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UNITED STATES DEPARTMENT OF LABOR
BULLETIN OF THE WOMEN'S BUREAU, No. 127

HOURS AND EARNINGS
IN
TOBACCO STEMMERIES

UNITED STATES DEPARTMENT OF LABOR

FRANCES PERKINS, SECRETARY

WOMEN'S BUREAU

MARY ANDERSON, Director

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**HOURS AND EARNINGS IN
TOBACCO STEMMERIES**

BY

CAROLINE MANNING



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REPORT OF THE COMMISSIONER

CONTRACT

HOURS AND EARNINGS IN TOBACCO STEMMERS

BY
CHAS. H. MANNING



1914

OFFICE OF THE COMMISSIONER
WASHINGTON, D. C.

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CHAPTER 10. FEDERAL RESERVE BANK

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LETTER OF TRANSMITTAL

UNITED STATES DEPARTMENT OF LABOR,
WOMEN'S BUREAU,
Washington, August 3, 1934.

MADAM: I have the honor to transmit a report on hours and earnings in tobacco stemmeries in Virginia and North Carolina. Data were secured for three branches of the industry—cigarette factories, chewing-tobacco factories, and dealers' establishments—in all of which tobacco stemming is done.

The investigation was made and the figures have been analyzed at the request of labor representatives for use in the making of a code of fair competition for tobacco manufacturing.

The field work was done and the report has been written by Caroline Manning, industrial supervisor.

Respectfully submitted.

MARY ANDERSON, *Director.*

HON. FRANCES PERKINS,
Secretary of Labor.

HOURS AND EARNINGS IN TOBACCO STEMMERIES

INTRODUCTION

In May 1934 the Women's Bureau of the United States Department of Labor made an investigation of current pay rolls of the stemmery departments in three branches of the tobacco manufacturing industry in Virginia and North Carolina to secure material for use in the making of a code for the tobacco industry. Dealers' stemmeries were included in this pay-roll audit, since dealers not infrequently contract with cigarette manufacturers to deliver tobacco that has already been stemmed in dealers' establishments. Smoking-tobacco stemmeries, represented by only 278 employees, are shown in certain tabulations (see pp. 8 and 17) but are not treated in detail as are the other branches.

Pay-roll data for 3,990 persons were secured in the stemmeries of 7 factories making cigarettes; for 418 persons in 3 plants making chewing tobacco; and for 717 persons employed by 3 dealers in tobacco. An overwhelming majority of the employees in stemmeries are women.

Since standards and conditions varied somewhat in these three branches of the tobacco industry, a separate wage analysis has been made for each of these groups; and where numbers employed were sufficiently large, emphasis has been placed on four of the numerically most important occupations in the stemmeries, namely, hand stemming, machine stemming, searching, and picking.

SUMMARY

Date of survey: May 1934.

Scope:

Stemmery departments in three branches of the tobacco manufacturing industry in Virginia and North Carolina. Pay-roll data for 5,125 persons in 13 establishments: 3,990 in 7 cigarette factories, 418 in 3 chewing-tobacco factories, and 717 in 3 dealers' establishments. An overwhelming majority of the employees in stemmeries are women.

Hours:

Over four-fifths of the employees worked the firms' operating hours. In dealers' establishments, a branch of the industry that has not complied with the President's Reemployment Agreement, over two-thirds of the employees had worked 55 hours or more, in contrast to only one person in cigarette-factory stemmeries who worked more than 40 hours and none in chewing-tobacco stemmeries who worked as much as 40.

Earnings:

Hand stemmers had a higher median of hourly earnings in cigarette factories (27 cents) than in chewing-tobacco factories (24.7 cents) or dealers' establishments (11.9 cents). In the last named no employee averaged as much as 22½ cents; in the other two branches some hand stemmers, 33 and 7, respectively, received as high as 40 cents.

The median of the week's earnings of 1,141 hand stemmers in cigarette-factory stemmeries, whose operating hours were 39 and 40, was \$11. On the other hand,

the median of the 424 hand stemmers in dealers' establishments working the full 55-hour week was only \$6.55, and the median for the 119 whose week was 28 hours was \$3.60.

HOURS OF WORK

The time element is as necessary a consideration as the wage rate in determining actual earnings. Altogether, of the 5,124 employees for whom complete pay-roll data were obtained in 13 tobacco-stemming departments, an outstanding number—44.7 percent—had worked 40 hours during the pay-roll week, but 15.3 percent had worked less than 30 hours and 29.5 percent had worked 30 but less than 40; in other words, almost the same number had worked less than 40 hours as had worked 40. All but 1 of the 542 employees who had exceeded 40 hours, 10.6 percent of the total, were employed in dealers' stemmeries, where a 55-hour week predominated.

Timekeeping was a most casual matter and done quite carelessly in several establishments visited, the records of hours worked by individual employees during the week seeming far from exact. In spite of this fact, the hours given have been used in this report, as the employers were reckoning their costs upon these same pay-roll entries, and they were the only records available for a measurement of time.

In one set of books almost every employee had worked 40 hours, though some had worked 32 hours and a few 36. On inquiry it developed that the foreman entered only absences in his time book and did not "bother" with anything less than half a day. In another factory office the record of time furnished showed only the number of days on which the employee had reported for work. There was nothing to indicate how short or how long the days had been, though a general statement was made as to the total number of hours the stemmery had operated. Obviously it was impossible to combine this pay roll with those on which hours worked, or at least approximate hours worked, were given, and therefore it has not been included in this report. This firm, nevertheless, had calculated hourly earnings in this case, using operating hours as a base for reckoning individual working hours. In passing it may be stated that three-fifths of the employees in this stemmery had earned less than \$8 during the week.

Hours worked in pay-roll week

Hours worked in pay-roll week	Total employees		Employees working specified number of hours in—					
	Number	Percent	Cigarette stemmeries		Chewing tobacco stemmeries		Dealers' stemmeries	
			Number	Percent	Number	Percent	Number	Percent
Total.....	15,124	100.0	13,989	100.0	418	100.0	717	100.0
Less than 30.....	783	15.3	404	10.1	220	52.6	159	22.2
30, less than 35.....	352	6.9	335	8.4	5	1.2	12	1.7
35, less than 40.....	1,158	22.6	960	24.1	193	46.2	5	.7
40.....	2,303	44.9	2,289	57.4			14	2.0
Over 40, less than 55.....	42	.8	1	(²)			41	5.7
55 and more.....	486	9.5					486	67.8

¹ Excludes 1 employee with hours not reported.

² Less than 0.1.

There were striking variations in the amount of time worked in the three branches of the industry studied. In stemmeries connected directly with the manufacture of cigarettes, 57.4 percent of the employees had worked 40 hours and only one employee had worked longer. In stemmeries of chewing-tobacco factories none had worked so long as 40 hours, though 46.2 percent had worked 35 and under 40; however, over half (52.6 percent) of the employees had worked less than 30 hours during the week. In contrast to this were the excessively long hours in dealers' stemmeries, not prohibited in the present unregulated condition of this branch of the industry. In the stemmeries of dealers over two-thirds (67.8 percent) of the employees had worked as long as 55 hours, although more than one-fifth (22.2 percent) had worked short hours, less than 30. This is a branch of the industry which, in spite of its long hours and low wage scale, is not yet [July 1934] regulated by a code and has never complied with the President's Reemployment Agreement.

In determining hourly rates of wages, due consideration should be given to the usual number of hours worked, for, after all, the worker must live on his week's earnings, and if he is employed for only part of a week, say 30 hours, when the hourly rate was fixed with a standard 40-hour week in view, the worker suffers a decided loss, and in this case earns only three-fourths of what standard earnings should be.

Since not far from half of the workers covered in the industry (44.8 percent) were employed less than 40 hours—many even less than 30 hours—in a normal period, the hourly rate should be fixed correspondingly higher, bearing this undertime condition in mind.

The fact that not far from three-fifths of the employees (55.2 percent) in the 13 plants worked 40 hours or more does not mean necessarily that the others could have worked 40 hours had they so desired. As a matter of fact, only 4 of the stemmeries connected with cigarette factories operated full 40 hours during the pay-roll week, and the week for this audit was selected in each case in consultation with management because it represented usual conditions, neither the high nor the low of the year.

Of the other three cigarette stemmeries, two operated 39 and 34 hours respectively, while the third operated 35 hours in one section and 36 hours in another. These operating hours under 40 affected about three-tenths (29.5 percent) of all employees scheduled in the cigarette units.

None of the three chewing-tobacco factories operated as much as 40 hours during the pay-roll week. Two divisions in one factory operated 36 and 28 hours respectively; the other factories operated 25½ and 16 or 17 hours. In this branch of the tobacco-products industry short hours prevailed, and none of the employees had an opportunity to work more than 36 hours.

Operating hours in the stemmeries of tobacco dealers show extreme conditions, for the most part decidedly different from the short hours prevailing in the other two branches of the industry. One of the three dealers' stemmeries operated only 28 hours but the other two operated 55 hours. Over four-fifths (82.3 percent) of the employees in dealers' units were in the stemmeries where these longest working hours were the standard.

Considering the 5,124 employees in the 13 stemmeries covered by the survey, 83.6 percent worked the full operating hours of the depart-

ment in which they were scheduled. Though as a whole 82.6 percent of all those in cigarette stemmeries worked total operating time, the proportion varied greatly from plant to plant. In one department operating 40 hours, only 42.6 percent worked the full 40 hours, while in another also operating 40 hours, 92.9 percent worked the total time. Variations in the proportions working full operating hours in the other branches of the industry are not so extreme as in cigarette factories, though in one dealer's stemmery 77.6 percent of the employees, and in another 88.4 percent, worked the total 55 operating hours. In the third dealer's stemmery 93.7 percent worked the total operating hours, in this case only 28.

Employees working total operating hours

Operating hours of plants or stemmery departments	Plant number	Total number of employees	Employees working total operating hours	
			Number	Percent
All stemmeries.....		5,124	4,284	83.6
Cigarette stemmeries—Total.....		3,989	3,293	82.6
34.....	1	248	158	63.7
35.....	7	476	438	92.0
36.....	7	279	266	95.3
39.....	2	172	142	82.6
40.....	3	168	156	92.9
40.....	4	242	103	42.6
40.....	5	2,226	1,873	84.1
40.....	6	178	157	88.2
Chewing-tobacco stemmeries—Total.....		418	387	92.6
16 or 17.....	11	55	51	92.7
25½.....	13	94	76	80.9
28.....	12	72	67	93.1
36.....	12	197	193	98.0
Dealers' stemmeries—Total.....		717	604	84.2
28.....	10	127	119	93.7
55.....	8	340	264	77.6
55.....	9	250	221	88.4

AVERAGE HOURLY EARNINGS

CIGARETTE STEMMERIES

Hand stemming

Of about 4,000 stemmery employees for whom pay-roll data were furnished by cigarette manufacturers, one-half were hand stemmers, over one-fourth (27 percent) were searchers or pickers, and somewhat over one-fifth (22.3 percent) were machine stemmers.

Almost invariably hand stemming is a piecework job, paid on a production basis by weight either of stems or of strips, the rates varying slightly with the type and the quality of the tobacco. The average hourly earnings of 69.1 percent of the 2,022 hand stemmers fell within a 10-cent range, 22½ and under 32½ cents an hour, while 17.2 percent earned less than 22½ cents and 13.7 percent earned 32½ cents or more. The following shows the percentage of 2,022 hand stemmers in cigarette factories averaging each specified amount per hour.

Average hourly earnings (cents):	Percent of employees
Less than 15.....	1.3
15, less than 20.....	7.3
20, less than 25.....	22.4
25, less than 30.....	41.9
30, less than 35.....	20.0
35 and more.....	7.1

This arrangement in 5-cent groups shows that the most usual hourly earnings were 25 and less than 30 cents, over two-fifths of the hand stemmers being in this group. More than one-fifth (22.4 percent) earned 20 and under 25 cents and still another fifth earned 30 and under 35. Small proportions earned 35 cents or more (7.1 percent) and less than 20 cents (8.6 percent).

As many as 26 hand stemmers averaged less than 15 cents an hour, 173 less than 20 cents, 626 less than 25 cents, and 1,474 less than 30 cents an hour; or, roughly speaking, almost one-third averaged less than 25 cents and almost three-fourths averaged less than 30 cents.

This is especially significant in view of the fact that the cigarette firms, in becoming parties to the President's Reemployment Agreement of August 1933, were allowed a minimum rate of 25 cents an hour for stemmery occupations. Further, the code for the cotton textile industry operating in the same areas as the tobacco-products factories established a minimum of 30 cents an hour. The theory of minimum wages is that they shall provide protection for the most unskilled workers by setting the lowest wage level at which workers can live in health and decency. Applying to the cigarette industry the minimum standard of 30 cents an hour set by the cotton textile code, it appears that only somewhat more than one-fourth (27.1 percent) of the hand stemmers in cigarette factories were earning 30 cents or more; that is, enough to meet the lowest standard of living allowed for experienced workers by the minimum established for the other industry.

Machine stemming

Machine stemming was not usually a piecework job, and the most common hourly rate was 25 cents. About 100 of the 890 machine stemmers were earning less than 25 cents, while almost three-fifths earned 25 cents and practically one-fourth earned 30 cents or more.

Picking and searching

The operations of picking and searching also were on an hourly basis, the prevailing rate in 4 of the 5 plants reporting these workers being 25 cents. No worker averaged less than this an hour, and fewer than 30 of the 1,077 were receiving more than 25 cents.

TOBACCO-DEALERS' STEMMERIES

The hourly earnings of the employees in stemmeries of tobacco dealers are so much lower than those in stemmeries directly connected with cigarette factories that they have been analyzed separately. For example, in the case of hand stemmers, who constitute the vast bulk of the workers, 87.6 percent of those employed in dealers' establishments, in contrast to only 1.3 percent of those in cigarette factories, earned less than 15 cents an hour; and at the other extreme, while over four-fifths of the hand stemmers of cigarette tobacco earned 22½

cents, no hand stemmers earned as much as this in dealers' establishments. The following shows the percentage of the 635 hand stemmers in tobacco dealers' establishments averaging less than the amounts specified per hour.

Average hourly earnings (cents):	Percent of employees
Less than 8.....	2.2
Less than 10.....	14.0
Less than 12.....	52.1
Less than 14.....	80.3
Less than 15.....	87.6
Less than 17½.....	97.6
17½ and more.....	2.4

As stated before, 87.6 percent of the 635 hand stemmers in dealers' plants earned less than 15 cents an hour, and the distribution of earnings under 15 cents shows that 2.2 percent earned less than 8 cents, 14 percent less than 10 cents, 52.1 percent less than 12, and 80.3 percent less than 14 cents.

Since work in the stemmeries of tobacco dealers is seasonal, the pay rolls used as a basis for this compilation were selected by the management in each case as representing a busy week in the past season. For this reason the dates of the pay rolls used were not uniform as were those of the cigarette firms. One dealer recommended a pay roll of November 1933 and another was as late as March 1934; but in each case the stemmery operated normal time for the season, if not overtime.

Furthermore, these pay rolls represent earnings on tobacco that had been contracted for by various cigarette manufacturers, and while employees in the stemmeries of cigarette factories had earnings with a median of 27 cents an hour, employees in dealers' stemmeries had earnings with a median of only 11.9 cents, or less than half that of stemmers in cigarette factories.

A difference in rates in these two branches of the industry is being considered by the administration, but it is unfair that the average earnings of stemmers in one plant should be less than half of the average of stemmers in another plant simply because the stemmers first named are employed by a dealer and the others are employed by a cigarette manufacturer. Undoubtedly the cigarette firms who contract with dealers for tobacco strips benefit by this differential in the labor costs at the expense of cigarette manufacturers who operate their own stemmeries, so from the point of view of employers as well as employees the rates set should be uniform for the occupation, whether done for a dealer or for a manufacturer of cigarettes, of chewing tobacco, or of smoking tobacco. And in no case should this mean the lowering of a rate below 25 cents an hour.

Almost nine-tenths of the employees (88.6 percent) in the stemmeries of tobacco dealers were hand stemmers, only 82 being machine stemmers, pickers, or searchers. With few exceptions, hourly earnings were higher in these latter occupations than in hand stemming. Two-thirds of the machine stemmers reported were earning 20 or 21 cents, and none of them, nor of the pickers and searchers, earned less than 15 cents.

CHEWING-TOBACCO STEMMERIES

The pay-roll data for over 400 persons employed in stemmeries directly connected with plants making chewing tobacco cover the hand-stemming operation only. Though earnings were decidedly better in this branch of the industry than in the stemmeries of dealers, they ranged somewhat lower than in stemmeries of cigarette factories. The following shows the percentage of the 418 hand stemmers in chewing-tobacco establishments averaging each specified amount per hour.

Average hourly earnings (cents):	Percent of employees
Less than 15.....	2.2
15, less than 20.....	23.4
20, less than 25.....	25.8
25, less than 30.....	30.9
30, less than 35.....	11.7
35 and more.....	6.0

Only 9 hand stemmers were earning less than 15 cents an hour in chewing-tobacco factories. Just over one-fourth were earning less than 20 cents and about the same number 20 and less than 25 cents. The largest group (30.9 percent) had earnings of 25 and less than 30 cents, and 17.7 percent had earnings of 30 cents or more, including a few who made as much as 40 cents.

SMOKING-TOBACCO STEMMERIES

Records were obtained for a limited number of stemmers, 1 with hours not reported, in smoking-tobacco stemmeries. The following shows the percentage of these 277 hand stemmers in smoking-tobacco units earning each specified amount per hour.

Average hourly earnings (cents):	Percent of employees
15, less than 20.....	2.9
20, less than 25.....	11.9
25, less than 30.....	27.1
30, less than 35.....	35.7
35, less than 40.....	15.2
40 and more.....	7.2

It is apparent that earnings of hand stemmers were higher in smoking-tobacco units than in the other stemmeries visited. None of the 277 hand stemmers averaged less than 15 cents and only 2.9 percent earned less than 20 cents. At the other extreme, over a third (35.7 percent) earned 30 and under 35 cents and more than a fifth (22.4 percent) earned 35 cents or more.

Nearly three-fifths (58.1 percent) of the workers in these units averaged 30 cents or more an hour, in contrast to only 27.1 percent in the cigarette units, 17.7 percent in chewing-tobacco factories, and no one at all in the dealers' units. Further, while only 1.6 percent of the hand stemmers in cigarette factories earned 40 cents or more, 7.2 percent of those in smoking-tobacco units did so.

HOURS AND EARNINGS IN TOBACCO STEMMERIES

Average hourly earnings of employees in tobacco stemmeries

Average hourly earnings (cents)	Percent of employees					
	Cigarette factories				Chewing-tobacco factories, hand stemmers (418)	Smoking-tobacco factories, hand stemmers (277)
	Total (3,989)	Hand stemmers (2,022)	Machine stemmers (890)	Pickers and searchers (1,077)		
Total.....	100.0	100.0	100.0	100.0	100.0	100.0
Median hourly earnings (cents).....	25	27	25	25	24.72	31.03
Less than 15.....	0.7	1.3	-----	-----	2.2	-----
15, less than 17½.....	1.3	2.6	-----	-----	7.2	0.7
17½, less than 20.....	2.6	4.7	1.1	-----	16.3	2.2
20, less than 22½.....	5.2	8.6	3.8	-----	13.2	5.1
22½, less than 25.....	8.3	13.8	6.1	-----	12.7	6.9
25, less than 27½.....	51.4	23.0	1 60.3	2 97.3	19.9	11.9
27½, less than 30.....	10.5	18.9	4.2	-----	11.0	15.2
30, less than 32½.....	8.3	13.4	4.2	2.4	7.4	22.4
32½, less than 35.....	7.9	6.7	3 20.1	3	4.3	13.4
35, less than 37½.....	1.8	3.6	.1	-----	2.9	10.5
37½, less than 40.....	1.0	1.9	-----	-----	1.4	4.7
40 and more.....	.9	1.6	.1	-----	1.7	7.2

Average hourly earnings (cents)	Percent of employees—Dealers' establishments		
	Total (4 717)	Hand stemmers (635)	Pickers and searchers (58)
Total.....	100.0	100.0	100.0
Median hourly earnings (cents).....	12.27	11.9	15
Less than 10.....	12.4	14.0	-----
10, less than 11.....	15.6	17.6	-----
11, less than 12.....	18.1	20.5	-----
12, less than 13.....	14.4	16.2	-----
13, less than 14.....	10.6	12.0	-----
14, less than 15.....	6.4	7.2	-----
15, less than 17½.....	15.8	10.1	84.5
17½, less than 20.....	3.5	2.0	15.5
20, less than 22½.....	2.5	.3	-----
22½, less than 25.....	.7	-----	-----

¹ Almost all at 25 cents.

² All at 25 cents.

³ Almost all at 32½ cents.

⁴ Includes 24 machine stemmers, not shown separately.

VARIATIONS IN HOURLY EARNINGS

There was a wide variation in individual earnings within the same plant. For example, in four cigarette factories some hand stemmers averaged as little as 10 to 12 cents an hour, while a few averaged as much as 45 to 48 cents.

There were variations in hourly earnings from plant to plant, also, but these were less marked than the differences among individual earnings within the same plant. For hand stemmers the median hourly earnings ranged from 25 cents in 1 of 6 cigarette factories to 30 cents in another, from 18.6 cents to 26 cents in 3 chewing-tobacco units, and from 11.6 cents to 12.1 cents in 3 dealers' units.

Median hourly earnings of hand stemmers, in ascending scale

6 cigarette factories ¹		3 chewing-tobacco factories		3 dealers' establishments	
Factory number:	Cents	Factory number:	Cents	Factory number:	Cents
6.....	25.0	13.....	18.6	9.....	11.6
7.....	26.5	11.....	25.0	8.....	11.9
1.....	26.7	12.....	26.0	10.....	12.1
5.....	27.3				
2.....	28.9				
4.....	30.0				

¹ Factory employing less than 50 excluded from this summary.

The range in median earnings for machine stemmers was from 23.7 cents in one cigarette factory to 32½ cents in another.

A comparison of the distribution of earnings plant by plant gives a more complete picture of the variations in standards than does a comparison of minimum and maximum points or of medians. Such a distribution follows:

*Percentage distribution of hand stemmers in various plants according to hourly earnings, arranged in ascending scale*1,988 HAND STEMMERS IN 6 CIGARETTE FACTORIES¹

Earning less than 25 cents		Earning 25 and less than 30 cents		Earning 30 cents and more	
Factory number:	Percent of employees	Factory number:	Percent of employees	Factory number:	Percent of employees
4.....	20.3	4.....	27.5	6.....	13.6
2.....	25.2	2.....	29.4	1.....	23.0
5.....	28.8	7.....	39.3	7.....	23.9
1.....	29.7	6.....	44.0	5.....	25.9
7.....	36.8	5.....	45.3	2.....	45.4
6.....	42.4	1.....	47.3	4.....	52.2

418 HAND STEMMERS IN 3 CHEWING-TOBACCO FACTORIES

Earning less than 20 cents		Earning 20 and less than 30 cents		Earning 30 cents and more	
Factory number:	Percent of employees	Factory number:	Percent of employees	Factory number:	Percent of employees
11.....	15.2	13.....	29.8	13.....	9.1
12.....	70.2	12.....	59.1	11.....	25.7
13.....		11.....	90.9	12.....	

635 HAND STEMMERS IN 3 DEALERS' ESTABLISHMENTS

Earning less than 10 cents		Earning 10 and less than 15 cents		Earning 15 cents and more	
Plant number:	Percent of employees	Plant number:	Percent of employees	Plant number:	Percent of employees
10.....	8.7	8.....	72.1	9.....	10.4
8.....	14.7	9.....	73.6	8.....	13.2
9.....	16.0	10.....	76.4	10.....	15.0

¹ Factory employing less than 50 excluded from this summary.

The proportion of hand stemmers in 6 cigarette units whose average earnings were less than 25 cents ranges from 20.3 percent in one factory to 42.4 percent in another; of those earning 25 and under 30 cents the range was from 27.5 percent in one factory to 47.3 percent in another; and of those earning 30 cents and more the range was from 13.6 percent in one factory to 52.2 percent in another.

The earnings of hand stemmers in three chewing-tobacco factories showed much wider variations. In one plant none of the stemmers earned less than 20 cents, while in another 70.2 percent were in this earnings group. Correspondingly, in the upper level of earnings 25.7 percent in one plant earned 30 cents or more, while in another plant no one earned as much as 30 cents.

Variations were slight in the stemmeries of dealers, where all earnings were extremely low. The variation in the proportion earning less than 10 cents an hour was only from 8.7 percent to 16 percent, and the variation in the highest wage group, with earnings of 15 cents or more per hour, was only from 10.4 percent to 15 percent.

Variations in firm standards—percent distribution¹ of average hourly earnings

HAND STEMMERS IN CIGARETTE FACTORIES

Average hourly earnings (cents)	Factory 1 (74 employees)	Factory 2 (119 employees)	Factory 3 (33 employees)	Factory 4 (69 employees)	Factory 5 (1,075 employees)	Factory 6 (125 employees)	Factory 7 (527 employees)
Total.....	100.0	100.0	-----	100.0	100.0	100.0	100.0
Less than 20.....	1.4	7.6	-----	11.6	7.7	8.0	11.6
20, less than 25.....	28.4	17.6	-----	8.7	21.1	34.4	25.2
25, less than 30.....	47.3	29.4	-----	27.5	45.3	44.0	39.3
30, less than 35.....	23.0	27.7	-----	23.2	21.4	10.4	15.7
35 and more.....	-----	17.6	-----	29.0	4.6	3.2	8.2

MACHINE STEMMERS IN CIGARETTE FACTORIES

	(41 employees)	(53 employees)	(68 employees)	(153 employees)	(330 employees)	(17 employees)	(228 employees)
Total.....	-----	100.0	100.0	100.0	100.0	-----	100.0
Less than 25.....	-----	-----	-----	64.1	-----	-----	-----
25, less than 30.....	-----	-----	-----	35.3	91.2	-----	92.1
30 and more.....	-----	100.0	100.0	.7	8.8	-----	7.9

HAND STEMMERS IN TOBACCO-DEALERS' ESTABLISHMENTS

	Plant 8 (258 employees)	Plant 9 (250 employees)	Plant 10 (127 employees)
Total.....	100.0	100.0	100.0
Less than 10.....	14.7	16.0	8.7
10, less than 13.....	51.6	57.2	54.3
13, less than 15.....	20.5	16.4	22.0
15 and more.....	13.2	10.4	15.0

HAND STEMMERS IN CHEWING-TOBACCO FACTORIES

	Factory 11 (55 employees)	Factory 12 (269 employees)	Factory 13 (94 employees)
Total.....	100.0	100.0	100.0
Less than 20.....	-----	15.2	70.2
20, less than 25.....	12.7	27.9	27.7
25, less than 30.....	78.2	31.2	2.1
30 and more.....	9.1	25.7	-----

¹ Not computed where base less than 50.

Earnings of machine stemmers were in most plants determined by the hourly rate of pay. In some manufacturing units the rate was uniformly 32½ cents and in other large units it was 25 cents. Only in one cigarette factory, where this occupation was on a piecework basis, did earnings fall below 25 cents an hour, and in this case 64 percent—almost two-thirds—were averaging less than 25 cents an hour, a few of them even less than 20 cents.

Like those of machine stemmers, the earnings of searchers and pickers were determined by the standard hourly rate paid for this work in the various plants. Practically all were earning 25 cents, the prevailing hourly rate. In no cigarette factory were any pickers and searchers earning less than this, and only 29, employed in 3 plants, were earning more.

LEARNING PERIOD

Stemming is often regarded as unskilled labor, but one superintendent insisted that it is more or less skilled. Searchers become efficient within a week, but hand stemmers require 3 weeks and machine feeders 4 weeks to acquire speed and accuracy.

However, all agreed that there is practically no inexperienced labor being hired these days. "They have all been brought up in stemmeries and know how to handle tobacco", was one manager's comment.

SUBSTANDARD WORKERS

Management in various plants referred to the inefficiency of workers, their advanced age, and their lack of fitness for any other type of work. It would seem that it was a charity to employ them, unless one remembered the thousands of pounds of tobacco that they were stemming and sorting. On two occasions a rough selection was made of individual earnings of pieceworkers that seemed decidedly below the usual earnings in the department, and the foremen were asked what they considered the cause in each case for the apparent low earning capacity. Of a total of 36 such workers, 14 were appraised as old, 16 as slow, and 2 as "no good", the other 4 being respectively in poor health, recently ill, inefficient, and handicapped by poor sight. With almost half of this sample group classified as slow, the question arises, Were the slow workers taken into consideration when the piece rates were set for their jobs?

STANDARDS RAISED SINCE PRESIDENT'S REEMPLOYMENT AGREEMENT

In the cigarette and chewing-tobacco branches of the industry there was a general revision of wage rates in August and September 1933, as well as a reduction in working hours. For example, the 40-hour week was adopted in a factory where formerly the week had been 45, sometimes 50, and occasionally 60 hours long. In another a uniform schedule of 45 hours was changed to 40 hours; and in a very short time all firms in the cigarette industry were conforming to a 40-hour maximum working week. At the same time hourly wage rates were raised. One manager stated that wages were increased 12½ percent in his plant. In some cases rates that had been 16 and 18 cents were raised to 25, while various piece rates were increased from 6½ to 10¼ cents, from 7 to 12½ cents, from 9 to 12 cents, or from 1½ and 1¾ cents

to 2 and 2¼ cents. Rates varied slightly from firm to firm and with various types and qualities of tobacco.

A comparison of pay rolls before and after the President's Reemployment Agreement shows to what extent wages improved. Average hourly earnings for all employees in one stemmery for the weeks in January and March of 1933 ranged from 13 to 16 cents. A great improvement was noticeable in the corresponding season in 1934, when the average hourly earnings for all employees in the stemmery ranged from 23 to 28 cents.

WEEK'S EARNINGS OF EMPLOYEES WORKING TOTAL OPERATING HOURS

The week's earnings are of vital importance to the man who must live from week to week, governing all expenditures by the amount in his weekly pay envelop. He cannot reckon on monthly salary or quarterly dividends. If his working hours are curtailed, he suffers immediately. Well over two-fifths (44.8 percent) of all the stemmery employees worked less than 40 hours in the pay-roll week recorded. Employment undoubtedly is more seasonal and precarious in some branches of the industry than in others.

MEDIAN EARNINGS

Hand stemmers

The hand-stemming occupation accounts for the great bulk of stemmery employees, and though the occupation is practically the same wherever performed, operating hours and earnings vary not only in the three branches of the industry covered but from plant to plant.

In the cigarette units, the median of the week's earnings of the 545 who worked full operating schedules of 34, 35, and 36 hours was \$9.55, and of the 1,141 who worked full 39- and 40-hour schedules it was \$11. These were the highest median earnings of hand stemmers in any of the groups.

The next highest median was \$8.80 for the hand stemmers in chewing-tobacco plants who worked the full schedule of 28 and 36 hours. For those who worked 16 or 17 and 25½ hours, other full-time operating schedules in chewing tobacco, the median was \$4.55.

In the stemmeries of dealers the medians fell still lower. For those working the very long week of 55 hours the weekly earnings had a median of \$6.55, and for those working the short schedule of 28 hours it was \$3.60. In summary, for the longest working schedules in each branch of the industry the medians of the week's earnings were \$11 in cigarette stemmeries, \$8.80 in chewing-tobacco stemmeries, and \$6.55 in dealers' stemmeries.

Machine stemmers

The median of the week's earnings of machine stemmers working 40 hours in cigarette factories was \$10.60; for those working full-time schedules of 34, 35, and 39 hours it was \$8.75. It is worth noting in this connection that the lowest median for machine stemmers, \$8.65, was in a factory where very recently there had been a marked increase in machine-stemming equipment and where pounds produced determined the group earnings.

Searchers and pickers

The great majority of the full-time searchers and pickers in cigarette factories were on a 40-hour schedule, and 94 percent of these 834 workers earned \$10. The few pickers on a 34-hour schedule earned \$8.50.

Median of the week's earnings of employees working total operating time of their respective departments

Occupation and branch of industry	Plant operating hours	Number of employees working total operating hours	Median of the week's earnings
Hand stemmers:			
Cigarette factories.....	{34, 35, and 36.....	545	\$9.55
	{39 and 40.....	1,141	11.00
Chewing-tobacco factories.....	{16 or 17 and 25½....	127	4.55
	{28 and 36.....	260	8.80
Dealers' plants.....	{28.....	119	3.00
	{55.....	424	6.55
Machine stemmers:			
Cigarette factories.....	{34, 35, and 39.....	296	8.75
	{40.....	405	10.00
Searchers and pickers:			
Cigarette factories.....	{34.....	72	1 8.50
	{40.....	834	2 10.00

¹ All earned \$8.50.

² 94 percent earned \$10; the rest earned more.

DISTRIBUTION OF EARNINGS

Medians indicate only the point at which half the earnings are below and half are above, but the variation appears more clearly in a distribution of earnings in dollar groupings.

Hand stemmers

Combining all hand stemmers regardless of the branch of the industry that employed them or of the operating hours of their respective plants, the median of the week's earnings of 2,589 in this occupation was \$9.55, and all had worked the entire time that their departments had operated in the week.

Though the median was \$9.55 as stated, 14.6 percent of the stemmers earned less than \$6, not so much as a dollar a day; at the other end of the scale a slightly larger proportion (15.4 percent) earned \$12 or more, averaging slightly over \$2 a day.

Between these two extremes of less than \$6 and \$12 or more fell the vast majority of the earnings. In each of the dollar groupings of \$6, \$7, and \$8 there were around 250 employees, more than 300 earned respectively \$9 and under \$10 and \$11 and under \$12, and more than 400 earned \$10 and under \$11.

The total of hand stemmers is heavily weighted by the large numbers in cigarette plants, where the range of earnings was higher than in stemmeries of dealers or of chewing-tobacco factories. Considering the hand stemmers in cigarette factories where operating hours were 39 and 40 separately from those where operating hours were 34, 35, and 36, it is apparent that only 1.9 percent of those on the longer schedules earned less than \$7 for the week and 9.9 percent of those on

the shorter schedules earned less than \$7; and while 25.8 percent under the longer hours earned less than \$10, 61.1 percent under the shorter hours had such earnings. Forty-six percent of those on the longer schedules earned \$10 and under \$12, the most representative earnings for this group, but only 27.9 percent on the shorter schedule earned so much. At the higher wage levels 28.2 percent working the longer hours earned \$12 or more, but only 11 percent with the shorter hours did so.

In the other two branches of the industry there were such wide differences in operating hours from plant to plant that there was even less similarity in earnings than in those just discussed. This was especially marked in the stemmeries of dealers, where none of the hand stemmers on a 55-hour week earned less than \$3, but 15.1 percent of those on a 28-hour week did so. The highest earnings on the 28-hour schedule were \$5 and under \$6, and only 1.7 percent of the group received this, while practically 2 percent (1.9) of those on a 55-hour schedule earned \$10 and under \$12. However, even those working the very long week had no one who earned as much as \$12. Their earnings bulked heavily in the \$5, \$6, and \$7 groups and only 13.4 percent earned \$8 or more.

Wide variation between the earnings on long and those on short operating hours was evident in the chewing-tobacco stemmeries also. Twelve percent of the hand stemmers on 17- and 25½-hour operating schedules earned less than \$4, though none of those working 28 or 36 hours earned so little. Sixty-five percent of the workers on the shorter hours earned \$4 and under \$5 and none earned as much as \$7, but 55 percent of those on the longer hours were in the \$7, \$8, or \$9 groups and 21.5 percent earned \$10 and under \$12. As many as 6.5 percent earned \$12 or more.

Machine stemmers and pickers and searchers

Of the 296 machine stemmers who worked full plant time of 34, 35, or 39 hours, practically two-thirds (65.9 percent) earned \$8 and less than \$9; for two-thirds (66.9 percent) of the 405 who worked full time where the hours were 40, the earnings were \$10 and less than \$11.

The bulking of numbers was even heavier in the case of the pickers and searchers, undoubtedly due to the fact that all were in cigarette factories, where these jobs have a standard hourly rate. All who worked full time where the plant schedule was 34 hours earned \$8.50, and all but 6 percent of those working full time where the schedule was 40 earned \$10. The little group exceeding this was paid over \$10 but under \$14. No machine stemmer and no picker or searcher who worked full operating hours earned less than \$8 nor so much as \$14.

The table following shows the earnings distribution of employees who worked the full operating hours.

Percent distribution according to week's earnings of employees who worked the operating hours of their respective departments

HAND STEMMERS

Week's earnings	Total hand stemmers		Cigarette factories operating—		Chewing-tobacco factories operating—		Dealers' stemmeries operating—	
	Number	Percent	34, 35, and 36 hours (545 employees)	39 and 40 hours (1,141 employees)	16 or 17 and 25½ hours (127 employees)	28 and 36 hours (260 employees)	28 hours (119 employees)	55 hours (424 employees)
Total.....	2,616	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$3.....	19	0.7	-----	-----	0.8	-----	15.1	-----
\$3, less than \$4.....	90	3.4	-----	-----	12.6	-----	60.5	0.5
\$4, less than \$5.....	129	4.9	0.6	0.2	66.1	0.4	22.7	2.8
\$5, less than \$6.....	168	6.4	3.3	.7	15.7	2.3	1.7	26.9
\$6, less than \$7.....	235	9.0	6.1	1.1	4.7	14.2	-----	34.7
\$7, less than \$8.....	242	9.3	11.9	3.4	-----	17.7	-----	21.7
\$8, less than \$9.....	253	9.7	15.6	7.2	-----	19.2	-----	8.5
\$9, less than \$10.....	340	13.0	23.7	13.2	-----	18.1	-----	3.1
\$10, less than \$11.....	424	16.2	18.7	24.4	-----	14.6	-----	1.4
\$11, less than \$12.....	317	12.1	9.2	21.6	-----	6.9	-----	.5
\$12, less than \$13.....	224	8.6	6.1	15.8	-----	4.2	-----	-----
\$13, less than \$14.....	103	3.9	3.3	7.2	-----	1.2	-----	-----
\$14, less than \$15.....	41	1.6	.9	3.0	-----	.8	-----	-----
\$15 and more.....	31	1.2	.7	2.3	-----	.4	-----	-----

MACHINE STEMMERS AND PICKERS AND SEARCHERS

Week's earnings	Total machine stemmers ¹		Machine stemmers in cigarette factories operating—		Total pickers and searchers ²		Pickers and searchers in cigarette factories operating—	
	Number	Percent	34, 35, and 39 hours (296 employees)	40 hours (405 employees)	Number	Percent	34 hours (72 employees)	40 hours (834 employees)
Total.....	725	100.0	100.0	100.0	943	100.0	100.0	100.0
\$8, less than \$9.....	203	28.0	65.9	2.0	98	10.4	100.0	-----
\$9, less than \$10.....	28	3.9	-----	6.9	11	1.2	-----	-----
\$10, less than \$11.....	288	39.7	4.7	66.9	814	86.3	-----	97.6
\$11, less than \$12.....	72	9.9	11.8	5.4	-----	-----	-----	-----
\$12, less than \$13.....	65	9.0	17.6	1.7	17	1.8	-----	2.0
\$13, less than \$14.....	69	9.5	-----	17.0	3	.3	-----	.4

¹ Total includes 24 machine stemmers in dealers' establishments working 55 hours, not shown separately.

² Total includes 37 pickers and searchers in dealers' establishments working 55 hours, not shown separately.

WEEK'S EARNINGS OF EMPLOYEES WORKING LESS THAN OPERATING HOURS

In the 3 branches of the industry under consideration 840 employees, 16.4 percent of the 5,124 covered, worked other than the full operating time of their respective departments, all but 13 of them working less than the operating hours. It is impossible to state what part of the 827 whose hours fell below the total in their departments lost time because of plant conditions and not for personal reasons. It frequently happens in industry that though a unit as a whole may operate 8 hours a day, there is not enough work to keep

all persons busy throughout the 8-hour period, and it is probable that many of those who failed to work the full operating period in the present study had their time curtailed by plant conditions.

Hours

The following shows the hours of employees who worked less than total operating hours:

Hours worked:	<i>Cigarette factories</i>	<i>Chewing- tobacco factories</i>
Total.....	685	30
Less than 20.....	212	19
20, less than 30.....	192	6
30, less than 40.....	281	5

Hours worked:	<i>Dealers' establishments</i>
Total.....	112
Less than 30.....	40
30, less than 40.....	17
40, less than 55.....	55

Over four-fifths (82.8 percent) of all who failed to work the plant's operating hours were employed in cigarette factories, and of these 685 undertime workers 30.9 percent had worked less than 20 hours during the week, 28 percent had worked 20 and less than 30 hours, and 41 percent had worked 30 and less than 40 hours.

The numbers of undertime workers in the other branches of the industry were relatively small; 19 of the 30 in chewing-tobacco factories had worked less than 20 hours, while of the 112 in dealers' stemmeries half had worked 40 but less than 55 hours and more than one-third had worked less than 30 hours.

Earnings

Naturally, earnings were correspondingly lower for these undertime workers than for those on full operating hours. Though the median of the earnings of cigarette hand stemmers working the full 39 or 40 hours was \$11, it was \$6.50 for the undertime employees in cigarette factories, more than two-fifths of whom worked 30 and under 40 hours. While the median of the earnings for hand stemmers in dealers' plants operating on a 55-hour schedule was \$6.55, for the undertime employees in dealers' stemmeries, half of whom worked at least 40 hours, it was \$4.40.

A comparison of the proportions earning less than \$5 emphasizes further the low level of the earnings of undertime workers. More than one-third (35.2 percent) of the undertime workers in cigarette stemmeries and more than three-fifths (63.4 percent) of those in dealers' stemmeries earned less than \$5. In contrast to this, only 2 hand stemmers on a full-time schedule of 40 hours in cigarette factories and only 14 on a full 55-hour schedule in dealers' stemmeries were reported as earning less than \$5. Further, of the hundreds of hand stemmers in all 3 branches of the industry who worked full operating time, which ranged from 16 to 55 hours, only 8.3 percent earned less than \$5.

Week's earnings of employees who worked less than total operating hours

Week's earnings	Total		Stemmeries employees working less than operating hours					
			Cigarette factories		Chewing-tobacco factories		Dealers' establishments	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total.....	827	100.0	685	100.0	30	(1)	112	100.0
Median ¹	\$6.05		\$6.50				\$4.40	
Less than \$4.....	210	25.4	143	20.9	21		46	41.1
\$4, less than \$5.....	127	15.4	98	14.3	4		25	22.3
\$5, less than \$6.....	71	8.6	57	8.3			14	12.5
\$6, less than \$7.....	106	12.8	89	13.0			17	15.2
\$7, less than \$8.....	66	8.0	59	8.6			7	6.3
\$8, less than \$9.....	115	13.9	109	15.9	4		2	1.8
\$9, less than \$10.....	49	5.9	48	7.0			1	.9
\$10, less than \$11.....	34	4.1	34	5.0				
\$11, less than \$12.....	20	2.4	19	2.8	1			
\$12 and more.....	29	3.5	29	4.2				

¹ Not computed where base less than 50.

WEEK'S EARNINGS OF ALL EMPLOYEES COVERED

A summary of all workers, regardless of hours actually worked and regardless of branch of the industry and of occupation, shows the week's earnings of 5,403 employees.

Week's earnings	Employees	
	Number	Percent
Total.....	5,403	100.0
Less than \$5.....	576	10.7
\$5, less than \$8.....	902	16.7
\$8, less than \$10.....	1,147	21.2
\$10, less than \$12.....	2,052	38.0
\$12, less than \$15.....	654	12.1
\$15 and more.....	72	1.3

¹ Includes 278 workers in a smoking-tobacco establishment.

From this it is apparent that the earnings of one-tenth of the employees were less than \$5 for the week, for close to one-half (48.6 percent) they were less than \$10, and for 86.6 percent they were less than \$12. In other words, only a little more than one-eighth of the employees covered in the stemmeries of this industry earned as much as \$12 during the week.

RELIEF

In one tobacco-manufacturing center the emergency relief administration reported that in May slightly more than 10 percent of their case load was experienced tobacco-factory workers, and that in over 2 percent of the cases they were giving supplemental aid to part-time workers in tobacco factories. In another city over one-sixth of the case load in April and over one-seventh in May were families in which one or more members were tobacco workers.

Relief had been necessary to supplement earnings of a greater number of workers still employed in the tobacco-products industry than of

those out of work because of the seasonal nature of the industry. In one city roughly two-thirds of the families were receiving supplemental aid during April and May, while only one-third were receiving total relief, and relief of tobacco workers in this city was averaging a few thousand dollars each month.

A relief organization stated that the shut-down of a tobacco concern for a few weeks in January had doubled their case load, but they met the emergency, and no family was left destitute.

ABILITY OF THE INDUSTRY TO PAY A LIVING WAGE

Labor cost is comparatively such a small part of the total production costs that the wage levels could be raised without making an appreciable difference to the industry. Figures submitted by the firms demonstrated that actual cost of labor for the preparation of tobacco leaf for cigarettes was low. In one plant the average weekly wage was \$10.82 per person for the unit of over 2,000 employees engaged in the preparation of tobacco leaf, that is, in stripping, inside trucking, blending, stemming, picking, searching, sweeping, and so forth. During the week this stemmery produced something over 3,000,000 pounds of strips, or enough tobacco for a billion cigarettes, the cost of these operations being less than a penny a pound of prepared tobacco or less than a mill per package of 20 cigarettes.

FLUCTUATION IN PAST 12 MONTHS

The past 12 months had not been a depression year for the cigarette firms and several units had employed an extra night shift for limited periods. To keep up with increasing business one unit not only put on a night force in the spring of 1934 but was gradually installing more machine-stemming equipment.

For 8 months out of the past 12 another firm had operated a second shift quite continuously. In other stemmeries hiring and laying off had been more spasmodic; for example, one plant closed down for 2 weeks in midwinter, then later operated extras at night for a short time.

In contrast to these fluctuations other units maintained a fairly steady labor force week after week and month after month.

Supplementary work

Not all units were expanding or working extra shifts; some were with difficulty keeping the force busy full time. It is to their credit that they were shifting workers from one job to another to employ them as much time as possible. In one department of 75 hand stemmers about one-fifth of them had worked on two jobs during the week. Their average employment on their regular jobs was 26 hours, while on the secondary job they averaged 6¾ hours, which raised their average earnings for the week from \$6.63 to \$8.48. In another such case the shifting to a supplementary job raised the average hours for the group from about 32 to 38½.

Trends of employment and other data

Five of the firms, 4 making cigarettes and 1 making chewing tobacco, supplied figures showing the recent trends in stemmery employment, production, and pay rolls. Three of the records were in weekly periods and two were in monthly periods. One cigarette unit had these comparative data for only the past 8 months, September 1933 to May 1934; one record extended over 11 months, June 1933 to May 1934; and one over 12 months, May 1933 to May 1934. Two records were for more than a year, one for the past 15 months and one for the past 17.

These five records have been analyzed separately to show the successive changes for the individual stemmeries. All figures submitted were reduced to index numbers, January 1934 being used as the base because it was a date common to all reports. Tables giving the index numbers accompany the charts.

Chart 1.—This chart illustrates conditions that are steadier than in the other plants, with a great improvement in the spring of 1934 over the spring of 1933. The increases through the winter months were due to an extra night shift employed during that season.

Chart 2.—In contrast to chart 1 this shows a decrease in employment, accompanied in most recent months by a marked increase in hours and production. The curves for the total pay roll and earnings rise in August at the same time that employment begins to decline somewhat. This rise undoubtedly reflects the improved wage standards set by the President's Reemployment Agreement. It has been suggested that the change in the direction of the production curve since January is due at least in part to the installation of stemming machines that are gradually replacing hand-stemming operations.

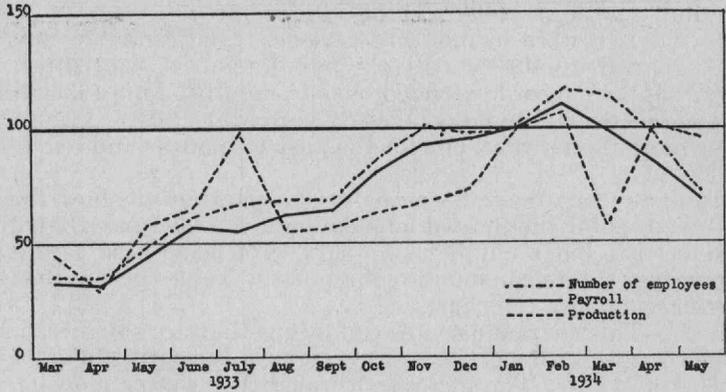
Chart 3.—The extreme peak in chart 3 in May 1933 immediately preceded the N.I.R.A. and coincides with sudden spurts in some other lines of business at that time. The curve indicates a decline in employment since February 1934 but recently an upward trend in the production and pay-roll curves, especially the former.

Chart 4.—These curves illustrate conditions in this firm only since the President's Reemployment Agreement became effective. There were sudden temporary changes through the 9 months, but on the whole employment cannot be said to be on a higher level. In February employment and man-hours increased while production dropped, but in April the opposite was true. The production curve suddenly went up with little change in employment and a drop in total pay roll. Such divergence in the curves was not explained.

Chart 5.—This is the only chart illustrating conditions in the chewing-tobacco branch of the industry. The record is incomplete in spots. Though the curve for employment was amazingly steady (the index varying only from a low of about 95 to a high of 103) production and pay-roll curves shot up and down from extreme highs to lows. Altogether there were at least eight spurts upward, each followed by sudden and drastic downward turns. Since early in August of 1933 the production and pay-roll curves have practically coincided, a condition not appearing in any cigarette factory chart, whether the stemmery force was wholly pieceworkers or not.

CHART 1.—INDEXES OF STEMMERY EMPLOYMENT, PAY ROLL, AND PRODUCTION IN CIGARETTE FACTORY 1, MARCH 1933 TO MAY 1934

[January 1934=100]



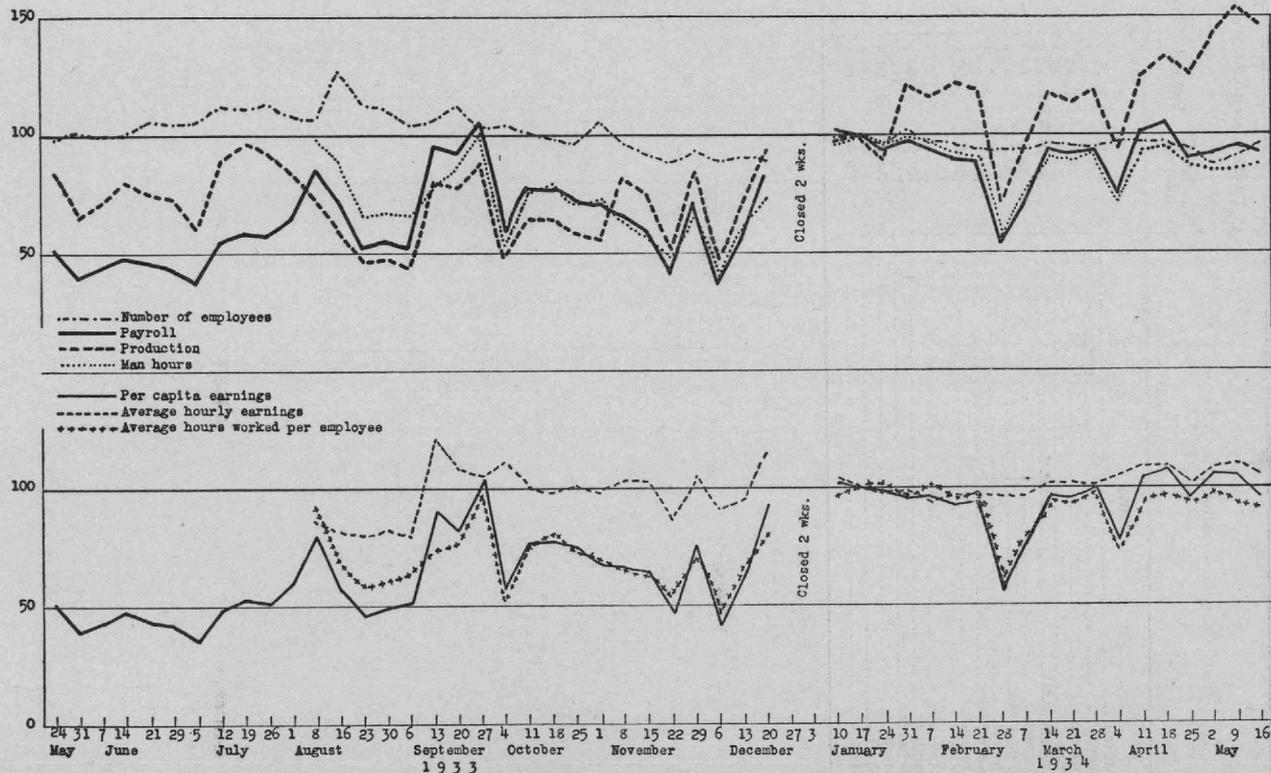
*Indexes of stemmery employment, pay roll, and production in cigarette factory 1,
March 1933 to May 1934*

[January 1934=100]

Month	1 week nearest middle of month		
	Number of employees	Pay roll	Production
1933			
March.....	36.0	33.0	45.4
April.....	35.2	31.1	29.6
May.....	48.5	44.9	57.3
June.....	61.9	57.6	65.5
July.....	67.7	55.6	98.9
August.....	69.8	63.3	55.9
September.....	69.7	64.6	56.2
October.....	85.9	81.7	63.7
November.....	100.2	93.6	68.7
December.....	98.0	96.0	73.8
1934			
January.....	100.0	100.0	100.0
February.....	116.8	111.1	106.7
March.....	114.2	99.8	57.2
April.....	97.5	85.5	100.3
May.....	72.0	68.1	96.5

CHART 2.—INDEXES OF STEMMERY EMPLOYMENT, PAY ROLL, PRODUCTION, AND HOURS WORKED IN CIGARETTE FACTORY 2, MAY 24, 1933, TO MAY 16, 1934

[January 17, 1934=100]



Indexes of stemmery employment, pay roll, production, and hours worked in cigarette factory 2, May 24, 1933, to May 16, 1934

[Jan. 17, 1934=100]

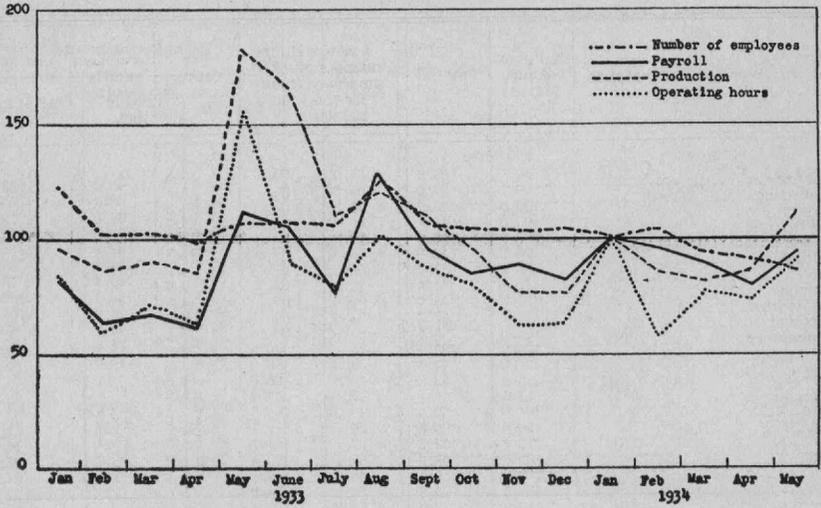
Week ending—	Number of employees	Pay roll	Production	Hours worked (man hours)	Per capita earnings	Average hourly earnings	Average hours worked per employee
1933							
May 24.....	99.6	50.6	84.2	(1)	50.8	(1)	(1)
May 31.....	100.7	39.6	65.5	(1)	39.3	(1)	(1)
June 7.....	100.0	43.2	71.3	(1)	43.3	(1)	(1)
June 14.....	100.0	48.7	80.1	(1)	48.7	(1)	(1)
June 21.....	105.8	46.4	75.8	(1)	43.9	(1)	(1)
June 28.....	104.7	43.8	73.3	(1)	41.8	(1)	(1)
July 5.....	106.2	37.7	60.5	(1)	35.5	(1)	(1)
July 12.....	112.4	55.3	89.2	(1)	49.2	(1)	(1)
July 19.....	111.3	58.7	96.5	(1)	52.7	(1)	(1)
July 26.....	113.1	57.7	92.4	(1)	50.9	(1)	(1)
Aug. 1.....	108.0	65.4	83.8	(1)	60.5	(1)	(1)
Aug. 8.....	106.9	85.4	73.1	99.9	79.9	85.5	93.5
Aug. 16.....	127.0	72.1	59.8	88.2	56.7	81.7	69.6
Aug. 23.....	113.1	52.0	46.8	65.6	46.0	79.2	58.1
Aug. 30.....	111.3	55.1	47.4	67.2	49.5	82.0	60.5
Sept. 6.....	104.0	52.5	43.2	66.3	50.5	79.2	63.9
Sept. 13.....	106.6	95.6	80.5	79.1	89.7	120.9	74.3
Sept. 20.....	112.8	92.5	77.4	85.7	82.0	108.0	76.2
Sept. 27.....	102.6	105.6	88.7	100.4	103.0	105.2	97.9
Oct. 4.....	103.6	59.4	48.9	53.4	57.3	111.3	51.6
Oct. 11.....	100.7	78.3	64.8	78.0	77.7	100.3	77.5
Oct. 18.....	99.3	77.9	64.2	79.4	78.5	98.1	80.1
Oct. 25.....	96.4	72.0	58.7	71.4	74.7	100.8	74.1
Nov. 1.....	105.5	71.1	56.4	71.7	67.4	99.1	68.1
Nov. 8.....	97.4	65.1	82.3	63.5	66.8	102.5	65.2
Nov. 15.....	91.6	59.2	75.4	57.4	64.7	103.2	62.8
Nov. 22.....	88.3	40.9	51.9	47.1	46.3	86.7	53.4
Nov. 29.....	93.4	71.1	84.3	67.6	76.1	105.2	72.5
Dec. 6.....	88.7	36.8	46.3	40.4	41.5	91.0	45.5
Dec. 13.....	90.1	56.5	70.4	59.1	62.6	95.6	65.7
Dec. 20.....	89.4	83.0	93.3	72.6	92.8	114.3	81.2
Dec. 27.....	(2)	(2)	(2)	(2)	(2)	(2)	(2)
1934							
Jan. 3.....	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Jan. 10.....	99.6	100.7	98.2	96.5	101.1	104.3	96.9
Jan. 17.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Jan. 24.....	94.9	92.9	90.0	95.0	97.9	97.9	100.3
Jan. 31.....	101.8	97.4	121.0	99.3	95.6	98.1	97.6
Feb. 7.....	97.4	93.5	115.8	98.6	95.9	94.9	101.3
Feb. 14.....	96.4	89.5	121.6	92.2	92.8	97.0	95.8
Feb. 21.....	93.4	88.0	119.0	91.0	94.2	96.7	97.6
Feb. 28.....	93.4	53.5	70.7	55.5	57.3	96.5	59.4
Mar. 7.....	92.7	70.0	93.2	72.5	75.5	96.6	78.3
Mar. 14.....	96.4	93.1	117.9	91.8	96.6	101.4	95.3
Mar. 21.....	95.3	91.5	113.5	89.8	96.1	101.9	94.5
Mar. 28.....	94.5	94.4	119.0	94.2	99.8	100.2	99.7
Apr. 4.....	97.4	74.8	93.3	71.3	76.8	105.0	73.3
Apr. 11.....	96.4	100.3	124.5	92.3	104.1	108.7	95.8
Apr. 18.....	97.1	104.4	132.2	95.2	107.6	109.7	98.2
Apr. 25.....	94.9	89.6	125.3	88.6	94.5	101.2	93.5
May 2.....	86.9	91.8	143.1	85.4	105.7	107.6	98.4
May 9.....	90.9	95.0	153.4	85.8	104.5	110.8	94.5
May 16.....	95.6	91.8	146.9	87.3	96.0	105.2	91.4

¹ Not available.

² Closed.

CHART 3.—INDEXES OF STEMMERY EMPLOYMENT, PAY ROLL, PRODUCTION, AND HOURS IN CIGARETTE FACTORY 3, JANUARY 1933 TO MAY 1934

[January 1934=100]



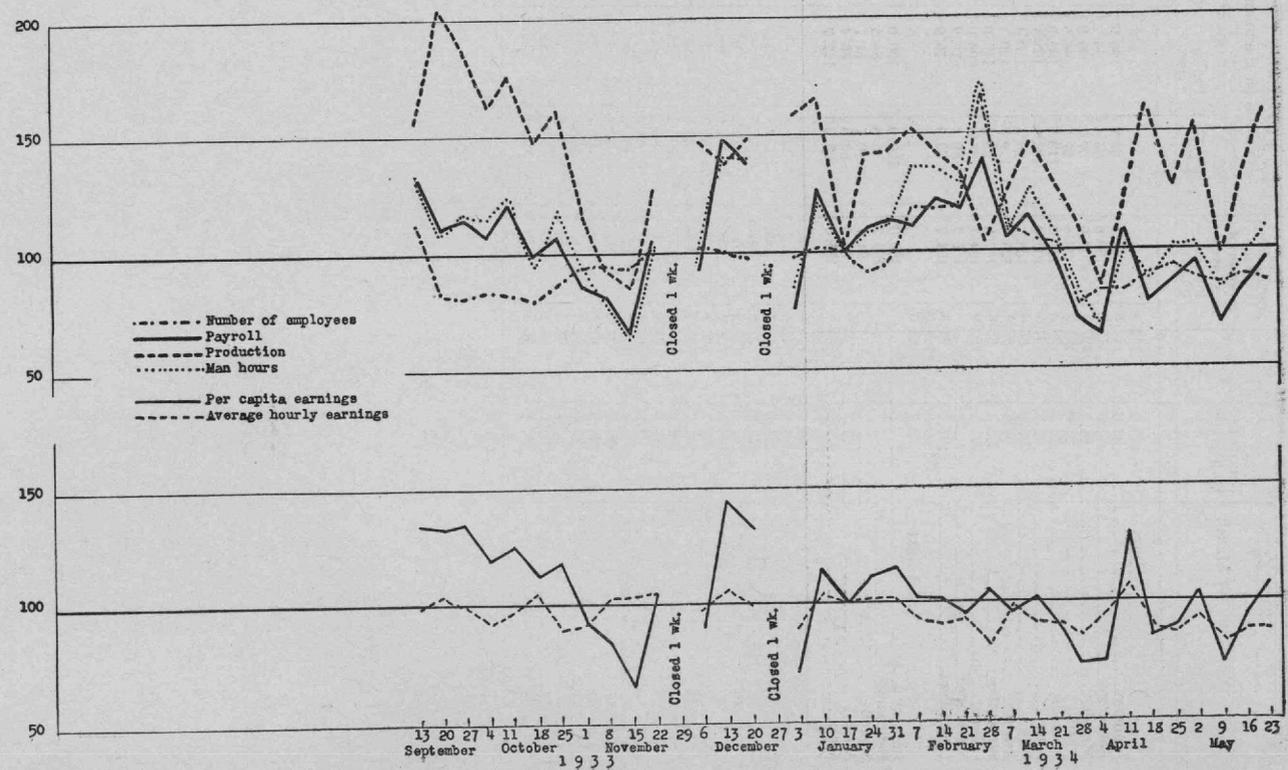
*Indexes of stemmery employment, pay roll, production, and hours in cigarette factory
3, January 1933 to May 1934*

[January 1934=100]

Month	Average number of employees for the month	Total for the month		
		Pay roll	Produc- tion	Operating hours
1933				
January.....	123.1	82.9	95.9	83.9
February.....	100.6	63.4	86.2	60.3
March.....	102.0	67.5	90.0	72.1
April.....	99.8	61.7	85.5	62.6
May.....	107.3	112.7	182.9	155.5
June.....	107.9	106.7	165.1	90.5
July.....	106.7	76.5	110.4	79.0
August.....	125.4	129.7	120.4	100.6
September.....	107.3	96.4	110.0	87.4
October.....	104.1	85.6	96.0	80.6
November.....	103.7	89.7	76.9	63.2
December.....	104.7	82.9	76.9	64.1
1934				
January.....	100.0	100.0	100.0	100.0
February.....	103.2	96.8	86.4	57.9
March.....	94.7	90.7	81.7	78.4
April.....	91.5	80.6	86.4	74.4
May.....	86.0	95.0	112.7	92.8

CHART 4.—INDEXES OF STEMMERY EMPLOYMENT, PAY ROLL, PRODUCTION, AND HOURS WORKED IN CIGARETTE FACTORY 4, SEPTEMBER 13, 1933, TO MAY 23, 1934

[January 17, 1934=100]



Indexes of stemmery employment, pay roll, production, and hours worked in cigarette factory 4, Sept. 13, 1933, to May 23, 1934

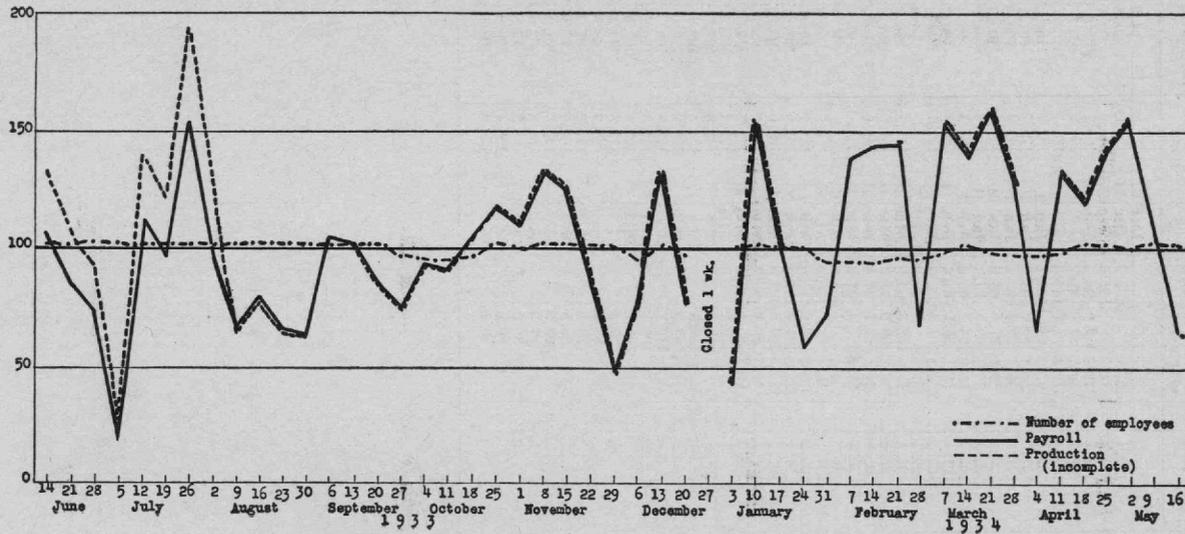
[Jan. 17, 1934=100]

Week ending—	Number of employees	Pay roll	Production	Hours worked (man hours)	Per capita earnings	Average hourly earnings
1933						
Sept. 13.....	113.6	132.8	155.7	133.6	134.9	99.4
Sept. 20.....	83.0	111.5	204.7	108.0	132.8	103.3
Sept. 27.....	81.8	115.7	188.7	116.2	135.2	99.6
Oct. 4.....	84.1	107.3	162.7	115.6	119.3	92.8
Oct. 11.....	83.0	121.2	176.7	124.2	125.4	97.6
Oct. 18.....	79.5	99.3	147.3	94.6	112.5	105.0
Oct. 25.....	87.5	107.2	161.5	119.5	118.6	89.8
Nov. 1.....	95.5	86.4	116.3	94.4	91.5	91.5
Nov. 8.....	94.3	81.7	93.4	80.0	83.9	102.1
Nov. 15.....	93.2	65.8	85.1	64.2	65.9	102.4
Nov. 22.....	101.1	106.0	127.1	101.5	104.4	104.4
Nov. 29.....	(1)	(1)	(1)	(1)	(1)	(1)
Dec. 6.....	102.3	94.8	147.4	97.1	90.5	97.6
Dec. 13.....	100.0	149.0	137.5	140.7	143.7	105.9
Dec. 20.....	97.7	138.0	149.6	139.0	131.1	99.3
Dec. 27.....	(1)	(1)	(1)	(1)	(1)	(1)
1934						
Jan. 3.....	97.7	76.8	158.7	85.8	70.4	89.5
Jan. 10.....	101.1	126.0	165.0	121.8	114.5	103.5
Jan. 17.....	100.0	100.0	100.0	100.0	100.0	100.0
Jan. 24.....	90.9	110.0	141.6	109.2	111.4	100.7
Jan. 31.....	95.5	113.6	142.8	112.2	115.7	101.3
Feb. 7.....	118.2	111.7	152.6	136.4	100.2	93.5
Feb. 14.....	118.2	122.8	142.3	135.4	100.3	90.7
Feb. 21.....	119.3	119.2	134.8	129.1	95.7	92.3
Feb. 28.....	165.9	138.2	163.0	170.6	104.4	81.0
Mar. 7.....	110.2	106.9	126.8	108.3	95.2	98.7
Mar. 14.....	105.7	115.4	146.3	126.8	100.9	91.0
Mar. 21.....	103.4	96.3	127.6	107.5	89.4	89.5
Mar. 28.....	77.3	71.2	112.8	84.1	72.7	84.7
Apr. 4.....	83.0	64.4	84.9	68.3	73.8	94.3
Apr. 11.....	83.0	107.7	121.3	101.2	129.2	106.4
Apr. 18.....	89.8	77.4	160.0	87.6	85.4	88.3
Apr. 25.....	93.2	87.5	126.7	101.1	89.4	86.6
May 2.....	87.5	95.6	152.8	102.4	103.2	93.3
May 9.....	85.2	68.8	98.3	83.8	73.2	82.0
May 16.....	89.8	83.9	133.4	96.3	93.4	87.1
May 23.....	86.4	96.3	158.3	109.1	107.3	88.2

¹ Closed.

CHART 5.—INDEXES OF STEMMERY EMPLOYMENT, PAY ROLL, AND PRODUCTION IN A FACTORY MAKING CHEWING TOBACCO, JUNE 14, 1933, TO MAY 16, 1934

[January 17, 1934=100]



HOURS AND EARNINGS IN TOBACCO STEMMERIES

Indexes of stemmery employment, pay roll, and production in a factory making chewing tobacco, June 14, 1933, to May 16, 1934

[Jan. 17, 1934=100]

Week ending—	Number of employees	Pay roll	Production	Week ending—	Number of employees	Pay roll	Production
1933				Dec. 6	94.7	77.2	77.1
June 14	102.1	107.0	133.9	Dec. 13	101.1	132.5	132.7
June 21	101.1	84.2	105.3	Dec. 20	97.9	76.3	76.3
June 28	103.2	73.9	92.5	Dec. 27	(¹)	(²)	(²)
July 5	103.2	19.2	23.7	1934			
July 12	102.1	112.6	140.8	Jan. 3	100.0	43.1	43.0
July 19	102.1	97.7	122.1	Jan. 10	101.1	157.5	157.7
July 26	102.1	154.4	193.3	Jan. 17	100.0	100.0	100.0
Aug. 2	101.1	96.0	120.1	Jan. 24	100.0	58.5	(¹)
Aug. 9	102.1	66.6	66.5	Jan. 31	94.7	73.9	(¹)
Aug. 16	103.2	80.1	78.1	Feb. 7	95.8	138.6	(¹)
Aug. 23	102.1	66.9	66.6	Feb. 14	94.7	143.1	(¹)
Aug. 30	101.1	63.5	63.4	Feb. 21	96.8	143.4	143.6
Sept. 6	102.1	104.8	(¹)	Feb. 28	96.8	68.1	(¹)
Sept. 13	102.1	101.0	100.8	Mar. 7	98.9	153.6	153.7
Sept. 20	102.1	84.8	84.8	Mar. 14	101.1	139.9	140.1
Sept. 27	96.8	74.3	74.3	Mar. 21	98.9	159.4	159.6
Oct. 4	95.8	94.4	94.4	Mar. 28	97.9	126.4	126.4
Oct. 11	95.8	91.9	91.9	Apr. 4	97.9	65.4	(¹)
Oct. 18	96.8	103.8	103.8	Apr. 11	98.9	131.8	132.0
Oct. 25	102.1	118.4	118.5	Apr. 18	102.1	119.4	119.5
Nov. 1	100.0	110.4	110.4	Apr. 25	101.1	143.4	143.6
Nov. 8	101.1	132.5	132.7	May 2	100.0	153.5	153.6
Nov. 15	101.1	125.4	125.5	May 9	102.1	106.1	(¹)
Nov. 22	101.1	86.7	86.7	May 16	101.1	63.6	63.5
Nov. 29	100.0	49.3	49.1				

¹ Incomplete record.

² Closed.