.6	+6
Cutter feeders.....	20.31	21.32	21.70	+5.0	+1.8	+6.8
Strippers.....	15.84	17.14	18.65	+8.2	+8.8	+17.7
Automatic gluing- and folding-machine operators.....	24.40	24.01	25.63	-1.6	+6.7	+5.0
Automatic gluing- and folding-machine feeders.....	17.22	16.99	17.60	-1.3	+3.6	+2.2
Machine helpers.....	16.17	16.18	17.89	+1	+10.6	+10.6
Bundlers and packers.....	16.24	17.83	19.38	+9.8	+8.7	+19.3
Laborers (loaders, unloaders, etc.).....	16.10	17.09	17.72	+6.1	+3.7	+10.1
Machine feeders.....	15.15	16.94	17.32	+11.8	+2.2	+14.3
Truck drivers.....	22.54	22.87	24.30	+1.5	+6.3	+7.8
Die makers' helpers.....	15.98	18.47	21.68	+15.6	+17.4	+35.7
Pressmen's helpers.....	19.52	20.51	22.66	+5.1	+10.5	+16.1
Supervisory employees, office and plant.....	35.91	38.20	39.32	+6.4	+2.9	+9.5
Clerical employees, office and plant.....	23.30	23.74	24.88	+1.9	+4.8	+6.8
Miscellaneous direct workers, skilled.....	27.77	27.19	28.00	-2.1	+3.0	+8
Miscellaneous direct workers, semiskilled.....	13.49	16.57	17.61	+22.8	+6.3	+30.5
Miscellaneous indirect workers, skilled.....	35.81	37.77	41.57	+5.5	+10.1	+16.1
Miscellaneous indirect workers, semiskilled.....	20.45	19.99	22.84	-2.2	+14.3	+11.7
Miscellaneous indirect workers, unskilled.....	16.96	17.87	19.83	+5.4	+11.0	+16.9
Power and maintenance workers, skilled.....	30.71	30.24	32.02	-1.5	+5.9	+4.3
Power and maintenance workers, semiskilled.....	22.04	21.14	21.65	-4.1	+2.4	-1.8
Service workers, miscellaneous.....	18.56	18.36	19.36	-1.1	+5.4	+4.3
Females:						
Pressfeeders.....	11.23	13.59	14.53	+21.0	+6.9	+29.4
Strippers.....	11.11	13.87	13.81	+24.8	-	+24.3
Automatic gluing- and folding-machine feeders.....	10.92	13.86	14.87	+26.9	+7.3	+36.2
Stitcher operators.....	11.34	13.57	14.63	+19.7	+7.8	+29.0
Machine helpers.....	10.70	12.94	13.79	+20.9	+6.6	+28.9
Bundlers and packers.....	10.86	14.13	15.04	+30.1	+6.4	+38.5
Machine feeders.....	11.75	12.93	14.53	+10.0	+12.4	+23.7
Gluers, folders, etc., hand.....	10.69	13.62	13.80	+27.4	+1.3	+29.1
Clerical employees, office and plant.....	18.96	19.40	20.10	+2.3	+3.6	+6.0
Miscellaneous other employees ¹	14.61	17.17	18.93	+17.5	-1.4	+15.9
<i>South</i>						
Males:						
Compositors, hand and machine, and die makers.....	26.30	27.68	29.85	+5.2	+7.8	+13.5
Pressmen.....	23.21	23.68	22.92	-2.0	-3.2	-1.2
Pressfeeders.....	14.84	15.65	15.64	+5.5	-	+5.4
Strippers.....	10.05	12.61	13.56	+25.5	+7.5	+34.9
Machine helpers.....	10.65	12.59	13.34	+18.2	+6.0	+25.3
Bundlers and packers.....	10.82	13.07	14.35	+20.8	+9.8	+32.6
Miscellaneous direct employees.....	19.04	19.40	20.09	+1.9	+3.6	+5.5
Miscellaneous indirect employees.....	17.07	17.53	19.32	+2.7	+13.1	+16.1
Females:						
Miscellaneous machine operators.....	10.63	10.31	11.35	-3.0	+10.1	+6.8
Miscellaneous machine feeders.....	10.34	10.34	12.88	-	+24.6	+24.6
Miscellaneous direct employees.....	7.64	9.49	10.19	+24.2	+7.4	+33.4
Miscellaneous indirect employees.....	8.59	12.29	11.33	+43.1	-7.8	+31.9

¹ Includes mostly indirect workers.

Between May 1933 and August 1934, the average earnings per week increased in 19 and decreased in 8 of the 27 occupational classes shown for males in the North. The gains ranged from 1 cent for machine helpers to \$3.08 or 22.8 percent for semiskilled miscellaneous direct workers. The reductions, on the other hand, varied from 20 cents or 1.1 percent for miscellaneous service workers to \$1.74 or 5.6 percent for machine adjusters and repairmen. Most of these decreases were for skilled or semiskilled occupational classes, but the

average weekly earnings in each case were well above the highest minimum full-time weekly rate (\$16) provided under the code. The average earnings per week in all of the occupational classes were higher in August 1935 than in August 1934. Cutter feeders had the smallest relative increase, 1.8 percent, and, with machine feeders, the smallest absolute increase, 38 cents, while die-makers' helpers had the highest relative increase, 17.4 percent, and skilled miscellaneous indirect workers the greatest absolute gain, \$3.80. Whereas in May 1933, the range in average weekly earnings was from \$13.49 for semiskilled miscellaneous direct workers to \$35.91 for office and plant supervisory employees, in August 1935 it was from \$17.32 for machine feeders to \$41.57 for skilled miscellaneous indirect workers.

In all of the eight occupational classes shown for male workers in the South, the average weekly earnings were higher in August 1934 than in May 1933. Miscellaneous direct employees had the smallest absolute gain, 36 cents, as well as the smallest relative gain, 1.9 percent, while strippers had the largest absolute and relative increases, \$2.56 or 25.5 percent. The increases were greatest in the lower-paid occupational classes, such as strippers, machine helpers, and bundlers and packers. Between August 1934 and August 1935, the average earnings per week advanced in six of the eight occupational classes, the smallest increase, 69 cents or 3.6 percent, being for miscellaneous direct employees, and the largest, \$2.29 or 13.1 percent, for miscellaneous indirect employees. During the same period, the average of pressfeeders declined 1 cent and that of pressmen 76 cents or 3.2 percent. In August 1935 the average weekly earnings varied from \$13.34 for machine helpers to \$29.85 for hand and machine compositors and die makers, as compared with a range from \$10.05 for strippers to \$26.30 for hand and machine compositors and die makers in May 1933.

The average weekly earnings increased between May 1933 and August 1934 in all of the 10 occupational classes presented for female workers in the North. The smallest gain, 44 cents or 2.3 percent, was for office and plant clerical employees, the group with the highest average, and the greatest gain, \$3.27 or 30.1 percent, was for bundlers and packers, one of the low-paid occupations. Increases ranging from 1.3 to 12.4 percent took place in 8 of the 10 occupational classes between August 1934 and August 1935. The smallest gain, or 18 cents, was for hand gluers and folders, and the largest gain, or \$1.60, for machine feeders. During this same period, the average of strippers dropped 6 cents and that of miscellaneous other employees declined 24 cents or 1.4 percent. In May 1933, the range was from \$10.69 for hand gluers and folders to \$18.96 for office and plant clerical employees, but in August 1935 the range was from \$13.79 for machine helpers to \$20.10 for office and plant clerical employees.

From May 1933 to August 1934, the trend in the average weekly earnings of the four occupational classes of female workers in the South varied decidedly. Thus, while the average of the miscellaneous machine feeders remained unchanged and that of the miscellaneous machine operators declined slightly, the earnings of the miscellaneous direct employees increased \$1.85 or 24.2 percent and those of the miscellaneous indirect employees advanced \$3.70 or 43.1 percent. Between August 1934 and August 1935, the averages of three occupational classes increased while that of the fourth class declined. The miscellaneous machine feeders showed the greatest gain, namely \$2.54 or 24.6 percent. In May 1933, the range was from \$7.64 for miscellaneous direct employees to \$10.63 for miscellaneous machine operators, but in August 1935 it was from \$10.19 for the former occupational class to \$12.88 for miscellaneous machine feeders.

In three of the five identical occupations of males for which regional comparisons are possible, the percentages of increase in the average weekly earnings between May 1933 and August 1935 were greater in the South than in the North. This tended to reduce the differentials in favor of the North from \$5.79 to \$5.09 for strippers, from \$5.52 to \$4.55 for machine helpers, and from \$5.42 to \$5.03 for bundlers and packers. In the case of pressmen, the South showed a relative decrease as compared with a relative increase in the North, thus causing an advance in the differential from \$6.17 to \$9.46. A rise in the differential for pressfeeders also took place, from \$3.08 to \$4.61, which was due to a larger relative increase in the North than in the South.

In every one of the six identical occupations in the North for which comparisons are possible by sex, the percentage gains in average earnings per week between May 1933 and August 1935 were much greater for females than for males, thereby causing a reduction in the wage differential in five of the occupations, namely, pressfeeders (from \$6.69 to \$5.72), automatic gluing- and folding-machine feeders (from \$6.30 to \$2.73), machine helpers (from \$5.47 to \$4.10), bundlers and packers (from \$5.38 to \$4.34), and machine feeders (from \$3.40 to \$2.79). In the case of strippers, however, the differential rose from \$4.73 to \$4.84.

Table C of appendix III presents the actual distribution of employees by occupational class.

Comparison by Type of Plant

As in the case of average hourly wages, the average earnings per week were also greater in consumer plants than in independent plants in all three periods.

In independent plants, the average weekly earnings were \$19.13 in May 1933, \$20.15 in August 1934, and \$21.57 in August 1935. In consumer plants, the averages amounted to \$20.89 in May 1933, \$22.52 in August 1934, and \$22.80 in August 1935. These averages are for northern workers only.

In May 1933 the lower average hourly earnings in independent plants were accompanied by longer working hours, and as a result the average weekly earnings in this type of plant were only \$1.76 under those in consumer plants. However, between May 1933 and August 1934, the much greater reduction in the weekly hours of independent plants more than offset the larger increase in wages per hour, and as a result in the latter period the differential in favor of consumer plants widened to \$2.37. Between August 1934 and August 1935, the increase in average weekly hours in independent plants more than counteracted the slightly greater increase in average hourly earnings in consumer plants, and consequently the weekly earnings differential in favor of the latter was reduced to \$1.23 in the later period, or 53 cents under the May 1933 differential.

Chapter V.—Personnel Policies and Working Conditions ²³

Employment Policies

The type of worker in folding-paper-box plants does not differ materially from that found in other industries that similarly offer reasonably light and clean work, much of which requires little training. Most of the plants are small, are usually located in industrial centers, and draw their labor from the local community. Thus, in metropolitan New York and eastern New Jersey, Italians and Jews are found in large numbers, a considerable proportion being foreign born. In New England, the Italians, Poles, French-Canadians, and Irish predominate, many of these also being foreign born or of foreign parentage. Poles are also numerous in the Great Lakes area. Many Germans are reported in Pennsylvania and the Middle West, Scandinavians in the Northwest, and Italians in the San Francisco region. In the South, a vast majority of the workers are native Americans, predominantly of English extraction, with Negroes forming about 13 percent of the labor force in August 1934. American citizenship predominates among the foreign-born workers, as does a speaking knowledge of the English language. The average formal education attained is apparently a completion of grade school. Some have one or more years of high school and a few some college work. Males constitute slightly more than three-fourths of the employees.²⁴

Employees in folding-paper-box establishments usually obtain their jobs by making direct application to the plant, upon their

²³ Out of the 204 plants scheduled in this survey, 200 furnished information on personnel policies and working conditions. The 200 establishments had in August 1935 a total employment of 27,170, of whom 8,448 were folding-paper-box employees. These were divided as follows: (1) As to region—176 plants were in the North and employed 25,074 persons, of whom 7,901 were folding-paper-box workers; 24 plants were located in the South and employed 2,096 persons, of whom 547 were folding-paper-box workers. (2) As to type of plant—153 converted paper products plants with 7,180 employees, of whom 4,371 were folding-paper-box workers; 33 paper or boxboard manufacturing and printing establishments with 12,800 employees, of whom 3,506 were folding-paper-box workers; 9 consumer plants with 7,190 employees, of whom 571 were folding-paper-box workers. (3) As to size of plant—104 plants had fewer than 50 employees, 45 had from 50 to 100, 27 from 100 to 300, and 24 had 300 employees or more.

It will be seen that the number of employees for whom wages-and-hours data were obtained in August 1935 amounted to only 7,865 in 204 plants. On the other hand, this part of the survey covered 200 plants with 8,448 employees. The apparent discrepancy is due to the fact that a number of workers were eliminated from the wages-and-hours data, due largely to incomplete information. The figures in this chapter, with the exception of those in tables 21 and 22, are based on a coverage of 200 plants and 8,448 employees.

²⁴ The percentage of women in the wages-and-hours coverage amounted to 25.3 in May 1933, 23.8 in August 1934, and 23.3 in August 1935. About 96 percent of the females during each of the pay-roll periods were employed in the occupations of pressfeeders, strippers, automatic gluing- and folding-machine feeders, stitcher operators, machine helpers, machine feeders, bundlers and packers, hand gluers and folders, and office and plant clerical workers. With the exception of the last-mentioned group, all of these occupations were either semiskilled or unskilled.

own initiative or in answer to newspaper advertisements, or upon information received from a regular plant worker. Only two of the firms scheduled obtained the majority of their employees otherwise, one recruiting them largely from a local vocational school and the other using almost exclusively a Government employment agency. A few other plants occasionally resorted to Federal, State, or city employment offices for temporary labor and in some instances for skilled workers. Private employment agencies were used to some extent for skilled or technical and clerical workers.

Some form of centralized employment was used by three-fourths of the establishments covered. An employment department existed in only about 8 percent of the plants, most of which had 300 workers or more. One-half of the establishments of this size had an employment department. The general manager, superintendent, or some other company official handled all employment in 68.0 percent of the plants. There was no centralized employment in the remaining establishments, the workers here being hired by individual foremen or department heads.

Formal policies governing the selection and placement of employees, separation from service, training, and promotion are not usual in this industry, due doubtless to the prevalence of small plants and the delegation of the duties of employment manager to officials with numerous other duties. A minimum age for hiring, higher than the State minimum, was found in 128 establishments, comprising about 64 percent of those reporting. The minima were 16 years in 35 establishments, 17 in 1, 18 in 86 (of which 3 required females to be 21), 20 in 4, and 21 in 2 (of which 1 enforced the minimum for females only). Maximum hiring-age limits were more or less definitely established in only 22 plants, approximately 11 percent of the total. One of these set the maximum as low as 25 years; two reported 35 years as the usual limit in hiring; five, 40 years; seven, from 43 to 45 years (one of these applied the limit to direct labor only); four gave 50 years; and the remaining three, as high as 55 to 60 years. Two establishments, limiting the hiring age for male applicants to 45 and 50 years, respectively, did not hire females older than 35 years, and a third applied the limit of 45 years to females only. In a few other plants, the management stated that it preferred young active workers, or that the job to be filled determined the age limit, or that the physical condition of the applicant rather than age was the determining factor.

Medical examinations at hiring are not usually required. Only 22 establishments made this a prerequisite, and only 2 of these were small paper-box firms, the other 20 being large consumer plants, paper mills, or printing establishments. These initial examinations were followed up in 8 of the establishments by periodical examinations at intervals varying from 6 to 24 months.

Almost one-half of the plants endeavored to spread available work among the regular employees rather than to lay off any during the slack season. Varied means of doing this were reported, some establishments shortening the work day and week and maintaining their full force during these limited periods of operation, others staggering the work by alternately laying off all employees part of the time, etc. Some plants, which were engaged in the manufacture of standard types of folding boxes, stocked up during slack periods, and in this way they were able to maintain their labor force intact and give their regular workers at least part-time employment.

Neither advance notice nor a dismissal wage at lay-off is generally given in this industry. Only one-third of the plants scheduled gave all or part of their employees some warning. Approximately one-half of the establishments gave no notice whatsoever, and the remaining ones had no definite policy in this respect. The length of the period was 2 weeks in only two of the plants, 1 week in about half of them, and an indefinite period of less than 1 week in the others, many of the latter reporting that they gave as much advance notice as possible. A dismissal wage to all workers in the case of permanent lay-offs was given in one establishment, and eight others paid such a wage to clerical or other salaried employees. The amount ranged from 1 week's to 1 month's pay, often depending on the position held by the person dismissed and the circumstances at the time of the dismissal.

Lay-offs, as well as dismissals for cause, are usually in the hands of the person who hires the workers, although approximately one-half of the plants where foremen discharge workers require that such dismissals be approved by some higher official, such as the manager or the superintendent. The foreman was the discharging official in slightly more than one-third of the 136 establishments that reported on this point, and the superintendent, manager, owner, or other official of the company did the discharging in most of the others. The employment manager was the discharging official in only four plants, as several of those with special employment departments permitted foremen to discharge workers, although sometimes providing for appeal to the personnel manager, works council, or general manager. Provisions for appeal from dismissals by foremen acting without approval of a higher official were made in 16 of the 24 such establishments that reported. Table 13 shows the number of plants that provided for appeal from discharge classified by the various discharging officials.

Less than 10 percent of the folding-paper-box employees covered had either union recognition or employee representation.²⁵ Of the 12 establishments thus affected, 3 had agreements with the International Brotherhood of Pulp, Sulphite, and Paper Board Workers

²⁵ Based on data obtained from 186 plants employing approximately 26,000 workers, of whom about 8,000 were folding-paper-box workers.

and 9 had company unions. Of the three plants with trade-union agreements, two had less than 100 employees and the third one was a very large plant. Among the establishments with company unions, three had less than 100, three between 100 and 500, and three over 500 workers.

TABLE 13.—*Provisions for appeal from discharge in 121¹ plants classified by the discharging official, August 1935*

Discharging official	Total number of plants reporting	Number of plants having provision for appeal
Total.....	121	31
Foreman, alone.....	24	16
Foreman, with approval of manager or superintendent.....	16	7
Manager or superintendent, alone.....	47	7
Employment manager or personnel director.....	4	1
High official, or manager, superintendent, or foreman, with approval of president or other high official.....	30	.....

¹ There were 15 of the 136 plants reporting on discharging official that did not report on provision for appeal.

Training necessary to the work is usually obtained on the job, inexperienced employees starting as general helpers and advancing either to hand work of a more highly skilled nature or to the position of machine feeder and thence to machine operator. Formal training systems were found in only a few large plants and were generally limited to the occupations of compositors, diemakers, and pressmen. In the case of compositors and pressmen, most establishments preferred to draw these workers from the printing industry rather than to train them. Diemakers, an occupation requiring the highest skill and peculiar to this industry, were generally developed either by converting a compositor into a die maker or by training an apprentice or learner to prepare cutting dies. The opportunity for promotion, particularly for women workers, is limited. Few plants have formal promotion plans, and seniority recognition is most casual as a rule.

Working Time

The workweek prior to the code generally consisted of 5½ or 6 days and 45 to 54 hours. During the code period it was predominantly 5 days and 40 hours. The latter hours still prevail, although information obtained for August 1935 indicates that there has been an appreciable shift back to longer scheduled hours and a 5½-day week. A number of plants that were then still actually working only 40 hours or less per week announced that their scheduled or full-time hours were more than 40.

The majority of establishments were working only one shift in August 1935. Only 30 of the 200 plants surveyed operated extra shifts regularly, and then usually for the press and cutting departments only. Twenty of these operated two shifts and the remaining 10 worked three shifts. Seventeen were departments in consumer,

paper manufacturing, or large printing establishments, and 13 were independent paper-box plants. A few others reported as working extra shifts only during short rush periods. Higher wages for the night shift were found in 11 plants, 1 of which operated a second shift only during rush periods. The differential varied, the lowest being about 2½ and the highest 12½ percent, with 6 to 10 percent as the usual figure. Of the 30 plants that regularly operated extra shifts, 5 alternated workers on shifts, usually changing each week, 13 did not rotate, and 12 did not report.

Lunch periods ranging in length from a half hour to 1 hour, on the employee's time, were provided in practically all of the plants reporting. All employees were allowed the time off in 185 plants, but 12 establishments did not extend this privilege to occupations on a shift basis or to night workers. The half-hour lunch period was most common, being reported by more than one-half of the plants. Approximately one-third allowed 1 hour, and most of the others 45 minutes. A few provided 1 hour off to the day shift and one-half hour to the night shift.

Short rest periods, in addition to lunch periods, were provided in nine establishments in the North. All employees benefited in two of the plants, and only female workers in five of them. One gave a smoking period to male employees only, and the ninth establishment failed to report the workers affected. These periods varied in length from 5 to 15 minutes, given in most instances twice each day. All but three plants paid the employees for this time.

Holiday observance is rather uniformly practiced, the usual number celebrated being 5 days in the South and 6 days in the North. All plants observed Christmas and all but two observed the Fourth of July and Thanksgiving Day. Labor Day was observed in 194 plants and New Year's in 187. Memorial Day is the sixth day usually observed in the North. Likewise, a substantial number of northern plants observed Lincoln's Birthday, Washington's Birthday, Columbus Day, and Armistice Day. In some localities, such holidays as Good Friday, All Saints' Day, Jewish New Year's, and the Day of Atonement were observed, as well as local or State holidays, such as Patriots' Day, Bunker Hill Day, Confederate Decoration Day, Admission Day, and Mardi Gras. The number of holidays on which plants were closed is shown in table 14.

The holidays observed were without pay for wage earners in all but four establishments, of which three were paper-box plants with less than 50 employees and the fourth manufactured paper boxes only incidentally and employed over 300 workers. In two of these plants all wage earners were on weekly salaries, and the other two paid the workers hourly rates. Three of the plants gave six holidays and the fourth gave seven. Almost three-fourths of all the plants covered paid their salaried employees for holidays.

TABLE 14.—*Holiday observance in 200 plants by region, August 1935*

Region	Number of plants reporting	Percentage of plants observing—									
		2 days	3 days	4 days	5 days	6 days	7 days	8 days	9 days	10 days	11 days
Total.....	200	100.0	99.5	99.0	95.0	83.0	29.0	12.0	5.0	3.0	1.5
North.....	176	100.0	100.0	99.2	96.9	90.3	30.1	10.8	5.1	3.4	1.7
South.....	24	100.0	95.9	95.9	79.2	29.2	20.9	20.9	4.2	-----	-----

Provisions for planned vacations for wage earners with service eligibility were reported by only 13 of the 200 plants, 10 of which gave vacations with pay and 3 without pay. Of the establishments granting paid vacations, one with less than 50 employees allowed 1 week to all workers, including those on piece rates, after 6 months' service. Another, with 50 and under 100 employees, whose workers were all paid weekly rates, gave all permanent employees 2 weeks of annual vacation. This plant had no definite service requirement. One year's service established eligibility for vacations of 1 week in three of the establishments; two years for 1 week, with an additional week after 10 years' service, in one plant; and 5 years for 1 week in one plant. Two establishments gave vacations to employees with long service only, of 1 and 2 weeks after 15 and 20 years' service respectively. The tenth gave 1 week with pay, but it did not report on service required for eligibility. Full pay was allowed those workers on weekly rates; full-time earnings at the regular hourly rates were paid hourly rate employees by some plants, and average earnings over a period of several weeks by still others. The latter method was also used for computing the pay for vacations of piece workers.

Foremen, shipping clerks, and technical workers and often other salaried plant employees, such as engineers, machinists, diemakers, electricians, truck drivers, elevator operators, etc., were granted paid vacations in 70 of the 200 establishments, and planned vacations without pay in 2 additional plants. Office workers were given paid vacations in still a larger number of the establishments, namely, 114. The length of vacation most frequently allowed was 1 week for the salaried plant occupations and 2 weeks for office employees, although vacations of both 1 and 2 weeks were common for both types of workers. Several establishments graded the length of vacations in accordance with length of service. Employment for 1 year was the usual requisite for eligibility. Although workers in large plants enjoy the vacation privilege more generally than do those in small ones, the practice is prevalent even in the small plants. Table 15 shows in greater detail the information on vacation practices with regard to the types of employees affected, number of days allowed, and length of service for eligibility.

TABLE 15.—Vacations¹ in 200 plants for wage earners and salaried plant employees and office employees, showing length of vacation and service requisite for eligibility, August 1935

Type of employees and region	Number of plants reporting	Total number of plants granting vacations	Number granting vacations to—		Number granting vacations of—				Number requiring previous service of—						
			All employees	Selected salaried plant occupations ²	1 week	10 days	2 weeks ³	Not known	None	6 months	1 year	2 years	3 to 5 years	10 to 20 years	Not known
Wage earners and salaried plant employees:															
Total.....	200	72	13	59	37	2	30	3	9	2	37	4	1	3	16
North.....	176	66	12	54	33	2	28	3	8	1	34	4	1	3	15
South.....	24	6	1	5	4	—	2	—	1	1	3	—	—	—	1
Office employees:															
Total.....	200	114	114	—	45	4	63	2	14	6	59	7	1	2	25
North.....	176	104	104	—	41	2	59	2	10	5	54	7	1	2	25
South.....	24	10	10	—	4	2	4	—	4	1	5	—	—	—	—

¹ Vacations in all plants are with full pay, except as follows: 2 plants give both wage earners and salaried plant employees vacations without pay; 1 plant gives foreman and salaried employees full pay and wage earners vacations without pay; 1 plant gives office employees vacations of 1 week with pay and 1 week without pay; 1 plant gives salaried office workers vacations with full pay and hourly rate office workers half pay.

² Refers to foremen, shipping clerks, technical workers, etc., and in some cases to such salaried plant workers as engineers, machinists, die makers, electricians, truck drivers, elevator operators, etc.

³ 6 plants give plant employees and 13 give office employees vacations of 1 and 2 weeks graded according to length of service. One plant gives 1 day per month with maximum of 2 weeks.

Pay for sick leave to all of their wage earners was provided by 14 of the 200 establishments. Such benefits were also granted in 55 plants to supervisory and other salaried plant employees, and in 106 plants to office workers. About one-sixth of the establishments that did not provide for sick leave with pay reported that their employees were taken care of through health insurance and mutual-benefit associations. A greater proportion of Northern plants granted sick leave with pay to workers than did Southern plants. Very few of the establishments had a definitely established procedure with regard to the amount of sick leave granted with pay, or to the length of service necessary for eligibility.

Methods of Wage Payment

Straight-time rates, piece rates,²⁸ and production bonus systems are all found in this industry, but straight-time rates prevailed in all occupational classes in August 1934 and August 1935. This method of wage payment was used exclusively in 60.0 percent of the plants in 1935. Piece rates for some occupations were paid in 30.0 percent of the establishments, and bonus systems were used in 12.5 percent. There was little difference found in these respects between

²⁸ This represents straight piece rates and also piece rates with a guaranteed time rate.

the consumer and paper-box plants,²⁷ except that production rates (piece work and bonus systems) were used in fewer of the very small plants.

With the introduction of minimum-time rates under the code, there was a decided shift from the production to the straight-time method of wage payment. Approximately 18 percent of the 200 plants surveyed made such a shift. A few establishments that had changed from piece to time rates in 1934 returned to piece rates in 1935. Two plants also discontinued their bonus systems, but these were offset by two other plants that installed such systems.

Piece rates were most frequently used for the occupations of stitcher operators, hand gluers and folders, bundlers and packers, machine feeders, and strippers. Bonus systems were most common for pressmen's helpers, pressmen, automatic gluing- and folding-machine feeders, stitcher operators, machine helpers, pressfeeders, and bundlers and packers. Piece rates were more extensively used in the South, while bonus systems were more prevalent in the North. The extent to which each of the three methods of wage payment was used in the various occupational classes and regions in 1934 and 1935 is shown in table 16.

The average hourly earnings during each pay-roll period were consistently higher under production methods of wage payment than those under straight-time rates, with piece-work earnings generally exceeding bonus earnings. This is shown in table 17 for the seven occupations for which there is a sufficient representation of employees paid by the different methods. Moreover, the average earnings per hour under straight-time rates were lower than the general averages for the occupational classes in all cases except one; namely, that of female stitcher operators in the North for 1933.

A guarantee to piece workers of minimum-time rates was seldom given in 1933. The code provided for such minima, which were continued to some extent in 1935, when about 45 percent of the plants that paid piece rates guaranteed minimum-time rates, in many cases higher than those set by the code. These guarantees affected at least two-thirds of the piece workers in 1935.

²⁷ Out of 47 consumer, paper manufacturing, and large printing establishments, 26 paid straight-time rates only, 12 paid some piece rates, and 11 had production bonus systems covering all or part of their employees. Of the 153 strictly paper-box plants, 94 paid only straight-time rates, 48 paid some piece rates, and 14 had production bonus systems.

TABLE 16.—Classification of employees according to method of wage payment, by occupational class and region, 1934 and 1935

Occupational class and region	Total number of employees		Percent of total that worked at—									
			Straight-time rates		Piece rates ¹		Bonus systems		Combination of straight-time and piece work ²			
	1935	1934	1935	1934	1935	1934	1935	1934	1935	1934		
Occupational class:												
Compositors, hand and machine.....	102	98	91.2	90.8	1.0	1.0	7.8	8.2				
Die makers.....	191	186	93.2	93.0	.5		6.3	7.0				
Pressmen.....	706	694	69.4	71.2	1.6		3.0	28.9	25.7	0.1	0.1	
Pressfeeders.....	1,340	1,313	68.8	68.9	11.6		12.4	19.4	18.1	.2	.6	
Pressmen and feeders.....	309	307	79.0	76.9	8.4		8.8	11.3	12.4	1.3	1.9	
Machine adjusters and repairmen.....	127	127	91.3	89.0				8.7	11.0			
Cutter operators.....	22	23	81.8	87.0	9.1		4.3	9.1	8.7			
Cutter feeders.....	52	51	86.5	82.3	3.9		5.9	9.6	11.8			
Strippers.....	928	868	62.3	65.0	17.0		16.2	19.6	18.2	1.1	.6	
Automatic gluing- and folding-machine operators.....	82	80	74.4	77.5	11.0		7.5	14.6	15.0			
Automatic gluing- and folding-machine feeders.....	367	371	64.3	73.1	7.6		7.3	25.4	16.4	2.7	3.2	
Stitcher operators.....	184	151	41.3	48.4	36.4		31.1	22.3	20.5			
Machine helpers.....	1,069	1,036	71.6	69.9	7.9		8.6	20.1	20.5	.4	1.0	
Bundlers and packers.....	460	418	59.8	59.8	23.5		24.2	16.5	16.0	.2		
Laborers (loaders, unloaders, etc.).....	239	223	85.4	91.5	6.7		3.1	7.9	5.4			
Machine feeders.....	118	116	67.8	78.4	17.8		14.7	11.9	6.0	2.5	.9	
Gluers and folders, hand.....	164	151	59.2	58.9	31.7		31.8	7.9	7.3	1.2	2.0	
Truck drivers.....	73	75	90.4	97.3				8.2	2.7	1.4		
Die makers' helpers.....	51	49	90.2	93.9				9.8	6.1			
Pressmen's helpers.....	76	70	56.6	57.2			1.4	43.4	41.4			
Office and plant supervisory employees.....	250	249	90.8	92.0				9.2	8.0			
Office and plant clerical employees.....	375	367	96.8	96.2	.3		.3	2.6	3.2	.3	.3	
Miscellaneous direct workers.....	69	71	78.3	80.3	5.8		2.8	15.9	14.1		2.8	
Miscellaneous indirect workers.....	252	257	84.1	81.7	5.6		7.4	9.9	10.1	.4	.8	
Power and maintenance workers.....	97	87	96.9	97.7				3.1	2.3			
Miscellaneous service workers.....	162	163	98.8	100.0				1.2				
Region:												
North.....	7,318	7,098	73.1	74.4	8.3		8.4	18.0	16.5	.6	.7	
South.....	547	505	71.5	74.3	27.6		25.1	.9	.6			
Total United States.....	7,865	7,601	73.0	74.4	9.7		9.5	16.8	15.4	.5	.7	

¹ Includes piece workers that are guaranteed minimum-time rates.² Includes workers employed partly on straight-time and partly on piece work.

TABLE 17.—Average hourly earnings under straight-time, piece-work, and bonus methods of wage payment for selected occupations,¹ 1933, 1934, and 1935

Occupation, sex, and region	Total		Straight-time rates		Piece rates		Bonus system	
	Number of employees	Average hourly earnings	Number of employees	Average hourly earnings	Number of employees	Average hourly earnings	Number of employees	Average hourly earnings
1935								
<i>North</i>								
Pressmen, male.....	664	\$0.798	456	\$0.787	6	-----	202	\$0.824
Pressfeeders, male.....	1,017	.506	716	.493	84	\$0.553	217	.535
Strippers, male.....	603	.483	355	.436	96	.613	152	.521
Strippers, female.....	244	.376	176	.360	38	.441	30	.395
Automatic gluing- and folding-machine feeders, female.....	238	.386	143	.366	16	-----	79	.407
Stitcher operators, female.....	132	.396	58	.379	45	.405	29	.414
Machine helpers, male.....	574	.453	430	.442	22	-----	122	.481
Machine helpers, female.....	409	.369	273	.356	43	.393	93	.399
Bundlers and packers, male.....	360	.492	211	.444	81	.610	68	.496
1934								
Pressmen, male.....	647	.789	455	.776	16	-----	176	.821
Pressfeeders, male.....	971	.504	682	.487	100	.553	189	.536
Strippers, male.....	573	.482	341	.445	101	.573	131	.512
Strippers, female.....	233	.382	175	.366	31	.441	27	.419
Automatic gluing- and folding-machine feeders, female.....	249	.370	192	.363	15	-----	42	.386
Stitcher operators, female.....	113	.379	62	.363	26	.380	25	.418
Machine helpers, male.....	585	.448	427	.439	34	.476	124	.474
Machine helpers, female.....	370	.367	249	.358	32	.390	89	.379
Bundlers and packers, male.....	324	.491	194	.450	76	.596	54	.486
1933								
Pressmen, male.....	376	.650	281	.637	1	-----	94	.699
Pressfeeders, male.....	531	.401	395	.386	27	.470	109	.440
Strippers, male.....	312	.364	219	.345	34	.446	59	.397
Strippers, female.....	160	.294	127	.288	22	-----	11	-----
Automatic gluing- and folding-machine feeders, female.....	148	.256	112	.250	6	-----	30	.291
Stitcher operators, female.....	81	.273	29	.275	43	.262	9	-----
Machine helpers, male.....	279	.354	214	.343	8	-----	57	.382
Machine helpers, female.....	227	.245	142	.238	31	.245	54	.261
Bundlers and packers, male.....	193	.364	136	.343	29	.415	28	.427

¹ Averages omitted for groups with fewer than 25 employees.

Bonus or premium systems rewarding production above standard were used in 25 plants and represented a variety of plans. Seven of these were simple time-saving premium plans, two paying the employee his regular rate for all of the time saved, four for one-half of the time saved, and one for one-fourth of the time saved. Another establishment adapted the time-saving principle in different ways for various occupations, the regular base rate for one-half of the time saved being paid to cutting and printing pressmen, the Rowan ²⁸ adaptation being used for the shipping department and certain strippers, and the regular base rate for varying percentages of time

²⁸ Under this system, the bonus percentage is equal to the ratio of time saved to standard time, which is added to the regular time earnings. This amounts in practice to payment for a gradually diminishing amount of the time saved.

saved (the more time saved, the greater the percentage for which payment is made) being paid to strippers and cutting and printing pressfeeders. The same plant paid stitchers double the regular piece rates for the production above standard. In still another plant, all hand workers were paid for all time saved at their base rates, increasing in proportion to the amount of time saved. The latter establishment, together with four others, also paid machine workers (pressmen, feeders, etc.), in addition to the regular time rate, a fixed amount per 1,000 pieces as a bonus for all production above standard. One plant paid straight piece rates up to standard production, and, for standard production and above, it paid a time rate for the standard time plus all of the time saved. Another plant paid time rates up to standard production, plus piece rates when standard production was reached. Efficiency-scale bonus plans were used in three plants, two of which started paying the bonus at 71.0 percent and one at 80.0 percent of the standard efficiency set for the department. One of these had a different plan for strippers, paying them their regular rates for the standard time plus one-half of the actual time taken. "Unit" plans of wage payment, or "constant sharing" plans under which production is measured in terms of man-minutes of work, were used in six more plants. The last establishment used graduated time rates, the employees being graded on production and rated periodically.

A profit-sharing system was reported by one plant. All employees with 6 months' service during the year received as a bonus a share of the net annual profits, prorated according to the individual annual earnings. Bonuses for truck drivers were provided in another establishment, based on no-accident records over a 6-month period. Gratuitous bonuses at Christmas time were given all employees in two additional plants, the amount of bonus varying with the earnings of the individuals.

Overtime pay is of importance in this industry, in view of the fact that almost two-thirds of the establishments in May 1933 and August 1934 and nearly three-fourths in August 1935 showed a considerable amount of overtime²⁹ work. The number of employees for whom overtime was shown in August 1935 comprised about 25 percent of the total scheduled. Approximately the same proportion was shown for the 1933 period, but the limitation of hours by the code reduced the number in 1934 to about 13 percent. The amount of individual overtime was not generally high, particularly during the code period, although as much as 30 hours of overtime per week was noted on pay rolls for August 1934 and 1935, and as much as 50 hours for May 1933 in individual cases.

As noted before, the limitations on overtime hours imposed by the code were not stringent, an 8-hour tolerance over the 40-hour week

²⁹ "Overtime", as used here, refers to any work in addition to the regular scheduled hours per day.

having been allowed to "laborers, mechanical workers, or artisans" engaged in plant operation work, provided time and a third were paid over the 8-hour day and 40-hour week. It was also stipulated that the above employees, not to exceed 10 percent of the labor force, when engaged in such machine and plant cleaning and maintenance work as could not be performed during the regular working hours, could work an unlimited amount of overtime, provided they were paid time and a third over a 10-hour day and a 48-hour week. Engineers, firemen, electricians, chauffeurs, and truckmen were to be paid time and a third after a 9-hour day and 48-hour a week. The hours of the two latter occupations could not exceed 48 per week averaged over 4 consecutive weeks, and the hours of the others could not exceed 42 hours averaged over the same period.

The usual pay for overtime in March 1933 was the regular time or piece rate. Only a few plants paid punitive or extra rates, the common rate being time and one-half.

In August 1934 the general practice was to pay the time and one-third overtime rate fixed by the code. However, noncompliance with regard to this provision was frequent. As many as 40 establishments paid only prorata for overtime, and numerous others computed the overtime on the basis of weekly rather than daily hours as provided by the code.

TABLE 18.—*Classification of plants by extent of overtime compensation and type of plant and region, August 1935*

Type of plant and region	Number of plants reporting	Number of plants compensating for overtime by—							
		Punitive rates to—				Pro rata pay to—			
		Total	All employees	Majority of employees	Special jobs only	Total	All employees	Majority of employees	Special jobs only
Type of plant:									
Consumer plants, etc. ¹	45	36	18	17	1	14	5	5	4
Paper-box plants.....	150	67	45	21	1	92	68	16	8
Region:									
North.....	172	90	56	33	1	93	63	20	10
South.....	23	13	7	5	1	13	10	1	2
Total.....	² 195	103	63	38	2	106	73	21	12

¹ Consumer, paper manufacturing, and large printing establishments.

² Three of the 200 plants scheduled did not permit employees to work overtime, and 2 did not report their policies.

During the August 1935 period punitive overtime rates were still being paid in more than one-half of the plants that reported on this subject, as one may see from table 18. These represented four-fifths of the consumer and nearly one-half of the paper-box establishments. Furthermore, the proportion in the South was slightly greater than in the North. The usual extra rate was still time and one-third, as reported

by 85 of the 103 plants that paid punitive overtime rates. The remainder paid time and one-half. A few paid higher rates for work on Sundays and holidays than on week days. The day was the basis for computing the extra rates in 62 of the plants and the full-time week in 37. Three establishments paid the extra rate for Sunday and holiday work only, and one paid it only for accumulated overtime in excess of 30 hours in 6 months.

Welfare Work

Welfare work in this industry is decidedly limited both in quantity and kind and is generally carried on only in the larger plants. With the exception of insurance plans and safety systems, few services of a welfare nature are provided. Health, social, and athletic activities are negligible.

Insurance was the most commonly used form of welfare work. There were 87 plants (43.5 percent) covering over 70 percent of the 27,170 total employment ³⁰ that had either some form of insurance system or a mutual-benefit association. This type of welfare work was found in one-third of the paper-box factories and in more than three-fourths of the plants not primarily engaged in the manufacture of paper boxes. Nearly all of these establishments (79) had insurance systems, mutual-benefit associations being confined only to several of the larger plants. Table 19 presents a classification of the establishments having insurance plans and mutual-benefit associations, as to type of plant, region, and size of plant in 1935, and shows the kinds of benefits provided.

TABLE 19.—*Classification of plants by kind of insurance as to region and type and size of plant, August 1935*

Region, type and size of plant	Total number of—		Number of plants in which benefits were provided through group insurance				Number of plants in which benefits were provided through mutual-benefit associations						
	Plants	Employees	Total	Death	Sickness	Disability	Accident	Total	Death	Sickness	Disability	Accident	Other
Region:													
North.....	176	25,074	71	66	23	6	16	12	5	10	1	5	3
South.....	24	2,096	8	8	2	1	2	---	---	---	---	---	---
Type of plant:													
Consumer plants, etc. ¹	47	19,990	29	27	15	2	10	10	4	9	1	4	1
Paper-box plants.....	153	7,180	50	47	10	5	8	2	1	1	---	1	2
Size of plant:													
Under 50 employees.....	104	2,512	27	24	5	2	4	---	---	---	---	---	---
50 and under 100 employees.....	45	3,120	17	16	3	---	2	2	1	1	---	1	2
100 and under 300 employees.....	27	4,150	18	18	6	3	5	3	1	3	---	1	---
300 employees and over.....	24	17,388	17	16	11	2	7	7	3	6	1	3	1
Total.....	200	27,170	79	74	25	7	18	12	5	10	1	5	3

¹ Consumer, paper manufacturing, and large printing establishments.

² 4 plants that provided insurance also had mutual-benefit associations that gave additional services.

³⁰ This includes all employees in the consumer, paper, and box-board manufacturing and printing establishments, and not merely the paper-box workers.

The cost of all types of insurance was shared jointly by the company and employees in 53 of the 79 establishments that provided this service; it was paid entirely by the company in 9 plants; the cost was borne by the company with additional benefits paid for by the employee in 7 factories; the entire cost was paid by the employee in 5 plants; and 5 did not report who paid for the cost. The mutual-benefit associations also were partially supported by the company in four establishments.

Only one formal pension system was reported, and this by a large consumer plant. In a few other plants, however, pensions were sometimes given to long-service employees at the discretion of the management.

Organized safety programs were found in 52 plants, a majority of which were consumer, paper manufacturing, or printing establishments with paper-box departments. They ranged in size from 50 to over 2,000 workers. A few plants employed safety directors or engineers; but the work was usually carried on under the direction of the superintendent, plant manager, or other official. In most places the safety program was in the hands of a safety committee, generally made up of supervisors and regular employees, which met periodically to discuss safety practices, study accidents, and find remedies. Committee members were charged with carrying out the program and instructing employees in safety practices. Some plants endeavored to further promote safety work among their employees by rewarding good safety records and penalizing carelessness. Practically all establishments made some provision for first aid, but only the larger plants as a rule had fully equipped first-aid rooms with full-time nurses in attendance. Several establishments have reduced fire hazards by installing sprinkler systems. A number reported that they take an active part in general safety campaigns.

Lastly, active interest in the health of their employees was shown in the reports of a few large plants, which included such services as medical attention by doctors, both at the plant and at home, nurses in plant dispensaries and visiting nurses caring for sick or injured employees at their homes, hospital facilities at reduced rates or free of charge, free clinics, and group hospitalization plans.

Appendix I.—Employment, Man-Hours, and Pay Rolls

The workers in the folding-paper-box industry not only benefited from higher hourly earnings and lower weekly hours but also from sizeable gains in employment and pay rolls. This is shown by table 20 and chart 5, which present the relative changes in employment, man-hours, and pay rolls for identical plants³¹ between the three periods.

TABLE 20.—*Relative changes in employment, man-hours, and pay rolls, for identical plants*

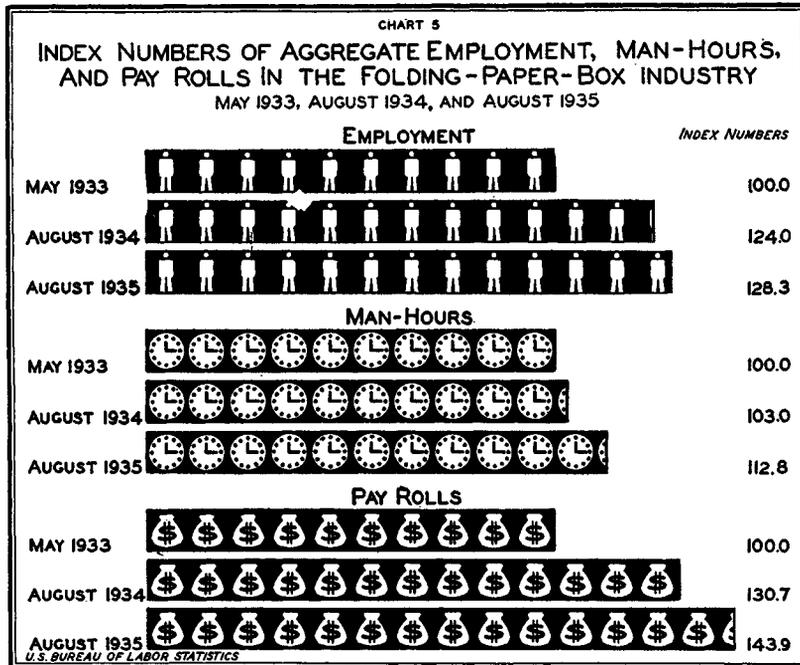
Sex	Percentage change			Index numbers		
	May 1933 to August 1934	August 1934 to August 1935	May 1933 to August 1935	May 1933	August 1934	August 1935
Employment:						
Males.....	+26.8	+4.1	+32.0	100.0	126.8	132.0
Females.....	+15.7	+1.3	+17.2	100.0	115.7	117.2
Total.....	+24.0	+3.5	+28.3	100.0	124.0	128.3
Man-hours:						
Males.....	+4.0	+10.9	+15.3	100.0	104.0	115.3
Females.....	-.6	+5.1	+4.5	100.0	99.4	104.5
Total.....	+3.0	+9.5	+12.8	100.0	103.0	112.8
Pay rolls:						
Males.....	+29.4	+10.9	+43.5	100.0	129.4	143.5
Females.....	+37.5	+6.1	+45.9	100.0	137.5	145.9
Total.....	+30.7	+10.1	+43.9	100.0	130.7	143.9

Most of the increase in employment took place between May 1933 and August 1934, the gain amounting to 24.0 percent. From August 1934 to August 1935, the rise was only 3.5 percent, thus making a total increase of 28.3 percent. The total gain was much greater for males (32.0) than for females (17.2), which would seem to indicate that, with the raising of wages to comply with the code provisions and with the maintaining of nearly all of these increases after the code, the industry preferred to hire men rather than women.

Due to the reduction of weekly hours as a result of the code, the rise in total man-hours was not as great as that in employment.

³¹ Computations based on plants furnishing data for all 3 years have also been made for average hourly earnings, average weekly hours, and average weekly earnings, but the figures obtained were practically the same as already shown in the various tables.

Thus, between May 1933 and August 1934, the increase in man-hours was only 3.0 percent as against 24.0 percent in employment. The opposite was true from August 1934 to August 1935, when the total man-hours advanced by 9.5 percent, as compared with only a 3.5 percent increase in employment. This may be explained by the gain in weekly hours following the discontinuance of the code. However, taking the period as a whole, the increase in total man-hours amounted to 12.8 percent, or less than one-half of the relative rise in employment. As in the case of the latter, the males



showed a much higher gain (15.3 percent) than females (4.5 percent) in total man-hours.

The rise in weekly pay rolls was even more pronounced than in employment, due to the combined influences of the greater employment and man-hours as well as of the higher rates of pay. The largest gain in pay rolls took place between May 1933 and August 1934, 30.7 percent, as compared with an advance of 10.1 percent between the latter period and August 1935. The total rise amounted to 43.9 percent. During the first interval, the females showed the greater percentage gain, due to a larger relative increase in average hourly earnings as a result of the code. The opposite was true during the second interval, but for the entire period the advance for females (45.9 percent) still exceeded somewhat that for males (43.5 percent).

Appendix II.—Technological Processes and Occupational Descriptions

General

The paper-box division of the converted-paper-products industry is in the main composed of three distinct branches, namely, folding-paper-box plants, set-up-paper-box plants, and corrugated- and solid-fiber-shipping-container plants. While the first two types of boxes are used for packaging, the latter type is employed almost exclusively for shipping purposes.

Folding paper boxes differ from set-up paper boxes in several respects: (1) They are made from "died-out" blanks prepared on a press in one operation, instead of from blanks which must first be scored and then either cornered or notched; (2) folding-box blanks may be complete when they leave the printing and cutting presses, or they may be folded and either glued or stitched, while set-up-box blanks must be folded, stayed, or "set", and very often covered or stripped; (3) when delivered to the consumer, folding boxes are "flat", but set-up boxes are fully erected and rigid in form. The fact that folding boxes are compact and readily lend themselves to shipment, while set-up boxes are bulky and can be economically shipped only within a limited radius, makes it possible for folding-box manufacturers to establish their plants either near the source of raw materials or in localities where taxes are low and labor is cheap and plentiful, even though far away from the consuming market. Set-up paper-box manufacturers, on the other hand, must establish their plants near their market.

Because there are relatively few necessary operations in the manufacture of a folding box and because these operations are relatively simple, this industry lends itself readily to mechanization and mass production. During the latter part of the nineteenth century hand operations were gradually replaced, at first by crude machines operated by hand or foot power, and later by more advanced steam-driven machinery. One of the important changes was the substitution of power-cutting presses for hand tools in the preparation of box blanks. The introduction of power-driven machines to glue, fold, and flatten out the boxes also greatly reduced the manufacturing time. Based on a study made by the Bureau of Labor in 1898,³²

³² See Thirteenth Annual Report of the Commissioner of Labor, 1898, vol. 1, pp. 124-125.

it appears that in 1895 it took 10 hours to make by hand 1,000 quart-size flask cartons, while with the aid of machines this time was reduced to slightly less than 4 hours. As an illustration, by using cutting and creasing presses instead of hand knives and rules, a saving of over 90 percent was effected in the time required. Likewise, the introduction of steam-powered folding and gluing machines reduced by over 75 percent the time required to fold and glue a box. The advent of electric motors has also greatly accelerated the mechanization of this industry. At present the industry has machines which will automatically fold, glue, and deliver "flat" and ready for shipment from 20,000 to 70,000 small boxes per hour.

There are in the main three types of folding paper boxes, all of which are made from board blanks which have been "died out" on presses. The first type consists of a single blank which, in order to be converted into the form of a box, need only be so folded that either the folds or the interlocking flaps will hold it in shape. This box, of which a butter container is a good example, is neither glued nor stitched. The second is known as the glued type. Boxes of this kind are either folded flat and the overlapping edges glued together or they may be glued together much in the manner of an end-set box.³³ A razor-blade box is a good example of the first kind of glued box, while special egg and food boxes might be cited as examples of the second kind. The third type, known as the stitched box, is in reality joined together with staples. This box is made from a board blank, the sides of which are folded inward, and the flanges or extensions at the ends of these side sections are lapped over the specially creased and folded ends of the main section of the blank and stapled to them instead of being glued. A stitched suit box is a good example of this type of folding box. Some glued folding boxes and most stitched folding boxes, when opened up, resemble a set-up box. They differ, however, from the set-up box in that they are so creased that they readily collapse, and it is undoubtedly for this reason that they are classified with folding rather than with set-up boxes. It should not be inferred that there are only three possible kinds of folding boxes. In addition to the three more or less standard groups outlined here, there is quite a variety of special boxes similar in some respects to the types described. Some folding-box establishments also manufacture cardboard window-display signs. This product is closely related to folding boxes, as both are made from "died-out" board blanks and are assembled in much the same way.

The chart on page 55 shows in their order of occurrence the different processes involved in the manufacture of folding boxes. It should not be inferred, however, that each process listed is essential and

³³ The main difference between this second kind of glued folding box and an end-set set-up box is that the ends of the former are not rigid, since they are so creased that they readily collapse, permitting the sides to fold in toward the middle of the box.

will be found in all folding-box plants, as manufacturing processes vary with plant practice and with the type of box made.

The processes involved in the manufacture of folding paper boxes (see chart 6) may be roughly classified in three groups: (1) The preparatory group, which includes the various cutting operations, such as sheeting, slitting and guillotine cutting, and the board-lining operations; (2) the printing and die-cutting group, which covers composition and die making, setting up and feeding presses, and stripping "died-out" board; (3) the folding and the gluing or stitching of the "died-out" blanks into box form, supplemented by any other incidental operations that may be necessary. In addition to the above-mentioned processes, which are more or less standard, there are special processes, such as pasting cellophane over windows or openings, coating box blanks, and taping, etc., these being found only in certain establishments engaged in the manufacture of special folding boxes.

Preparatory Group of Operations

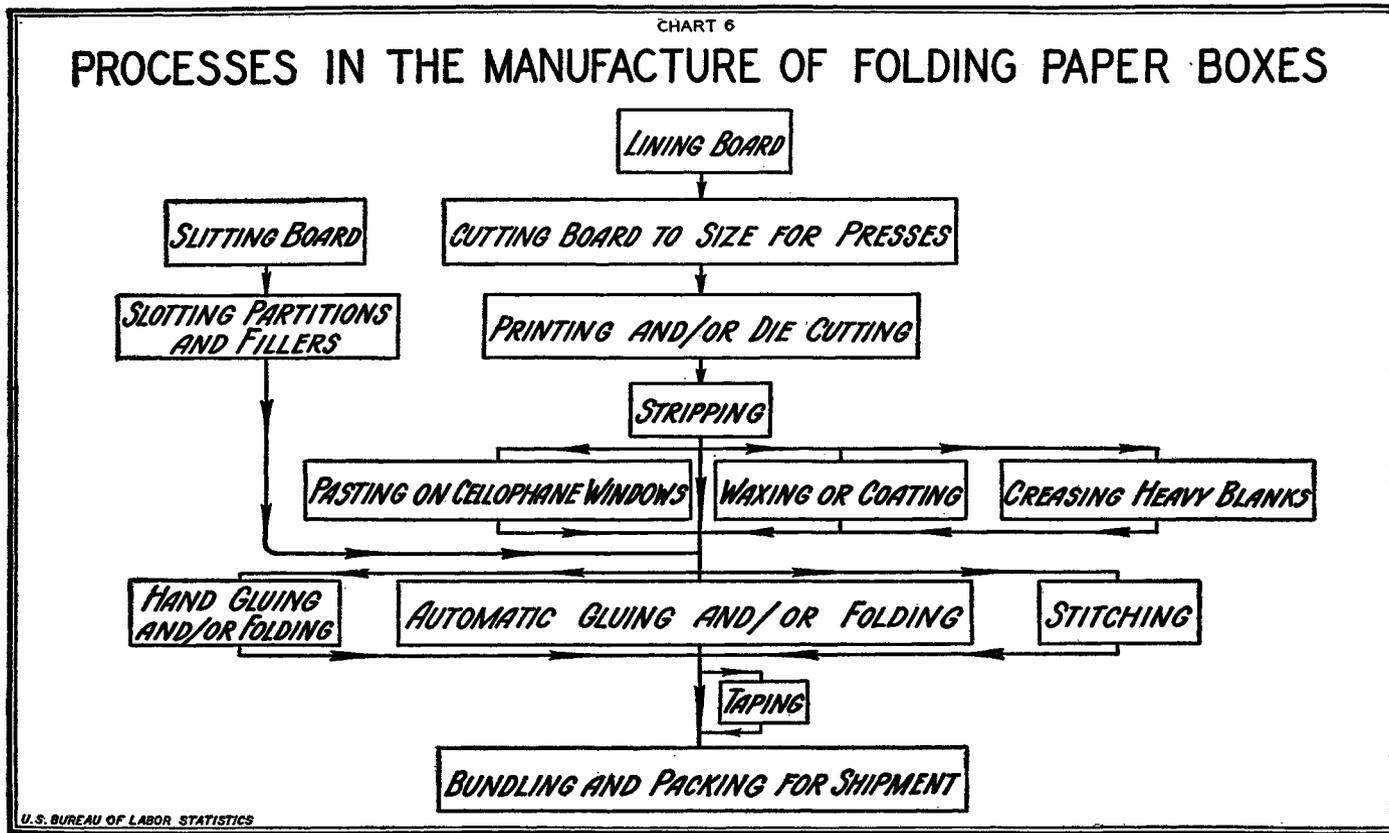
There are relatively few preparatory operations in the folding-paper-box industry, the more important ones being the lining of the board, either to build it up or to give it a more serviceable or a more attractive covering, and the cutting of paper and board into sheets of the desired size. The slitting of paper and board into strips of the desired width and the slotting of box partitions might also be included here. The following descriptions cover only the more or less standard occupations ³⁴ in this group of operations.

Lining-machine operator (liner operator).—Sets up and is responsible for the operation of a machine which applies a paper lining either to one or to both sides of the paper board. After regulating the distance between the pasting pressure rolls to meet the requirements of the board being lined, and after adjusting the end shear to cut the lined board to the desired length, the operator, with the aid of helpers, mounts on the frame of the machine one or two rolls of lining paper, and, if light board is being lined, also mounts one roll of board. If heavy board is being lined, it is first cut into sheets and the sheets are inserted one at a time into the machine by a feeder. After passing the lining paper over a series of rolls, some of which are glue rolls, which apply glue to one side of the paper, the operator lines up the glue-covered paper with the board that is to be lined, and then threads them between a series of heated rolls set up in tandem. The pressure and the heat of these rolls cause the paper to adhere to the board. Also supervises the lining operation, checks over the lined board to make sure that it is lined properly and cut to the desired length, and makes any necessary adjustments. May also prepare the glue used in this machine. Must also know the properties of paper and board and be able to prepare a suitable paste.

This is a responsible job requiring a person who is mechanically inclined and who is accurate and dependable. It takes from 2 to 3 years to develop an all-round liner operator.

Lining-machine feeder (lining-machine operator's helper).—Inserts sheets of heavy board between the rolls of the lining machine, taking particular care to line

³⁴ Terms given in parentheses represent alternative terms also found in the industry.



up each sheet so that it will enter the machine straight. Also assists the operator in a general way, helping him mount rolls of paper on the frame of the machine, fill glue boxes, and do any general work under the direction of the operator.

A careful and accurate person can learn to do this job satisfactorily in from 1 to 2 weeks.

Lining-machine take-off (lining-machine operator's helper).—Works at the back of a lining machine, catching and piling up lined boards which have been sheared to length. This is an unskilled job that can be mastered in a very few days.

Cutting-machine operator.—Cuts paper and board into sheets of the desired size or slits them into strips of the desired width. Sheets are generally cut either on a sheeting machine or on a guillotine cutter, while strips are cut on a slitting machine.

Sheeter operator (sheeter).—Mounts one or more rolls of paper or light board on a rack at the front of the machine and threads the end or ends through the feed rolls, underneath the cylinder which cuts the paper or board into sheets of the desired length, and through the ejecting and piling mechanism. Then starts the sheeter, checks the sheets to make sure that the machine is operating satisfactorily, and takes away the piles of sheets from the back of the machine. In some plants, the operator must also set up his own machine, adjusting the feeding, cutting, and piling mechanisms, and changing and, if necessary, sharpening, the cutting blade.

While an average person can learn the mechanics of this operation in a few days, to become a proficient operator it takes a mechanically inclined person from 3 to 6 months.

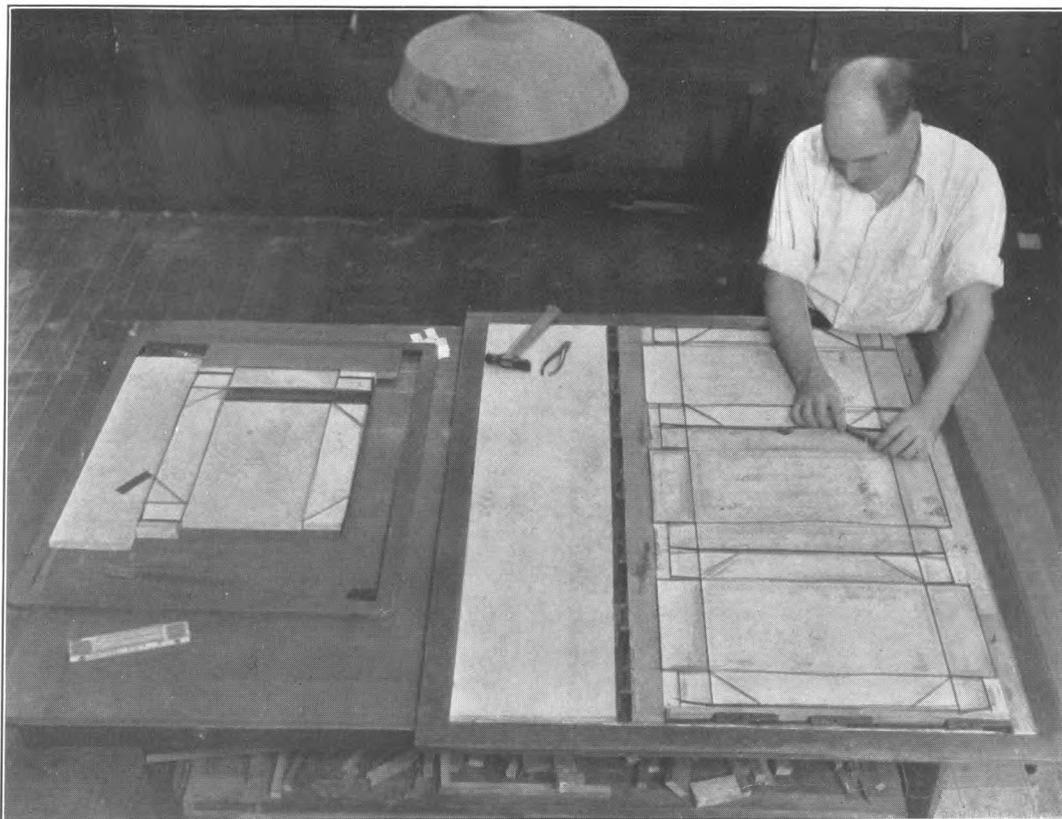
Guillotine-cutter operator (power-knife operator, ream cutter, straight-edge cutter).—Uses cutting machine of the guillotine type to cut paper and board into sheets of the size required by the presses. Places several sheets of board or paper on the feeding table, squares the pack against the back and side gages or guides, and then trips a lever which causes the blade to travel downward cutting one side of the pack to desired size. If necessary, turns the pack around and repeats the operation, cutting the other side to size. In some establishments, the operator must also set up his own machine, adjusting gages or guides, and changing, and, if necessary, sharpening the cutting blade.

The actual operation of a guillotine cutter can be learned in about 2 weeks by a careful and alert person. To develop an all-round operator, capable also of setting up the machine and of reducing cutting waste to a minimum, would take about 6 months.

Slitting-machine operator (board-stock slitter, Seybold operator).—Cuts rolls of paper or light board into strips of the desired width. Mounts a roll of paper or board on the machine frame, feeds the open end between the slitting rolls, and starts the strips winding on spools set up on revolving shafts at the back of the machine. Sees that the machine is operating satisfactorily, that it is supplied with paper or board, and that spools are replaced when full. May in some plants be called upon to set up his own machine, adjusting the feeding and winding mechanism, placing the cutting disks on shafts, and spacing them properly.

A careful person can learn to perform this operation in about 2 weeks. However, it takes a mechanically inclined person 6 months or more to become a proficient operator, capable also of setting up the machine and of so spacing the cutting disks as to obtain the greatest number of usable strips from a given width of paper or board.

Filler-machine operator (automatic-slitter operator).—Mounts rolls of light board on the feeding frame and inserts the ends into the machine, which automatically



Courtesy of The Bartgis Bros. Co.

PLATE 1.—ASSEMBLING "CUTTING DIES."



Courtesy of The Bartgis Bros. Co.

PLATE 2.—CUTTING AND CREASING PAPER BOARD ON PLATEN PRESS.

slots the board and cuts it into strips, assembles and interlocks the many strips into a complete partition or filler, and flattens it out ready to be inserted into a box. May also set up and adjust machine.

An alert person can learn the mechanics of this job in about 1 week, but it would take him from 3 to 6 months to become an all-round operator.

Printing and Die-Cutting Group of Operations

This group includes all operations having to do with the printing and the "dieing-out" of folding-box blanks. "Dieing-out" consists in cutting a box blank to desired size and shape and creasing it along the folding lines, the cutting and creasing being performed in one operation. It also includes the cutting out of any openings or slits within the body of the blank.

The printing and the "dieing-out" of folding-box blanks are closely related operations. Both are performed either separately or jointly on platen, cylinder, or rotary presses. The occupations incidental to these operations may also overlap, as the same person may be both a compositor and a die maker, or he may make-ready the presses for both operations, or he may feed both printing and cutting presses. In small establishments, printing and "dieing-out" occupations may be further consolidated, as compositors and die makers may also make-ready the presses; make-ready men may also feed the presses, and the same person may prepare the chase, set it up on the press, and feed the press. The descriptions of the more or less standard occupations follow.

Compositor (Ludlow operator, stone man, hand-type compositor, machine-type compositor).—Prepares forms for the printing press. First takes an exact impression of the cutting die and uses it as a guide in lining up the type and plates in the chase. Next sets up type or plates or both, spaces them in the chase in relative position with the cutting outline, and secures them in the chase by means of quoins. Then takes a proof of the lay-out and either checks it himself or has it checked by a proofreader. In small plants may also set up the form on the press and may even operate the press. Likewise, in small establishments, the work of composing and that of die making are often performed by the same person, who may set up type, assemble dies, lock up the forms, and in some instances set them up on the press and also operate the press.

A compositor must be a careful, accurate, and creative worker. Must have good vision, judgment, and be able to read copy. The training required varies with plants, with the nature of the work, and with the duties of the compositor. The length of the training period ranges from 1 to 5 years. In some establishments, where the composing work is on a par with that of a regular printing establishment, the compositor may serve a formal apprenticeship, or, where the work is less complicated, may gain experience in the printing room either by helping on the presses or assisting a regular compositor.

Compositor's helper (compositor's assistant).—Assists the compositor, keeping him supplied with type, plates, forms, and any necessary materials, delivering assembled forms to the presses, and storing and recording forms and plates. Under the direction of the compositor, may also assemble type, lock assembled type and plates in chases, take proofs of assembled forms, and perform any

other work as directed. May also break up forms which no longer are needed, storing the type, plates, and other materials.

A compositor's helper must be alert, accurate, dependable, observant, and willing to learn. Should also be able to read copy. It takes from 2 months to 1 year to develop a good helper.

Die maker (die setter, die-form builder).—Prepares the dies used on the cutting and creasing presses. Cuts to length and bends to shape the cutting and creasing metal strips or rules and, following an outline, sets up these rules in the die, holding them in place by means of metal or wood furniture. Then securely locks the die in the chase. An assembled die generally outlines the shape of several folding-box blanks. The die maker also takes an impression of the die and checks it against the outline or sample. In some plants the die maker may have to do the composing work, set the form on the press, and operate the press.

A die maker must be careful, accurate, and analytical. Manual dexterity and ability to read prints are also necessary qualifications. The training period for this job varies greatly, depending on plant practices, the range being from 1 to 6 years. May serve a formal apprenticeship or gain experience by working on the presses and also as a die-maker's helper.

Die-maker's helper (die-maker's assistant).—Assists the die maker by supplying metal and wood furniture, cutting and scoring rules, forms, and any other necessary materials. May cut blocks to size and shape and rules to length, take samples, deliver assembled dies to the cutting presses, receive used dies from the presses and either take them apart, or, if they are to be used again, store them and make a record. Under the direction of the die maker he may even assemble simple dies.

A die-maker's helper must be alert, dependable, accurate, observant, and willing to learn. Should be able to read prints. It takes from 2 months to 1 year to develop a good die-maker's helper.

Pressman (cutting pressman, printing pressman, rotary pressman, box pressman, Cottrell pressman, cylinder pressman, flat-bed pressman, platen pressman, Thompson pressman, set-up pressman).—Prepares printing and cutting presses. Places the form on the press, lines it up, secures it in place and adjusts the press for clearance. In case of cutting presses, "dies-out" a board blank, cuts this blank into sections, and pastes these sections on the platen or the cylinder in such a manner as to form a groove at the point where each cutting and each creasing rule contacts the platen or cylinder. The pasted blank serves the purpose of a female die, the cutting die being the male die. On printing presses the make-ready man must also adjust the ink rolls and plates. The duties of the pressman also include the setting of the feeding guides on hand-fed presses and of the feeding mechanism on automatic presses, the running off and the checking of a few board blanks, the frequent checking of blanks to insure the proper operation of the press, and the making of any necessary adjustments. Upon completion of a run removes the chase from the press. Also oils the press, makes minor repairs, and, in some small establishments, may even feed the press.

A pressman must be mechanically inclined, familiar with presses, alert, careful, and accurate. It takes from 1 to 6 years to develop an all-around pressman, the training depending on plant practice, the type of presses used, the nature of the work, and previous experience. May serve an apprenticeship or gain experience from working on presses as a feeder or as a pressman's helper.

Pressman's helper (cub pressman).—Assists the pressman in preparing the presses. Helps place the chase on the press and make adjustments. Runs a few samples and performs any other general work in connection with the setting up of the presses. May also, under the supervision of the regular pressman, prepare small presses on simple jobs.



Courtesy of Hummel and Downing Co.

PLATE 3.—STRIPPING WASTE EDGES.

A helper should be mechanically inclined, alert, careful, accurate, dependable, and willing to learn. It takes from 3 to 6 months to train a good helper, depending on the type of presses used and the nature of the work.

Feeder, presses (Cottrell-press feeder, cutting-press feeder, cylinder-press feeder, platen-press feeder, pressfeeder).—Either inserts sheets one at a time into the press or, in the case of automatically-fed presses, supplies the feeding mechanism with sheets. Must also remove faulty sheets and any foreign matter which might injure the type or die and report any mechanical trouble to the pressman.

A feeder must be alert, accurate, and careful, and on hand-fed presses have muscular coordination. Training ranges from 1 month on small presses to 1 year on a complicated press.

Stripper, hand (breaker, folder, peewee, picker, scrapper, sheller, waster).—Takes stacks or piles of "died-out" board sheets, sorts them to pattern, jogs or lines up the sorted packs, and places them on skids or on a stripping table. With a hammer or any other appropriate hand tool, breaks off the waste edges, separates the individual body blanks, piles them up, and in some cases smooths rough edges either with sandpaper or with a brush.

A stripper must be very careful, as blanks are easily damaged when removing the waste edges. A careful person can learn this job in about 2 weeks, but it takes about 6 months to become proficient.

Waste baler (scrap baler, waste-bundling boy, machine-waste baler).—Collects waste board and paper, loads it into a machine which presses it into a compact bale, ties the bale with wire or cord, removes it from the machine, and either piles it up or trucks it to the shipping department.

Unskilled job which an able-bodied man can learn in a few hours.

Fly-boy, miscellaneous presses (stock booster, press catcher, stock flyer, jogger, press helper).—Takes away piles or stacks of sheets from the back of the presses, stacks them up on skids or trucks, and may even deliver them to the next operation. Also supplies the presses with board stock. May also jog or align "died-out" blanks for stripping or printing.

This is an unskilled job which a person can learn in a short while, the training ranging from a few days to 1 month, depending on the type of presses and on the duties to perform.

Folding and Gluing or Stitching Group of Operations

This group includes the bending and the further creasing of the blank, and the folding and gluing or stitching of this blank. It also includes any special operations such as pasting cellophane, coating blanks, taping, etc. The occupational descriptions are as follows:

Corner-breaker operator (bar creaser, welt creaser, creasing-machine operator, score-breaker-machine operator).—Feeds cut and creased box blanks into a machine, which either bends them along the creased lines or further creases them in preparation for folding and gluing or stitching operations. Corner breaking not only keeps the board from cracking when it is folded, but it also facilitates the mechanical folding and gluing of boxes and prevents them from clogging the machines. May also set up the machine.

Corner breaking is a rather simple operation, which a careful person could learn in a few days.

Folder and gluer, hand (hand bender, hand cellophane paster, hand breaker, hand creaser, glue-wheel operator).—Takes a prepared box blank, applies glue to one edge either with a hand brush or by passing it over a glue roll, folds the blank superimposing the overlapping edges that are to be glued, and presses these edges together either by hand or by feeding the box through rolls which press the edges together and also flatten out the box.

A hand folder and gluer must be careful and neat. This work can be learned in about 1 month.

*Automatic folding- and gluing-machine operator (egg-carton-machine operator, pail operator, Brightwood operator, automatic-folder operator).—*Feeds prepared box blanks into a machine, which automatically either only folds them or both folds and glues them. Keeps the automatic feeding mechanism supplied with box blanks. May also remove the glued boxes from the back of the machine. Examines boxes casually and reports any mechanical trouble to the adjuster. May also tie up the bundles as delivered and counted by the machine. In some plants the operator must also set up the machine to meet the requirements of the type of box run, adjusting the feeder, the glue roll, the folding bars, the conveyor belts, the pressure rolls, and the automatic counter. Must also supply the machine with glue and keep it at the proper temperature and consistency. May also have to make minor repairs on the machine.

The feeding and taking-off operations on an automatic folding and gluing machine are rather simple and can be learned in a few days by an alert and careful person. To become an all-round operator, who can also set up and keep the machine in good running order, takes a mechanically inclined person from 1 to 3 years.

*Stitching-machine operator (machine wire stitcher).—*Uses a power-driven machine to staple together the sides and the ends of the box. The operator or a helper first folds the box blank in such a manner that the side extensions or flanges overlap the ends. The operator then places each folded end of the blank over an anvil and trips a lever which causes the machine to drive a staple through the overlapped flanges and ends, binding them together. After stitching both ends, the operator or a helper may next flatten out the stitched box by means of rolls or a press. The stitchee operator may also set up the machine, make necessary adjustments, and supply it with wire or staples.

A careful person can learn to operate a stitching machine in from 1 to 2 weeks, but to become an all-round stitchee takes from 6 months to 1 year.

*Taping-machine operator (machine binder).—*Mechanically applies a cloth tape handle to small boxes or pails. Inasmuch as the machines are automatic and are generally set up by skilled mechanics, the duties of the operator consist only in keeping the feeder hopper filled with boxes or pails, inspecting them after taping, and placing them on trucks. Sees that the machine is operating satisfactorily, and in some establishments also makes minor adjustments.

An average person can learn the mechanics of this operation in 1 day and become a proficient operator in about 1 month.

*Taper, hand.—*Uses needle to insert tape or ribbon through certain perforations in special boxes (hat, suit, etc.), secures these tapes to the box, and cuts tape to desired length.

Hand taper must be neat and have nimble fingers. May become good hand taper in a few days.

*Eyelet-machine operator.—*With the aid of a power-driven punch press, puts an eyelet on one edge of the box cover, and, with a similar press, puts a metal tongue on the other edge. Also keeps the machine supplied with these eyelets and tongues. In order to close the box, the tongue will be pushed through the eyelet and bent over, locking the box.

An alert and careful person can learn the mechanics of this job in a few days. To become a proficient operator, however, it would take from 1 to 3 months.

*Cellophane-machine operator.—*Applies a cellophane covering over certain openings or perforations in each box. After setting up a roll of cellophane in the machine, threading it through the machine and supplying the machine with glue, the operator starts the machine and feeds into it, one at a time, cut and creased

box blanks. The machine automatically glues a strip of cellophane over the opening. Cellophane windows are sometimes pasted on by hand table workers.

This operator must be careful, know the machine thoroughly, and be able to set up and adjust it as well as feed it. It takes a person about 6 months to become an all-round operator.

Coating-machine operator (graining-machine operator, paraffining-machine operator, varnishing-machine operator, waxing-machine operator).—Applies a water-proof coating, such as wax, paraffin, or silicate to certain kinds of folding-box blanks, particularly those which will be used for foods, such as butter boxes. Either feeds the machine by hand, or, if the machine be automatic, fills the feeder hopper with blanks, and also takes away coated blanks from the back of the machine. In some plants, sets up his own machine, adjusting the feeding and coating mechanism, maintains at the proper temperature both the coating and cooling baths, and keeps the machine in good running order.

The mechanics of this job can be learned in about 2 weeks, but it takes about 6 months to train a man who can also set up the machine, prepare the coating bath, and properly coat box cartons. A coating operator must be careful and dependable.

Miscellaneous Occupations

The following group includes a number of miscellaneous occupations which are usually found in folding-box establishments. These occupations do not appear in the previous sections, as they may be common to more than one group of operations. All of these are "indirect" occupations. Their descriptions follow.

Machine take-off or catcher (catcher-off, counter, grabber, pick-up, taker-away, back-tender, nester, off-bearer, packer [catching], Brightwood crusher).—Works at the back of any one of the various machines, taking off, examining, and reporting flaws to operator, counting, and piling or tying or wrapping finished or partly finished boxes. The catcher may also supply machine with blanks, deliver machined blanks or finished boxes, relieve feeder on some machines, or do any other necessary work.

This is an unskilled job. An average person can learn the work in from a few days to 1 month, depending on the machine or machines and on the duties to be performed.

General helper (carton assembler, stock booster, box breaker-down, inserter egg-carton fillers, floor girl, sticher's helper, handyman [stocking], stock piler, stock repiler, stock stacker, stock handler, stocker, tender, hand trucker [stocking], utility man [stocking]).—Does general work about the plant, handling stock, supplying boards or blanks to feeders and removing them upon completion of the operation, folding and preparing box blanks for certain machines, such as the folding and gluing, stitching, etc., flattening out glued or stitched boxes either by hand or on rolls or presses, inserting fillers in boxes, jogging or lining up packs of blanks, or doing any general work on the floor.

The duties of a general helper are unskilled, and an average person can learn to do any one of them in a few days. Due to the wide variety of duties which a helper might be called upon to do, it takes a person from 1 to 2 months to become proficient in all of them.

Machine adjuster (automatic gluing- and folding-machine adjuster, Brightwood-machine adjuster, egg-carton-machine adjuster, pail-machine adjuster, machinist on folding and gluing machine, folding- and gluing-machine set-up man, adjuster and repairman on machines, adjusting machinist).—Is a skilled mechanic who adjusts and keeps in repair the various machines used in the plant. May specialize on certain types of machines or may be an all-round mechanic able to adjust and repair all machines.

An adjuster must be mechanically inclined, familiar with machinery, accurate, and dependable. It takes from 1 to 4 years to develop a good repairman and adjuster, the length of the training depending on whether required to repair only certain machines or all machines.

Bundler and packer for shipment (bander, case gluer, shipper's helper, tying-machine operator, wrapper).—Takes a specified number of boxes and either wraps or ties them in a bundle for shipment or places them in a shipping container and seals same with tape when full. Bundles may also be tied by machine, the packer placing the bundle on a machine which ties it mechanically. The packer also places the name and address of consignee on package, either by stenciling or pasting an identifying label.

A packer must be accurate and able to read and write. It takes from 4 to 6 weeks before such a person can do the work well; i. e., be able to read job tickets, know stock, fill orders, and keep records. The duties of a packer vary widely and of necessity the qualifications and training also vary.

General plant laborer (broke picker, clean-up laborer, yard maintenance man, shipping loader, shipping unloader, warehouse laborer).—Does general work about plant, sweeping up, gathering waste and delivering it to scrap baler, moving materials between departments, loading shipments and also unloading incoming shipments of raw materials. This is a common-labor job which a person can learn to do in a day or so.

No attempt has been made to describe here recurrent occupations, i. e. those which are common to more than one industry, such as supervisory employees, clerical workers, plant maintenance and service employees, etc. Practically all of these occupations are "indirect", and they have been covered by the Bureau in other glossaries. They have, however, been included in all tabulations in this article.

Classification of Occupations Used

The descriptions given above were limited to the more or less standard occupations in the industry. No attempt has been made here to describe the remaining occupations, some of which, while peculiar to this industry, were found only in a few specialized plants and others were such as generally appear in other industries.

All occupations found in this industry were included in the presentation of the wages and hours data on an occupational basis. Separate figures were shown for such individual occupations as had a sufficient number of employees. The remaining occupations, however, were classified into related groups, and figures were presented for each group. The following list gives the classification of occupations by sex and region used, enumerating in each instance the specific occupations which go to make up the group:

North

Males:

Compositors, hand and machine.

Die makers.

Pressmen, include printing, cutting, and creasing pressmen.

Pressfeeders, include printing, cutting, and creasing pressfeeders.

Pressmen and feeders, include only those workers who both set up and feed printing, cutting, and creasing presses.

Males—Continued.

Machine adjusters and repairmen.

Cutter feeders.

Strippers.

Automatic gluing- and folding-machine operators, who both adjust and feed machines.

Automatic gluing- and folding-machine feeders, who only feed machines.

Machine helpers, include miscellaneous helpers on machines.

Bundlers and packers, include only those found in shipping department.

Laborers, loaders, and unloaders, include common laborers as well as unloaders of supplies and loaders of finished products.

Machine feeders, include the workers who are primarily feeders, such as bar-creaser operators, cellophane-machine operators, corner-breaker operators, eyelet-machine operators, filler and slotter operators, label-machine operators, liner feeders, miscellaneous machine feeders, paraffine-machine feeders, spot welders, staplers, taping-machine operators, and tray-machine operators.

Truck drivers.

Die-makers' helpers.

Pressmen's helpers, include printing, cutting, and creasing pressmen.

Supervisory employees, office and plant, include all kinds of office supervisors, plant foremen, and shippers.

Clerical employees, office and plant, include all kinds of office and plant clerical employees, such as stockkeepers, storekeepers, weighers, typists, key punch operators, office-machine operators, stenographers, and switch-board operators.

Miscellaneous direct workers, skilled, include all miscellaneous operators who both adjust and feed machines, and, for males in the North only, cutter operators.

Miscellaneous direct workers, semiskilled, include stitcher operators, and hand folders and gluers.³⁵

Miscellaneous indirect workers, skilled, include artists, engravers, color or ink mixers, proofreaders, battery men (electrotype), jig-saw men, back-up men (electrotype), wax molders (engraving), draftsmen, compositors and die setters, type setters and die makers, type setters and pressmen (printing), compositors and pressmen (printing), stone and lock-up men, compositors and make-ready men, die setters and pressmen and compositors, die makers and pressmen (printing and cutting).

Miscellaneous indirect workers, semiskilled, include adhesive makers, bundle compressors, electric truckers, tractor drivers, floormen (electrotype), ink-roll coaters, product inspectors, plate finishers' helpers, engravers' helpers, stereotypers, tar-house operators, product testers, and wax melters (engraving).

Miscellaneous indirect workers, unskilled, include waste balers, press cleaners, ink-mixers' helpers, stockroom men, truck drivers' helpers, apprentices, and learners.

Power and maintenance workers, skilled, include blacksmiths, carpenters, steam engineers, electricians, millwrights, painters, pattern makers, tin-smiths, toolmakers, and welders.

Power and maintenance workers, semiskilled, include firemen, electricians' helpers, machinists' helpers, and machinery oilers.

Service workers, miscellaneous, include cooks, elevator operators, errand boys, janitors, matrons, nurses, and watchmen.

³⁵ See corresponding occupations shown for females in the North.

Females:

Press feeders.³⁶

Strippers.

Automatic gluing- and folding-machine feeders.³⁶

Stitcher operators.

Machine helpers.³⁶

Bundlers and packers.³⁶

Machine feeders.³⁶

Hand folders and gluers, include disc inserters, sample makers, and hand tapers.

Clerical employees, office and plant.³⁶

Miscellaneous other employees, include pressmen,³⁶ laborers, loaders and unloaders,³⁶ office and plant supervisory employees,³⁶ skilled miscellaneous indirect workers,³⁶ semiskilled miscellaneous indirect workers,³⁶ unskilled miscellaneous indirect workers,³⁶ and miscellaneous service workers.³⁶ This group also includes two occupations for which only a few employees were reported, namely, pressmen and feeders³⁶ and automatic gluing- and folding-machine operators.³⁶

South

Males:

Compositors, hand and machine, and die makers, include both hand and machine compositors and die makers.

Pressmen.³⁶

Pressfeeders.³⁶

Strippers.

Machine helpers.³⁶

Bundlers and packers.³⁶

Miscellaneous direct employees, include occupations listed under skilled miscellaneous direct workers;³⁶ also include pressmen and feeders,³⁶ cutter feeders, automatic gluing- and folding-machine operators,³⁶ automatic gluing- and folding-machine feeders,³⁶ stitcher operators, machine feeders,³⁶ and hand folders and gluers.³⁵

Miscellaneous indirect employees, include occupations listed under skilled miscellaneous indirect workers,³⁶ semiskilled miscellaneous indirect workers,³⁶ and unskilled miscellaneous indirect workers;³⁶ also include machine adjusters and repairmen, laborers, loaders, and unloaders,³⁶ truck drivers, die-makers' helpers, pressmen's helpers,³⁶ office and plant supervisory employees,³⁶ office and plant clerical employees,³⁶ and miscellaneous service workers.³⁶

Females:

Miscellaneous machine operators, include automatic gluing- and folding-machine operators³⁶ and stitcher operators.

Miscellaneous machine feeders, include pressfeeders,³⁶ pressmen and feeders,³⁶ automatic gluing- and folding-machine feeders,³⁶ and machine feeders.³⁶

Miscellaneous direct employees, include strippers and hand folders and gluers.³⁵

Miscellaneous indirect employees, include machine helpers,³⁶ bundlers and packers,³⁶ office and plant clerical employees,³⁶ semiskilled miscellaneous indirect workers,³⁶ and miscellaneous service workers.³⁶

³⁵ See corresponding occupations shown for females in the North.

³⁶ See corresponding occupations shown for males in the North.

Appendix III.—Detailed Statistical Tables

TABLE A.—Distribution of employees according to average hourly earnings by region and sex

UNITED STATES

Year	Number of employees	Average hourly earnings	Number of employees whose earnings per hour were—															
			10, under 15 cents	15, under 20 cents	20, under 25 cents	25, under 30 cents	30, under 35 cents	35, under 40 cents	40, under 45 cents	45, under 50 cents	50, under 55 cents	55, under 60 cents	60, under 70 cents	70, under 80 cents	80, cents under \$1.00	\$1.00, under \$1.20	\$1.20 and over	
All occupations:																		
May 1933.....	4,546	\$0.421	57	168	538	507	622	541	485	357	328	172	327	211	174	42	17	
August 1934.....	7,601	.532	1	2	9	20	231	1,371	1,834	619	729	484	739	420	533	224	85	
August 1935.....	7,865	.535		8	19	96	286	1,332	1,670	969	806	563	758	457	555	264	82	

North—Males

Occupation and year	Number of employees	Average hourly earnings	Number of employees whose earnings per hour were—															
			10, under 15 cents	15, under 20 cents	20, under 25 cents	25, under 30 cents	30, under 35 cents	35, under 40 cents	Ex-actly 40 cents	Over 40, under 45 cents	45, under 50 cents	50, under 55 cents	55, under 60 cents	60, under 70 cents	70, under 80 cents	80, cents under \$1.00	\$1.00, under \$1.20	\$1.20 and over
All occupations:																		
May 1933.....	3,143	\$0.476	13	31	143	210	352	435	122	310	334	300	161	304	204	169	39	16
August 1934.....	5,417	.534	1		3	5	27	76	943	554	813	652	458	674	399	511	217	84
August 1935.....	5,616	.586			8	21	86	178	731	502	842	710	529	706	431	535	256	81
Compositors, hand and machine:																		
May 1933.....	72	.640				1	3	4		2	7	9	5	14	11	12	3	1
August 1934.....	91	.770							3	4	1	10	6	18	11	23	9	6
August 1935.....	95	.790						1	1	4	2	8	5	16	14	22	14	7
Die makers:																		
May 1933.....	129	.684					2	2		4	3	15	11	32	28	26	5	1
August 1934.....	171	.806							1	7	7	9	31	28	53	27	7	7
August 1935.....	175	.815								1	6	4	10	35	27	52	34	6
Pressmen:																		
May 1933.....	376	.650				1	4	10	4	14	24	49	35	89	74	61	10	1
August 1934.....	648	.789						1	7	7	18	32	24	139	127	190	84	19
August 1935.....	665	.798						1	4	11	15	24	36	120	132	204	101	17
Pressfeeders:																		
May 1933.....	538	.401	3	2	16	51	92	88	24	86	69	57	22	20	5	3		
August 1934.....	978	.504					4	10	182	120	195	163	137	121	34	9	1	2

August 1935	1,020	.506			1	1	6	43	129	110	203	193	144	148	33	8	1	
Pressmen and feeders:																		
May 1933	192	.509			1	2	11	19	8	29	24	31	17	29	17	3	1	
August 1934	284	.619							16	12	37	46	33	54	47	33	5	1
August 1935	288	.621					3	4	12	20	28	38	34	66	38	36	9	
Machine adjusters and repairmen:																		
May 1933	82	.624				1	6	1	2	4	5	7	3	30	14	5	3	
August 1934	123	.714							1	2	6	13	9	29	25	30	7	1
August 1935	123	.733							1	4	3	12	12	24	23	32	11	1
Cutter feeders:																		
May 1933	32	.445				1	2	7	3	5	6		4	4				
August 1934	46	.550							1	2	12	13	5	10	1	2		
August 1935	47	.549							1	3	7	12	6	12		3		
Strippers:																		
May 1933	314	.364	5	5	33	31	49	78	21	39	22	13	6	5	6	1		
August 1934	575	.482	1		3	3	7	12	151	81	119	87	34	43	22	11	1	
August 1935	605	.483			2	8	19	42	138	54	121	66	58	62	20	15		
Automatic gluing- and folding-machine operators:																		
May 1933	35	.538						3		4	4	6	5	7	4	1		
August 1934	72	.609							5	4	7	12	5	20	10	9		
August 1935	76	.618							5	6	9	9	6	14	17	9	1	
Automatic gluing- and folding-machine feeders:																		
May 1933	47	.385			4	4	4	8	9	3	9	4		2				
August 1934	86	.445					1	6	19	20	29	7	2	2				
August 1935	99	.442					2	10	22	25	18	16	4	1	1			
Machine helpers:																		
May 1933	280	.354		10	22	39	54	66	7	35	32	7	5	2	1			
August 1934	585	.448			1	1	10	227	101	130	66	27	21	1				
August 1935	578	.453			2	3	21	18	156	83	154	78	35	25	3			
Bundlers and packers:																		
May 1933	193	.364	1	8	21	23	29	35	8	17	23	20	5	2	1			
August 1934	324	.491					2	6	85	66	63	23	28	27	19	5		
August 1935	360	.492			1	5	15	23	60	49	72	45	34	27	22	6	1	
Laborers (loaders and unloaders, etc.):																		
May 1933	118	.360			1	6	21	18	34	3	11	17	5	1	1			
August 1934	210	.453							84	41	35	13	37					
August 1935	229	.454						1	67	51	48	17	32	4		1		
Machine feeders:																		
May 1933	31	.357	1	1	9	3	5	1	1	3	2	3	2					
August 1934	51	.461							23	10	4	6	4	2	2			
August 1935	51	.466			1				18	10	9	5	1	5	2			
Truck drivers:																		
May 1933	46	.465			1	2	5	4		4	9	10	3	7	1			
August 1934	72	.536					1	4	5	4	11	14	15	12	5	1		
August 1935	68	.533					1	3	5	3	11	14	13	13	4	1		
Die makers' helpers:																		
May 1933	17	.351			3	2	4	2	2	1	2		1					
August 1934	49	.480					1	1	10	5	14	9	3	4	2			
August 1935	50	.523					1	1	4	4	7	16	8	5	2	2		
Pressmen's helpers:																		
May 1933	51	.417			2	4	7	9	2	5	9	9	2	2				
August 1934	66	.530						2	7	4	12	14	12	11	3	1		
August 1935	73	.554				1	2	2	6		9	17	14	8	13	1		

TABLE A.—Distribution of employees according to average hourly earnings by region and sex—Continued
North—Males—Continued

Occupation and year	Number of employees	Average hourly earnings	Number of employees whose earnings per hour were—														\$1.00, under \$1.20	\$1.20 and over	
			10, under 15 cents	15, under 20 cents	20, under 25 cents	25, under 30 cents	30, under 35 cents	35, under 40 cents	Exactly 40 cents	Over 40, under 45 cents	45, under 50 cents	50, under 55 cents	55, under 60 cents	60, under 70 cents	70, under 80 cents	80 cents, under \$1.00			
Supervisory employees, office and plant:																			
May 1933	140	\$0.752					3	4	1	3	7	12	11	20	20	37	12	10	
August 1934	225	.935							2	2	6	8	10	20	15	70	56	36	
August 1935	223	.933							2	2	6	8	11	16	17	67	52	40	
Clerical employees, office and plant:																			
May 1933	126	.485			5	5	9	14	7	10	24	15	11	14	7	4	1		
August 1934	200	.586					1	1	14	14	33	32	21	43	18	20	3		
August 1935	205	.590							3	7	12	13	22	33	44	29	14	5	
Miscellaneous direct workers, skilled:																			
May 1933	55	.585			1		2	5	2	5	8	7	1	9	4	9	1	1	
August 1934	88	.700							4	3	5	8	9	25	8	16	7	3	
August 1935	83	.706							1	4	2	12	9	18	12	17	6	2	
Miscellaneous direct workers, semiskilled:																			
May 1933	20	.350			5	3	5		1	3	1			1	1				
August 1934	23	.472							7	3	2	3	1	4	1				
August 1935	42	.486							3	1	8	6	9	7	2	3	3		
Miscellaneous indirect workers, skilled:																			
May 1933	25	.754							1		2		2	1	4	5	6	3	1
August 1934	56	.930											1	1	7	2	23	13	8
August 1935	61	.919											2	2	1	6	3	25	15
Miscellaneous indirect workers, semiskilled:																			
May 1933	17	.438			1		2	1	2	2	4	3	1	1					
August 1934	46	.520							1	6	3	12	13	4	4	2			1
August 1935	46	.546								3	4	7	14	7	8		3		
Miscellaneous indirect workers, unskilled:																			
May 1933	72	.367		2	4	5	18	15	6	8	7	5	2						
August 1934	116	.467				1	1	4	32	19	19	20	12	5	2	1			
August 1935	115	.482				1	5	1	27	12	27	21	8	6	4	2	1		
Power and maintenance workers, skilled:																			
May 1933	22	.602							1			2	3	4	6	5	1		
August 1934	44	.725										2	2	2	9	10	14	4	
August 1935	51	.727										3	4	5	7	10	14	5	1
Power and maintenance workers, unskilled:																			
May 1933	29	.437					4	3	5	4	5	3	2	3					
August 1934	43	.509							1	10	2	7	10	2	8	3			
August 1935	46	.499							2	9	1	11	11	3	8	1			
Service workers, miscellaneous:																			
May 1933	84	.335	3	2	9	11	11	23	3	7	9	5	1						
August 1934	145	.435					8	14	41	24	26	20	6	5	1				
August 1935	142	.440			1	2	3	8	36	22	31	24	8	5	1	1			

North—Females

Occupation and year	Number of employees	Average hourly earnings	Number of employees whose earnings per hour were—											
			Under 15 cents	15, under 20 cents	20, under 25 cents	25, under 30 cents	30, under 35 cents	Ex-actly 35 cents	Over 35, under 40 cents	40, under 45 cents	45, under 50 cents	50, under 55 cents	55, under 60 cents	60 cents and over
All occupations:														
May 1933.....	1,056	\$0.283	9	90	305	259	243	4	72	28	9	17	5	15
August 1934.....	1,679	.389	2	2	5	3	99	552	547	282	77	51	17	44
August 1935.....	1,702	.395	1	1	1	58	101	445	489	371	98	76	21	41
Pressfeeders:														
May 1933.....	151	.274		16	46	29	36	1	15	3	1	4		
August 1934.....	241	.382					10	80	96	38	9	6	1	1
August 1935.....	218	.384					9	71	70	47	13	6	2	
Strippers:														
May 1933.....	166	.294	1	11	34	27	75		12	6				
August 1934.....	236	.382					7	73	97	34	12	12	1	
August 1935.....	252	.376		1		10	13	83	87	31	11	13	3	
Automatic gluing- and folding-machine feeders:														
May 1933.....	151	.256		11	56	49	23		10	2				
August 1934.....	260	.370				1	8	108	100	36	5		2	
August 1935.....	247	.386				7	5	85	52	81	13	3	1	
Stitcher operators:														
May 1933.....	81	.273	1	3	26	29	12		7		1		2	
August 1934.....	113	.379			1		18	25	37	18	9	5		
August 1935.....	132	.396				2	8	30	41	29	13	8	1	
Machine helpers:														
May 1933.....	227	.245	1	35	96	60	28	1	4	2				
August 1934.....	380	.367		2			39	161	109	58	7	3	1	
August 1935.....	409	.369					31	42	97	139	89	6	4	1
Bundlers and packers:														
May 1933.....	33	.278	2	2	2	12	13		1			1		
August 1934.....	59	.382					4	18	23	9	2	1	1	1
August 1935.....	56	.381					6	14	25	5	3	3		
Machine feeders:														
May 1933.....	29	.291		3	3	7	14		2					
August 1934.....	58	.376			1			27	18	10	1			1
August 1935.....	57	.385				1	1	18	24	8	1	4		
Gluers, folders, etc., hand:														
May 1933.....	92	.270	3	7	32	24	13		9	3		1		
August 1934.....	117	.378			1		7	40	36	24	4	3		
August 1935.....	119	.387				4	11	34	28	26	9	6	1	
Clerical employees, offices and plant:														
May 1933.....	80	.427	1		3	13	16	1	8	9	5	8	2	14
August 1934.....	154	.491			1	1	5	7	15	47	21	19	7	31
August 1935.....	156	.503					5	5	12	46	24	23	10	31
Miscellaneous other employees:														
May 1933.....	46	.344		2	7	9	13	1	4	3	2	3	1	1
August 1934.....	61	.449			1	1	1	13	16	8	7	2	2	10
August 1935.....	56	.468			1	3	1	8	11	9	5	6	2	10

DETAILED STATISTICAL TABLES

TABLE A.—Distribution of employees according to average hourly earnings by region and sex—Continued

South—Males

Occupation and year	Number of employees	Average hourly earnings	Number of employees whose earnings per hour were—														
			10, under 15 cents	15, under 20 cents	20, under 25 cents	25, under 30 cents	30, under 35 cents	Exactly 35 cents	Over 35, under 40 cents	40, under 45 cents	45, under 50 cents	50, under 55 cents	55, under 60 cents	60, under 70 cents	70, under 80 cents	80 cents, under \$1	\$1 and over
All occupations:																	
May 1933.....	253	\$0.338	16	24	60	27	24	4	20	24	14	10	6	11	7	4	2
August 1934.....	377	.461				6	16	124	53	48	27	24	9	40	8	16	6
August 1935.....	418	.444			9	6	14	134	72	61	25	18	13	30	15	14	7
Compositors, hand and machine, and die makers:																	
May 1933.....	19	.577							2	5	1		3	4	2		2
August 1934.....	22	.697						1		1	1			10	2	3	3
August 1935.....	23	.695								2	1	3	1	4	7	1	4
Pressmen:																	
May 1933.....	31	.496				1	1		4	6	7	5		5	1	1	
August 1934.....	42	.624						1		5	1	6	7	13	3	5	1
August 1935.....	38	.620						1	1	3	1	6	7	11	3	4	1
Pressfeeders:																	
May 1933.....	59	.311	1	3	16	12	9	1	4	7	3		3				
August 1934.....	84	.412					2	22	12	27	13	4		4			
August 1935.....	92	.405					3	20	21	29	12	3	1	3			
Strippers:																	
May 1933.....	37	.206	10	6	15	3	1		1	1							
August 1934.....	52	.360					3	35	11		3						
August 1935.....	66	.348			5	1	6	29	20	4	1						
Machine helpers:																	
May 1933.....	22	.213	1	7	11	1	2					1					
August 1934.....	49	.361					3	32	10	3		1					
August 1935.....	54	.346			1	2	3	40	7	1							
Bundlers and packers:																	
May 1933.....	18	.218	2	3	8	3	1		1								
August 1934.....	25	.362				1	1	13	8	1	1						
August 1935.....	33	.368				2		15	8	7		1					
Miscellaneous direct employees:																	
May 1933.....	35	.397	1		3	4	6	1	5	5	2	4		2	1	1	
August 1934.....	50	.517				1	1	4	8	5	5	8	2	11	2	3	1
August 1935.....	59	.496			1	1	1	12	5	7	8	4	3	11	2	3	1

Miscellaneous indirect employees:																			
May 1933.....	32	.353	1	5	7	3	4	2	3	1	1					3	2		2
August 1934.....	53	.475				4	6	16	4	6	3	4			2	1			5
August 1935.....	53	.472			2		1	17	10	8	2	1	1	1		3	6		1

South-Females

Occupation and year	Number of employees	Average hourly earnings	Number of employees whose earnings per hour were—																
			Under 10	10, under 15 cents	15, under 20 cents	20, under 25 cents	25, under 30 cents	Exact-ly 30 cents	Over 30, under 35 cents	35, under 40 cents	40, under 45 cents	45, under 50 cents	50, under 55 cents	55, under 60 cents	60 cents and over				
All occupations:																			
May 1933.....	94	\$0.214	1	18	23	30	11		3	6	1				1				
August 1934.....	128	.330				1	6	51	38	19	7	2			2				2
August 1935.....	129	.316			7	1	11	47	38	14	5	4			2				
Miscellaneous machine operators:																			
May 1933.....	12	.221		2	3	3	2			2									
August 1934.....	25	.319					3	9	11		1								1
August 1935.....	21	.319				1	1	6	10	2	1								
Miscellaneous machine feeders:																			
May 1933.....	30	.234		2	7	11	6		1	3									
August 1934.....	33	.328					1	16	7	7	1	1							
August 1935.....	28	.343						9	7	8	2	2							
Miscellaneous direct employees:																			
May 1933.....	20	.182		6	5	9													
August 1934.....	23	.320				1				3	1								1
August 1935.....	27	.308			1		1	14	9	2									
Miscellaneous indirect employees:																			
May 1933.....	32	.212	1	8	8	7	3		2	1	1					1			
August 1934.....	47	.340					2	14	15	9	4	1			2				
August 1935.....	53	.305			6		9	18	12	2	2	2			2				

TABLE B.—Distribution of employees according to weekly hours by region and sex

Occupation and year	Number of employees	Average weekly hours	Number of employees whose weekly hours were—							
			Under 16 hours	16, under 24 hours	24, under 32 hours	32, under 40 hours	Exactly 40 hours	Over 40, under 48 hours	48, under 56 hours	56 hours and over
<i>United States</i>										
All occupations:										
May 1933.....	4,546	44.8	130	120	205	564	268	1,268	1,520	471
August 1934.....	7,601	37.5	216	234	495	1,479	4,042	876	216	43
August 1935.....	7,865	39.7	171	206	366	1,288	3,319	1,494	870	151
<i>North—Males</i>										
All occupations:										
May 1933.....	3,143	45.7	82	85	120	313	197	873	1,085	388
August 1934.....	5,417	37.9	144	148	317	1,001	2,817	746	201	43
August 1935.....	5,616	40.4	102	115	237	856	2,285	1,167	708	146
Compositors, hand and machine:										
May 1933.....	72	44.4	3	3	5	9	21	24	7	
August 1934.....	91	39.5	1	4	12	60	13	1		
August 1935.....	95	40.9		4	12	50	18	10		1
Die makers:										
May 1933.....	129	46.0	1	3	4	8	12	40	51	10
August 1934.....	171	39.7	1	1	9	20	100	28	10	2
August 1935.....	175	41.7		1	3	17	83	53	15	3
Pressmen:										
May 1933.....	376	45.2	11	11	15	39	26	118	110	46
August 1934.....	648	38.0	13	12	42	126	344	90	18	3
August 1935.....	665	40.6	5	6	20	124	305	100	96	9
Press feeders:										
May 1933.....	538	44.7	17	20	20	67	28	146	177	63
August 1934.....	978	37.1	26	37	74	189	509	122	19	2
August 1935.....	1,020	40.0	13	31	56	149	412	219	116	24
Pressmen and feeders:										
May 1933.....	192	45.1	3	3	5	21	16	58	69	17
August 1934.....	284	38.5	5	4	10	75	142	37	7	4
August 1935.....	288	39.8	10	11	8	48	97	67	43	4
Machine adjusters and repairmen:										
May 1933.....	82	49.6				6	5	21	38	12
August 1934.....	123	40.9	1	1	2	12	62	36	7	2
August 1935.....	123	42.5	1	3	2	14	40	40	17	6
Cutter feeders:										
May 1933.....	32	45.7		1	2	2	1	9	14	3
August 1934.....	46	38.7		2	2	4	31	5	2	
August 1935.....	47	39.5	3		2	3	23	9	7	
Strippers:										
May 1933.....	314	43.5	16	13	18	36	17	70	114	30
August 1934.....	575	35.6	23	25	59	162	272	29	4	1
August 1935.....	605	38.6	16	22	36	123	254	89	56	9
Automatic gluing- and folding-machine operators:										
May 1933.....	35	45.3	1		1	2	3	15	12	1
August 1934.....	72	39.4	1	3	1	10	40	10	3	4
August 1935.....	76	41.5			5	11	29	20	9	2
Automatic gluing- and folding-machine feeders:										
May 1933.....	47	44.8	2	2	1	12		7	16	7
August 1934.....	86	38.2	2	1	3	17	46	14	3	
August 1935.....	99	39.8	3	2	9	14	43	9	15	4
Machine helpers:										
May 1933.....	280	45.6	11	4	16	30	14	72	91	42
August 1934.....	585	36.1	30	23	53	123	269	70	16	1
August 1935.....	578	39.5	16	6	33	115	215	115	68	10
Bundlers and packers:										
May 1933.....	193	44.6	3	8	14	21	9	57	57	24
August 1934.....	324	36.3	15	15	21	74	150	45	4	
August 1935.....	360	39.5	11	12	27	61	115	80	42	12
Laborers (loaders, unloaders, etc.):										
May 1933.....	118	44.7	3	5	6	18	4	25	43	14
August 1934.....	210	37.8	7	6	8	34	118	32	5	
August 1935.....	229	39.1	9	5	13	28	87	56	31	

TABLE B.—Distribution of employees according to weekly hours by region and sex—Continued

Occupation and year	Number of employees	Average weekly hours	Number of employees whose weekly hours were—								
			Under 16 hours	16, under 24 hours	24, under 32 hours	32, under 40 hours	Exactly 40 hours	Over 40, under 48 hours	48, under 56 hours	56 hours and over	
<i>North—Males—Continued</i>											
Machine feeders:											
May 1933.....	31	42.4	2	1	3	1	2	12	7	3	
August 1934.....	51	36.8	1	1	6	7	34	2			
August 1935.....	51	37.2	3	3		6	32	4	3		
Truck drivers:											
May 1933.....	46	48.4		1		4	4	10	20	7	
August 1934.....	72	42.6				6	24	30	12		
August 1935.....	68	45.6				4	14	26	18	6	
Die makers' helpers:											
May 1933.....	17	45.6		1		1	2	4	8	1	
August 1934.....	49	38.4		1	2	9	31	6			
August 1935.....	50	41.5			1	5	27	11	5	1	
Pressmen's helpers:											
May 1933.....	51	46.8				3	5	23	18	2	
August 1934.....	66	38.7		1	5	14	34	9	3		
August 1935.....	73	40.9	1	1	3	18	21	12	13	4	
Supervisory employees, office and plant:											
May 1933.....	140	47.8	1	1	1	4	13	40	63	17	
August 1934.....	225	40.8	1	4	3	17	135	40	22	3	
August 1935.....	223	42.2	1	2	1	14	119	46	36	4	
Clerical employees, office and plant:											
May 1933.....	126	48.0	1	1		8	10	46	48	12	
August 1934.....	200	40.5	1	1		19	133	35	11		
August 1935.....	205	42.1	1	1		14	111	53	21	4	
Miscellaneous direct workers, skilled:											
May 1933.....	55	47.5			2	3	3	16	28	3	
August 1934.....	88	38.9	2		3	14	53	13	3		
August 1935.....	83	39.7	1	2	3	15	33	24	5		
Miscellaneous direct workers, semiskilled:											
May 1933.....	20	38.5	1	2	3	3	3	5	2	1	
August 1934.....	23	35.1	2	1	1	5	12	1	1		
August 1935.....	42	36.3	3		4	11	18	4	2		
Miscellaneous indirect workers, skilled:											
May 1933.....	25	47.5	1			2		9	10	3	
August 1934.....	56	40.6			1	1	41	10	3		
August 1935.....	61	45.3				6	20	12	16	6	
Miscellaneous indirect workers, semiskilled:											
May 1933.....	17	46.6	1		1	2	1	6	2	4	
August 1934.....	46	38.4	1	2		8	27	7	1		
August 1935.....	46	41.8				10	18	12	5	1	
Miscellaneous indirect workers, unskilled:											
May 1933.....	72	46.2	3	3	4	8	3	13	24	14	
August 1934.....	116	38.3	5	1	6	20	63	14	5	2	
August 1935.....	115	41.2		1	5	15	51	27	14	2	
Power and maintenance workers, skilled:											
May 1933.....	22	51.0				2		5	9	6	
August 1934.....	44	41.7	1	1	1	3	18	11	5	4	
August 1935.....	51	44.0	2	2		5	15	8	8	11	
Power and maintenance workers, semi-skilled:											
May 1933.....	29	50.5			1	4	2	7	6	9	
August 1934.....	43	41.5				4	25	9	4	1	
August 1935.....	46	43.4				1	19	16	8	2	
Service workers, miscellaneous:											
May 1933.....	84	55.4	1	2	3	1	5	18	24	30	
August 1934.....	145	42.3	6	4	1	16	44	28	32	14	
August 1935.....	142	44.0	3	4	1	13	34	37	29	21	

TABLE B.—Distribution of employees according to weekly hours by region and sex—Continued

Occupation and year	Number of employees	Average weekly hours	Number of employees whose weekly hours were—							
			Under 16 hours	16, under 24 hours	24, under 32 hours	32, under 40 hours	Exactly 40 hours	Over 40, under 48 hours	48, under 56 hours	56 hours and over
<i>North—Females</i>										
All occupations:										
May 1933.....	1,056	41.5	36	33	60	197	68	351	293	18
August 1934.....	1,679	36.4	47	60	139	350	986	91	6	
August 1935.....	1,702	37.6	58	74	95	299	840	234	101	1
Pressfeeders:										
May 1933.....	151	40.9	5	4	8	31	15	57	27	4
August 1934.....	241	35.6	6	14	19	65	132	5		
August 1935.....	218	37.9	3	11	10	34	126	30	4	
Strippers:										
May 1933.....	166	37.9	7	7	22	43	14	46	25	2
August 1934.....	236	36.3	6	11	18	43	136	17	5	
August 1935.....	252	36.7	10	6	13	66	132	24	1	
Automatic gluing- and folding-machine feeders:										
May 1933.....	151	42.7	1	3	9	30	6	60	38	4
August 1934.....	260	37.5	6	3	22	39	170	20		
August 1935.....	247	38.5	7	3	8	58	120	38	12	1
Stitcher operators:										
May 1933.....	81	41.5	5	3	1	13	6	25	26	2
August 1934.....	113	35.8	1	5	13	34	55	5		
August 1935.....	132	37.0	4	7	9	20	71	18	3	
Machine helpers:										
May 1933.....	227	43.7	10	9	6	28	4	54	112	4
August 1934.....	380	35.3	15	19	40	106	173	27		
August 1935.....	409	37.4	17	26	37	75	134	64	56	
Bundlers and packers:										
May 1933.....	33	39.1	3	1	1	7	1	15	5	
August 1934.....	59	37.0	2		5	12	36	4		
August 1935.....	56	39.5	1	1	1	10	31	5	7	
Machine feeders:										
May 1933.....	29	40.5		1	2	10	1	9	6	
August 1934.....	58	34.4	6	2	6	6	37	1		
August 1935.....	57	37.7	1	5	3	6	30	10	2	
Gluers, folders, etc., hand:										
May 1933.....	92	39.6	2	5	9	18	6	30	22	
August 1934.....	117	36.1	4	4	10	23	72	4		
August 1935.....	119	35.7	10	11	7	11	56	11	13	
Clerical employees, office and plant:										
May 1933.....	80	44.4				6	13	41	20	
August 1934.....	154	39.5		1	3	13	132	5		
August 1935.....	156	40.0	1	2	3	12	109	28	1	
Miscellaneous other employees:										
May 1933.....	46	42.5	3		2	11	2	14	12	2
August 1934.....	61	38.2	1	1	3	9	43	3	1	
August 1935.....	56	36.2	4	2	4	7	31	6	2	

TABLE B.—Distribution of employees according to weekly hours by region and sex—Continued

Occupation and year	Number of employees	Average weekly hours	Number of employees whose weekly hours were—								
			Under 16 hours	16, under 24 hours	24, under 32 hours	32, under 40 hours	Exactly 40 hours	Over 40, under 48 hours	48, under 56 hours	56 hours and over	

South—Males

All occupations:													
May 1933.....	253	48.0	5	2	20	31	2	28	110	55			
August 1934.....	377	36.9	15	14	20	96	184	39	9				
August 1935.....	418	39.5	4	10	19	110	147	72	52	4			
Compositors, hand and machine, and die makers:													
May 1933.....	19	45.6			2	4		3	8	2			
August 1934.....	22	39.7				6	13	2	1				
August 1935.....	23	42.9				6	7	5	3	2			
Pressmen:													
May 1933.....	31	46.8			3	5		3	18	2			
August 1934.....	42	37.9	1	1	1	10	24	4	1				
August 1935.....	38	37.0		4	1	10	17	5	1				
Pressfeeders:													
May 1933.....	59	47.6	1	1	5	9	1	6	24	12			
August 1934.....	84	38.0	1	2	1	32	39	6	3				
August 1935.....	92	38.6		1	3	38	27	14	9				
Strippers:													
May 1933.....	37	48.7	1		2	5		3	14	12			
August 1934.....	52	35.0	3	3	7	13	20	6					
August 1935.....	66	39.0	2	1	2	19	22	15	5				
Machine helpers:													
May 1933.....	22	50.1			1	4		4	6	7			
August 1934.....	49	34.9	5	1	3	13	24	2	1				
August 1935.....	54	38.6	1	2	5	15	16	7	7	1			
Bundlers and packers:													
May 1933.....	18	49.7			1		1	1	14	1			
August 1934.....	25	36.1		3	2	7	11	2					
August 1935.....	33	39.0			2	7	21	1	2				
Miscellaneous direct employees:													
May 1933.....	35	47.9	1		3	2		7	14	8			
August 1934.....	50	37.5	1	2	3	9	27	8					
August 1935.....	59	40.5		2	3	10	21	10	13				
Miscellaneous indirect employees:													
May 1933.....	32	48.4	2	1	3	2		1	12	11			
August 1934.....	53	36.9	4	2	3	6	26	9	3				
August 1935.....	53	42.0	1		3	5	16	15	12	1			

South—Females

All occupations:													
May 1933.....	94	42.9	7		5	23	1	16	32	10			
August 1934.....	128	33.0	10	12	19	32	55						
August 1935.....	129	36.2	7	7	15	23	47	21	9				
Miscellaneous machine operators:													
May 1933.....	12	48.1				2		4	4	2			
August 1934.....	25	32.4	3		6	6	10						
August 1935.....	21	35.6		2	3	7	7	1	1				
Miscellaneous machine feeders:													
May 1933.....	30	44.2			2	8		9	10	1			
August 1934.....	33	31.5	5	1	5	9	13						
August 1935.....	28	37.6	1		3	6	13	4	1				
Miscellaneous direct employees:													
May 1933.....	20	42.0	2			6	1	1	8	2			
August 1934.....	23	29.6	2	6	4	7	4						
August 1935.....	27	33.1	4	1	5	1	9	5	2				
Miscellaneous indirect employees:													
May 1933.....	32	40.5	5		3	7		2	10	5			
August 1934.....	47	36.1		5	4	10	28						
August 1935.....	53	37.2	2	4	4	9	18	11	5				

TABLE C.—Distribution of employees according to weekly earnings by region and sex

UNITED STATES

Year	Number of employees	Average weekly earnings	Number of employees whose weekly earnings were—														
			Under \$4	\$4, under \$8	\$8, under \$12	\$12, under \$16	\$16, under \$20	\$20, under \$24	\$24, under \$28	\$28, under \$32	\$32, under \$36	\$36, under \$40	\$40, under \$44	\$44, under \$48	\$48 and over		
All occupations:																	
May 1933.....	4,546	\$18.88	88	292	797	905	740	580	382	265	193	104	99	40	61		
August 1934.....	7,601	19.96	109	198	508	1,770	2,033	1,770	673	342	350	162	129	87	114		
August 1935.....	7,865	21.24	95	188	387	1,468	2,160	1,316	801	448	367	199	168	104	164		

North—Males

Occupation and year	Number of employees	Average weekly earnings	Number of employees whose weekly earnings were—														
			Under \$4	\$4, under \$8	\$8, under \$12	\$12, under \$16	Ex-actly \$16	Over \$16, under \$20	\$20, under \$24	\$24, under \$28	\$28, under \$32	\$32, under \$36	\$36, under \$40	\$40, under \$44	\$44, under \$48	\$48, and over	
All occupations:																	
May 1933.....	3,143	\$21.78	38	120	269	484	9	616	530	352	250	183	102	92	40	58	
August 1934.....	5,417	22.16	66	115	209	533	579	1,116	1,050	617	324	331	156	124	85	112	
August 1935.....	5,616	23.68	49	85	160	385	385	1,243	1,176	742	427	345	193	163	101	162	
Compositors, hand and machine:																	
May 1933.....	72	28.42	1	1	2	6	-----	5	10	16	7	6	8	5	1	4	
August 1934.....	91	30.42	-----	-----	-----	4	2	9	14	13	10	9	2	8	7		
August 1935.....	95	32.28	-----	-----	-----	2	-----	8	14	16	11	11	10	6	9	8	
Die makers:																	
May 1933.....	129	31.48	-----	-----	3	3	-----	6	12	16	31	20	14	12	6	6	
August 1934.....	171	32.05	-----	1	-----	3	2	7	22	23	27	28	21	19	7	11	
August 1935.....	175	33.98	-----	-----	-----	-----	-----	5	19	28	23	29	25	24	10	12	
Pressmen:																	
May 1933.....	376	29.38	3	7	7	15	-----	27	49	60	60	53	40	30	13	12	
August 1934.....	648	29.98	-----	8	12	8	6	49	83	117	98	101	72	40	27	27	
August 1935.....	665	32.38	1	2	4	7	4	34	68	105	108	115	81	61	26	49	
Pressfeeders:																	
May 1933.....	538	17.92	5	27	55	106	3	151	107	55	22	6	-----	1	-----	-----	
August 1934.....	978	18.69	12	23	52	119	109	246	279	94	31	10	3	-----	-----	-----	

August 1935	1,020	20.25	7	16	39	84	74	267	289	168	58	15	3					
Pressmen and feeders:																		
May 1933	192	22.98	1	3	2	15	2	46	48	32	20	13	3	4	3			
August 1934	284	23.82		5	6	12	14	47	69	53	40	26	5	4				3
August 1935	288	24.76	1	8	8	15	7	42	65	55	34	22	10	8	6			7
Machine adjusters and repairmen:																		
May 1933	82	30.96				2		8	14	10	13	13	10	3	4			5
August 1934	123	29.22	1			3		8	19	27	17	22	13	8	3			2
August 1935	123	31.15		1		1		8	16	32	14	19	11	8	7			6
Cutter feeders:																		
May 1933	32	20.31			2	9		7	5	5	2	1						
August 1934	46	21.32			2	3		13	18	7			2					
August 1935	47	21.70		3	1	2	1	8	16	8	5	1	2					1
Strippers:																		
May 1933	314	15.84	7	29	52	67	1	88	37	21	5	4	2		1			
August 1934	575	17.14	9	20	46	114	101	142	90	30	13	6	2	2	2			
August 1935	605	18.65	9	18	32	54	83	196	122	62	23	2	3	1				
Automatic gluing- and folding-machine operators:																		
May 1933	35	24.40			1	3		5	10	5	6	3	1	1				
August 1934	72	24.01		1	3	3	2	10	16	16	9	9	2	1	1			
August 1935	76	25.63				6	2	10	15	15	14	6	4	3	1			
Automatic gluing- and folding-machine feeders:																		
May 1933	47	17.22		2	7	12		10	11	3	1							
August 1934	86	16.99	2		3	20	17	27	15	2								
August 1935	99	17.60		3	4	20	17	28	22	3	2							
Machine helpers:																		
May 1933	280	16.17	9	13	40	79		70	37	21	8	2	1					
August 1934	585	16.18	19	24	45	97	131	163	77	24	4	4	1					
August 1935	578	17.89	11	8	30	74	69	226	109	44	5	1	1					
Bundlers and packers:																		
May 1933	193	16.24	3	11	39	41	1	44	37	11	4			1	1			
August 1934	324	17.83	10	12	13	52	47	93	49	29	12	6	1					
August 1935	360	19.38	9	5	22	44	34	96	87	29	12	12	6	3	1			
Laborers (loaders, unloaders, etc.):																		
May 1933	118	16.10	3	5	9	38	1	35	25	1	1							
August 1934	210	17.09	5	7	6	22	54	67	45	4								
August 1935	229	17.72	5	7	8	19	31	99	50	6	4							
Machine feeders:																		
May 1933	31	15.15	2	3	9	5		4	4	1		2	1					
August 1934	51	16.94	1		4	6	15	15	8	1								
August 1935	51	17.32	1	4	1	4	9	20	5	6	1							
Truck drivers:																		
May 1933	46	22.54			3	5		3	12	15	7	1						
August 1934	72	22.87				4	2	16	21	20	6	2	1					
August 1935	68	24.30				2		11	22	19	9	4						1
Die makers' helpers:																		
May 1933	17	15.98		1	2	7		3	2	2								
August 1934	49	18.47		1	2	5	6	18	13	2	2							
August 1935	50	21.68				1	5	10	23	6	3	1	1					
Pressmen's helpers:																		
May 1933	51	19.52			5	10		11	15	8	1	1						
August 1934	66	20.51			1	8	6	14	21	11	3	2						
August 1935	73	22.66	1	1	3	4	1	10	25	12	11	3	2					

TABLE C.—Distribution of employees according to weekly earnings by region and sex—Continued
North—Males—Continued

Occupation and year	Number of employees	Average weekly earnings	Number of employees whose weekly earnings were—													
			Under \$4	\$4, under \$8	\$8, under \$12	\$12, under \$16	Ex-actly \$16	Over \$16, under \$20	\$20, under \$24	\$24, under \$28	\$28, under \$32	\$32, under \$36	\$36, under \$40	\$40, under \$44	\$44, under \$48	\$48, and over
Supervisory employees, office and plant:																
May 1933	140	\$35.91		2		3		6	8	15	22	25	8	17	9	25
August 1934	225	38.20			2	2	2	12	12	25	10	45	15	27	24	49
August 1935	223	39.32			1			6	14	19	20	45	17	25	22	53
Clerical employees, office and plant:																
May 1933	126	23.30	1	2	3	13		27	24	20	18	11	4	2	1	
August 1934	200	23.74	1	1		5	12	40	54	45	16	16	4	3	2	1
August 1935	205	24.88		1	1	5	10	32	49	44	31	19	6	4	1	2
Miscellaneous direct workers, skilled:																
May 1933	55	27.77		1		3		7	15	6	6	5	2	7	1	2
August 1934	88	27.19	1	1	1		4	8	17	25	7	12	2	5	2	3
August 1935	83	28.00		2		2		8	17	14	13	17	3	2	3	2
Miscellaneous direct workers, semiskilled:																
May 1933	20	13.49	1	3	3	5	1	4	3							
August 1934	23	16.57	1		2	4	5	5	4	2						
August 1935	42	17.61	3		1	9	3	14	6	3	2		1			
Miscellaneous indirect workers, skilled:																
May 1933	25	35.81		1				3	2		2	5	2	4	2	4
August 1934	56	37.77						1	2	7	2	16	3	10	7	8
August 1935	61	41.57						3	3	2	3	8	3	11	10	18
Miscellaneous indirect workers, semiskilled:																
May 1933	17	20.45	1			3		7	2	2		1		1		
August 1934	46	19.99	1		2	1	6	12	18	4	1					1
August 1935	46	22.84						13	20	6	2	1	2	1		
Miscellaneous indirect workers, unskilled:																
May 1933	72	16.96	1	6	11	12		20	10	9	3					
August 1934	116	17.87	3	3	3	18	18	31	29	10		1				
August 1935	115	19.83		1	1	15	17	26	37	7	8	2			1	
Power and maintenance workers, skilled:																
May 1933	22	30.71				1		1	1	4	6	4	2	3		
August 1934	44	30.24		1			1	5	1	8	4	17		3	4	
August 1935	51	32.02		2		2	1	1	8	6	6	10	2	5	3	5
Power and maintenance workers, semiskilled:																
May 1933	29	22.04			1	5		4	12	2		5				
August 1934	43	21.14				1	8	9	14	6	3	2				
August 1935	46	21.65				1	5	11	16	10	1	2				
Service workers, miscellaneous:																
May 1933	84	18.56		3	13	16		14	18	12	5	2	1			
August 1934	145	18.36		7	4	19	9	49	40	12	5					
August 1935	142	19.36	1	3	4	12	10	51	39	17	4		1			

North—Females

Occupation and year	Number of employees	Average weekly earnings	Number of employees whose weekly earnings were—														
			Under \$4	\$4, under \$8	\$8, under \$12	\$12, under \$14	Exactly \$14	Over \$14, under \$16	\$16, under \$20	\$20, under \$24	\$24, under \$28	\$28, under \$32	\$32, under \$36	\$36, under \$40	\$40, under \$44	\$44, under \$48	\$48 and over
All occupations:																	
May 1933	1,056	\$11.76	37	102	443	247	3	103	73	27	11	5	2		2		1
August 1934	1,679	14.19	27	56	226	225	356	433	264	43	25	10	8	1	1		1
August 1935	1,702	14.86	35	80	161	201	294	339	433	112	25	9	11		1		1
Pressfeeders:																	
May 1933	151	11.23	5	14	71	33	1	12	12	3							
August 1934	241	13.59	6	7	33	42	50	72	23	7		1					
August 1935	218	14.53	1	11	13	18	53	66	48	8							
Strippers:																	
May 1933	166	11.11	8	23	51	55		19	8	2							
August 1934	236	13.87	2	5	38	20	51	83	34	3							
August 1935	252	13.81	6	10	31	36	55	72	32	9	1						
Automatic gluing- and folding-machine feeders:																	
May 1933	151	10.92	4	10	81	34		12	9	1							
August 1934	260	13.86	2	7	34	13	77	91	34		2						
August 1935	247	14.87	4	8	16	30	55	40	81	11	1		1				
Stitcher operators:																	
May 1933	81	11.34	4	8	33	18		12	5	1							
August 1934	113	13.57	1	5	17	24	13	34	18	1							
August 1935	132	14.63	3	9	10	13	18	30	38	11							
Machine helpers:																	
May 1933	227	10.70	7	22	123	53	1	15	6								
August 1934	380	12.94	10	21	66	85	91	64	40	3							
August 1935	409	13.79	9	21	61	73	72	72	53	17		1					
Bundlers and packers:																	
May 1933	33	10.86	3	2	12	11	1	3	1								
August 1934	59	14.13	2		6	9	13	23	3	1	2						
August 1935	56	15.04		1	7	5	7	19	14	3							
Machine feeders:																	
May 1933	29	11.75		2	12	11		3	1								
August 1934	58	12.93	2	5	7	2	18	14	8		1						
August 1935	57	14.53		5	7	2	12	9	18	4							
Gluers, folders, etc., hand:																	
May 1933	92	10.69	3	17	38	18		9	6	1							
August 1934	117	13.62	1	6	15	20	28	24	21	2							
August 1935	119	13.80	9	10	10	15	18	16	26	15							

TABLE C.—Distribution of employees according to weekly earnings by region and sex—Continued

North—Females—Continued

Occupation and year	Number of employees	Average weekly earnings	Number of employees whose weekly earnings were—														
			Under \$4	\$4, under \$8	\$8, under \$12	\$12, under \$14	Exactly \$14	Over \$14, under \$16	\$16, under \$20	\$20, under \$24	\$24, under \$28	\$28, under \$32	\$32, under \$36	\$36, under \$40	\$40, under \$44	\$44, under \$48	\$48 and over
Clerical employees, office and plant:																	
May 1933.....	80	\$18.96	-----	1	8	11	-----	12	18	12	9	5	2	-----	1	-----	1
August 1934.....	154	19.40	-----	2	5	5	6	16	69	22	15	7	8	-----	-----	-----	1
August 1935.....	156	20.10	-----	2	2	3	1	7	80	27	19	4	10	-----	-----	-----	1
Miscellaneous other employees:																	
May 1933.....	46	14.61	3	3	14	3	-----	6	7	7	2	-----	-----	-----	1	-----	-----
August 1934.....	61	17.17	1	-----	4	8	9	12	14	4	5	2	-----	1	1	-----	-----
August 1935.....	56	16.93	3	3	4	6	3	8	13	7	4	4	-----	-----	1	-----	-----

South—Males

All occupations:																		
May 1933.....	253	\$16.24	6	38	53	24	1	27	35	23	19	10	8	2	5	-----	-----	2
August 1934.....	377	17.02	8	18	25	57	57	53	65	32	31	8	11	5	4	-----	2	1
August 1935.....	418	17.52	4	6	43	52	57	69	88	28	34	12	11	6	4	-----	3	1
Compositors, hand and machine, and die makers:																		
May 1933.....	19	26.30	-----	-----	-----	-----	-----	3	4	2	1	5	2	-----	1	-----	-----	1
August 1934.....	22	27.68	-----	-----	-----	-----	1	3	4	4	5	3	4	-----	-----	1	-----	1
August 1935.....	23	29.85	-----	-----	-----	-----	-----	4	-----	6	5	5	5	-----	1	-----	1	1
Pressmen:																		
May 1933.....	31	23.21	-----	1	2	-----	-----	3	7	4	7	3	3	-----	-----	-----	-----	1
August 1934.....	42	23.68	-----	2	-----	1	-----	4	6	9	11	2	4	1	1	-----	1	-----
August 1935.....	38	22.92	-----	-----	4	1	1	8	5	5	12	1	2	2	-----	1	-----	-----
Pressfeeders:																		
May 1933.....	59	14.84	2	7	10	10	1	6	13	3	5	1	1	-----	-----	-----	-----	-----
August 1934.....	84	15.65	-----	2	4	17	9	14	30	4	3	1	-----	-----	-----	-----	-----	-----
August 1935.....	92	15.64	-----	1	9	15	3	23	31	9	1	-----	-----	-----	-----	-----	-----	-----
Strippers:																		
May 1933.....	37	10.05	1	16	11	4	-----	2	1	1	1	-----	-----	-----	-----	-----	-----	-----
August 1934.....	52	12.61	1	5	8	13	14	6	4	1	-----	-----	-----	-----	-----	-----	-----	-----
August 1935.....	66	13.56	2	1	7	17	12	20	6	1	-----	-----	-----	-----	-----	-----	-----	-----

Machine helpers:																			
May 1933.....	22	10.65		5	11	2		3	1										
August 1934.....	49	12.59	3	3	5	11	14	7	5										
August 1935.....	54	13.34	1	2	11	10	14	8	7	1									
Bundlers and packers:																			
May 1933.....	18	10.82		4	9			3	2										
August 1934.....	25	13.07		3	2	5	7	6	2										
August 1935.....	33	14.35			4	2	13	9	4	1									
Miscellaneous direct employees:																			
May 1933.....	35	19.04	1	1	6	4		3	3	8	4	1	2	1		1			
August 1934.....	50	19.40		1	2	4	4	9	10	6	9	2	1	2		2			
August 1935.....	59	20.09		1	4	5	5	4	13	7	13	3	2	1		1			
Miscellaneous indirect employees:																			
May 1933.....	32	17.07	2	5	5	2		4	4	5	1				1	3			
August 1934.....	53	17.53	4	2	4	6	8	7	5	7	3		2	2		3			
August 1935.....	53	19.82	1	1	4	2	9	4	15	4	2	3	2	3		2		1	

South—Females

Occupation and year	Number of employees	Average weekly earnings	Number of employees whose weekly earnings were—																
			Under \$4	\$4, under \$8	\$8, under \$12	Exactly \$12	Over \$12, under \$16	\$16, under \$20	\$20, under \$24	\$24, under \$28	\$28, under \$32	\$32, under \$36	\$36, under \$40	\$40, under \$44	\$44, under \$48	\$48 and over			
All occupations:																			
May 1933.....	94	\$9.21	7	32	32		16	7											
August 1934.....	128	10.90	8	9	48	12	41	9	1										
August 1935.....	129	11.44	7	17	23	21	50	11											
Miscellaneous machine operators:																			
May 1933.....	12	10.63		4	4		2	2											
August 1934.....	25	10.31	2	1	13	1	7	1											
August 1935.....	21	11.35		2	6	4	9												
Miscellaneous machine feeders:																			
May 1933.....	30	10.34		10	11		6	3											
August 1934.....	33	10.34	5		12	1	13	2											
August 1935.....	28	12.88	1	1	5	4	13	4											
Miscellaneous direct employees:																			
May 1933.....	20	7.64	2	8	10														
August 1934.....	23	9.49	1	4	13	1	3	1											
August 1935.....	27	10.19	4	5	3	4	9	2											
Miscellaneous indirect employees:																			
May 1933.....	32	8.59	5	10	7		8	2											
August 1934.....	47	12.29		4	10	9	18	5	1										
August 1935.....	53	11.33	2	9	9	9	19	5											

List of Bulletins of the Bureau of Labor Statistics

The following is a list of all bulletins of the Bureau of Labor Statistics published since July 1912, except that in the case of bulletins giving the results of periodic surveys of the Bureau only the latest bulletin on any one subject is here listed.

A complete list of the reports and bulletins issued prior to July 1912, as well as the bulletins published since that date, will be furnished on application. Publications which are not available for free distribution, indicated in this list by an asterisk, can in some cases be obtained by purchase from the Superintendent of Documents, Government Printing Office, Washington, D. C.; all can be consulted at libraries which are Government repositories.

Collective agreements.

- *No. 191. Collective bargaining in the anthracite coal industry. [1916.]
- *No. 198. Collective agreements in the men's clothing industry. [1916.]
- No. 341. Trade agreement in the silk-ribbon industry of New York City. [1923.]
- *No. 402. Collective bargaining by actors. [1926.]
- *No. 468. Trade agreements, 1927.

Conciliation and arbitration (including strikes and lock-outs).

- *No. 124. Conciliation and arbitration in the building trades of Greater New York. [1913.]
- *No. 133. Report of the industrial council of the British Board of Trade on its inquiry into industrial agreements. [1913.]
- *No. 139. Michigan copper district strike. [1914.]
- *No. 144. Industrial court of the cloak, suit, and skirt industry of New York City. [1914.]
- *No. 145. Conciliation, arbitration, and sanitation in the dress and waist industry of New York City. [1914.]
- No. 233. Operation of the Industrial Disputes Investigation Act of Canada. [1918.]
- *No. 255. Joint industrial councils in Great Britain. [1919.]
- *No. 283. History of the Shipbuilding Labor Adjustment Board, 1917 to 1919.
- *No. 287. National War Labor Board: History of its formation and activities. etc. [1921.]
- *No. 303. Use of Federal power in settlement of railway labor disputes. [1922.]
- *No. 481. Joint industrial control in the book and job printing industry. [1928.]

Cooperation.

- *No. 313. Consumers' cooperative societies in the United States in 1920.
- *No. 314. Cooperative credit societies (credit unions) in America and in foreign countries. [1922.]
- *No. 437. Cooperative movement in the United States in 1925 (other than agricultural).
- No. 531. Consumers', credit, and productive cooperative societies, 1929.
- No. 598. Organization and management of consumers' cooperative associations and clubs (with model bylaws). [1934.]
- *No. 606. Organization and management of cooperative gasoline and oil associations (with model bylaws). [1934.]
- *No. 608. Organization and management of cooperative housing associations (with model bylaws). [1934.]
- No. 612. Consumers', credit, and productive cooperation in 1933.

Employment and unemployment.

- *No. 109. Statistics of unemployment and the work of employment offices [in the United States]. [1913.]
- *No. 172. Unemployment in New York City, N. Y. [1915.]
- *No. 183. Regularity of employment in the women's ready-to-wear garment industries. [1915.]
- *No. 195. Unemployment in the United States. [1916.]
- *No. 196. Proceedings of Employment Managers' Conference, held at Minneapolis, Minn., January 19 and 20, 1916.
- *No. 202. Proceedings of the conference of Employment Managers' Association of Boston, Mass., held May 10, 1916.
- *No. 206. The British system of labor exchanges. [1916.]
- *No. 227. Proceedings of Employment Managers' Conference, Philadelphia, Pa., April 2 and 3, 1917.
- *No. 235. Employment system of the Lake Carriers' Association. [1918.]
- *No. 241. Public employment offices in the United States. [1918.]
- *No. 247. Proceedings of Employment Managers' Conference, Rochester, N. Y., May 9-11, 1918.
- *No. 310. Industrial unemployment: A statistical study of its extent and causes. [1922.]
- *No. 409. Unemployment in Columbus, Ohio, 1921 to 1925.
- No. 542. Report of the Advisory Committee on Employment Statistics. [1931.]
- *No. 544. Unemployment-benefit plans in the United States and unemployment insurance in foreign countries. [1931.]
- No. 553. Fluctuation in employment in Ohio, 1914 to 1929.
- *No. 555. Social and economic character of unemployment in Philadelphia, April 1930.
- No. 610. Revised indexes of factory employment and pay rolls, 1919 to 1933.
- No. 611. Unemployment insurance and reserves in the United States: A selected list of recent references. [1935.]
- No. 613. Average annual wage and salary payments in Ohio, 1916 to 1932.

Housing.

- *No. 158. Government aid to home owning and housing of working people in foreign countries. [1914.]
- No. 263. Housing by employers in the United States. [1920.]
- No. 295. Building operations in representative cities, 1920.
- No. 545. Building permits in the principal cities of the United States [1921] to 1930.
- *No. 608. Organization and management of cooperative housing associations (with model bylaws). [1934.]

Industrial accidents and hygiene (including occupational diseases and poisons).

- *No. 104. Lead poisoning in potteries, tile works, and porcelain-enameled sanitary ware factories. [1912.]
- No. 120. Hygiene of the painters' trade. [1913.]
- *No. 127. Dangers to workers from dusts and fumes, and methods of protection. [1913.]
- *No. 141. Lead poisoning in the smelting and refining of lead. [1914.]
- *No. 157. Industrial accident statistics. [1915.]
- *No. 165. Lead poisoning in the manufacture of storage batteries. [1914.]
- *No. 179. Industrial poisons used in the rubber industry. [1915.]
- *No. 188. Report of British departmental committee on the danger in the use of lead in the painting of buildings. [1916.]
- *No. 201. Report of the committee on statistics and compensation insurance costs of the International Association of Industrial Accident Boards and Commissions. [1916.]
- *No. 209. Hygiene of the printing trades. [1917.]
- *No. 219. Industrial poisons used or produced in the manufacture of explosives. [1917.]
- *No. 221. Hours, fatigue, and health in British munition factories. [1917.]
- *No. 230. Industrial efficiency and fatigue in British munition factories. [1917.]
- *No. 231. Mortality from respiratory diseases in dusty trades (inorganic dusts). [1918.]
- *No. 234. The safety movement in the iron and steel industry, 1907 to 1917.
- *No. 236. Effects of the air hammer on the hands of stonecutters. [1918.]
- *No. 249. Industrial health and efficiency. Final report of British Health of Munition Workers' Committee. [1919.]
- *No. 251. Preventable death in the cotton-manufacturing industry. [1919.]
- *No. 256. Accidents and accident prevention in machine building. [1919.]
- No. 267. Anthrax as an occupational disease. [1920.]
- No. 276. Standardization of industrial accident statistics. [1920.]
- *No. 280. Industrial poisoning in making coal-tar dyes and dye intermediates. [1921.]
- *No. 291. Carbon monoxide poisoning. [1921.]
- No. 293. The problem of dust phthisis in the granite stone industry. [1922.]
- No. 298. Causes and prevention of accidents in the iron and steel industry, 1910-1919.
- No. 392. Survey of hygienic conditions in the printing trades. [1925.]
- No. 405. Phosphorus necrosis in the manufacture of fireworks and in the preparation of phosphorus. [1926.]
- No. 427. Health survey of the printing trades, 1922 to 1925.
- No. 428. Proceedings of the Industrial Accident Prevention Conference, held at Washington, D. C., July 14-16, 1926.
- No. 460. A new test for industrial lead poisoning. [1928.]
- No. 466. Settlement for accidents to American seamen. [1928.]
- No. 488. Deaths from lead poisoning, 1925-1927.
- *No. 490. Statistics of industrial accidents in the United States to the end of 1927.
- *No. 507. Causes of death, by occupation. [1930.]
- *No. 582. Occupation hazards and diagnostic signs: A guide to impairments to be looked for in hazardous occupations. (Revision of Bul. No. 306.) [1933.]
- *No. 602. Discussions of industrial accidents and diseases at the 1933 meeting of the International Association of Industrial Accident Boards and Commissions, Chicago, Ill.

Industrial relations and labor conditions.

- *No. 237. Industrial unrest in Great Britain. [1917.]
- *No. 340. Chinese migrations, with special reference to labor conditions. [1923.]
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- *No. 411. Twelfth, Salt Lake City, Utah, August 13-15, 1925.
- *No. 429. Thirteenth, Columbus, Ohio, June 7-10, 1926.
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