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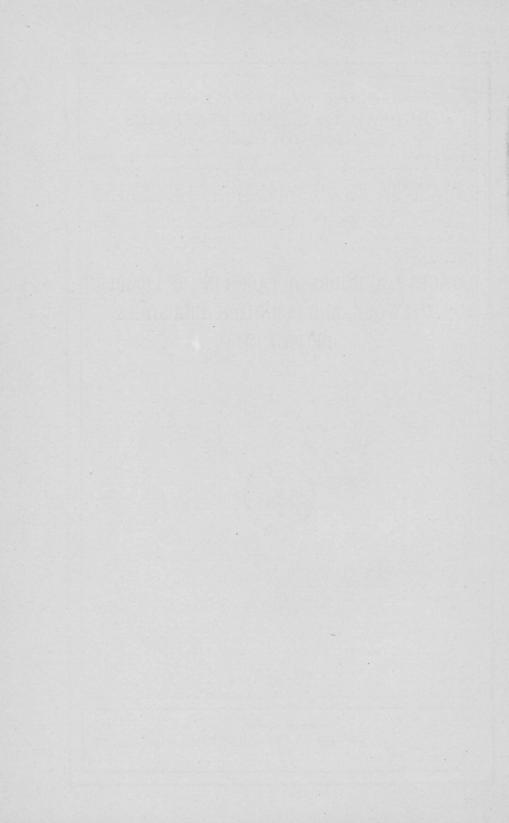
WAGES AND HOURS OF LABOR SERIES: No. 12

WAGES AND HOURS OF LABOR IN THE LUMBER, MILLWORK, AND FURNITURE INDUSTRIES 1907 TO 1913



MAY 21, 1914

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BULLETIN OF THE

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WAGES AND HOURS OF LABOR IN LUMBER MANUFACTURING, MILL-WORK, AND FURNITURE MANUFACTURING, 1907 TO 1913.

LUMBER MANUFACTURING.

SUMMARY.

This report, based on information obtained from representative establishments, shows the full-time weekly earnings, the full-time hours of labor per week, and the rates of wages per hour in the principal occupations in the lumber industry in the United States. Figures relating to full-time hours of labor per week and rates of wages per hour are presented for the years 1907 to 1913 inclusive, and for full-time weekly earnings for the years 1910 to 1913 inclusive.

Earlier reports of this Bureau present wages and hours of labor in the industry from 1890 to 1912.

Briefly summarized, the average full-time weekly earnings of employees engaged in lumber manufacturing in 1913 were 3.4 per cent higher than such earnings in 1912, 4.9 per cent higher than in 1911, and 5.4 per cent higher than in 1910. The full-time hours of labor per week in 1913 were 0.7 per cent lower than in 1912, and 0.5 per cent lower than in each of the years 1910 and 1911. Rates of wages or earnings per hour in 1913 were 4 per cent higher than in 1912, 5.4 per cent higher than in 1911, and 5.7 per cent higher than in 1910.

The most significant facts concerning the occupations covered by this report are summarized in the table below. The data for the years 1907 to 1911 were secured in 1911. Owing to the difficulty of finding establishments having records extending back for a period of years and also owing to the amount of work involved, data for 1907 to 1909 were secured from a smaller number of establishments than have furnished data for the later years.

According to the plan of the table, direct comparisons, which are indicated by the grouping of the years within brackets, can be made properly only between two or more successive years where the data are for identical establishments.

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¹ Previous reports of wages and hours of labor in the lumber manufacturing industry have been published by the Bureau as follows: Nineteenth Annual Report, covering 1890 to 1903; Bulletin No. 59 (July, 1905), covering 1903 and 1904; Bulletin No. 65 (July, 1906), covering 1904 and 1905; Bulletin No. 71 (July, 1907), covering 1905 and 1906; Bulletin No. 77 (July, 1908), covering 1906 and 1907; and Bulletin No. 129 (August, 1913), covering 1907 to 1912.

The data are for one pay-roll period in each year, the period ending nearest May 15 being selected, except in a very few establishments in which conditions in May were abnormal.

The figures for the years 1907 to the first presentation for 1912 are reproduced from Bulletin No. 129, except the average full-time weekly earnings for 1910 to 1912, which figures have been computed for this Bulletin from data gathered for those years. The average full-time weekly earnings have not been computed for the period 1907 to 1910 owing to the lack of funds. It will be observed that the average full-time weekly earnings generally are not exactly the same as the product of the average rate of wages per hour and the average full-time hours per week. This difference is explained on page 16.

In 1913 the average full-time weekly earnings of employees engaged in lumber manufacturing, represented by 10 occupations, varied from \$10.40 for laborers to \$33.90 for band sawyers. The full-time hours of labor per week in 1913 varied in the several mills. In a few instances the working time was less than 60 hours, and in a few instances over 66. The predominating working time was 60 hours per week, although for quite a percentage of the employees it was 66 hours.

All of the employees for whom figures are presented in this report are males.

AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN EACH OF THE PRINCIPAL OCCUPATIONS IN LUMBER MANUFACTURING, 1907 TO 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]

	Num-		Per cent of employees whose full-time hours per week were—					Aver-	Per cent of employ- ees earning each classified rate of wages per hour.				Average full-
Year.	Year. em-		Un- der 60	60	Over 60 and un- der 66	66	Over 66	rate of wages per hour.	Un- der 14 cts.	and under 18 ets.	18 and un- der 25 ets.	25 ets. and over.	time week- ly earn- ings.
{1911 {1912	852 869	61. 5 61. 4	1.7 1.9		4.8 5.2	20. 9 19. 7			23. 6 19. 9		38. 2 39. 6		\$10.96 11.03
${1912 \atop 1913}$	973 939	61. 4 61. 2			4.9	19.8 16.0							
$ \begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases} $	4,097 3,662 3,910 4,582	60. 5 60. 6 60. 5 60. 5	3.3 5.4 4.7 5.3	86. 5 82. 7 83. 8 84. 9	5. 4 6. 5 6. 2 5. 3	4.0	1.4 1.3	. 1665	15. 5 19. 4 16. 8 13. 7	33. 8 50. 8 45. 5 27. 7	45.3 28.3 36.0 54.2	1.6	(1) (1) (1) (1)
${1910 \atop 1911}$	20,327 19,256	61.3 61.3	2.9 2.5	73. 8 73. 6	4. 9 5. 4		.6	. 1660 . 1655	29. 4 29. 1	30. 9 33. 9	36. 7 33. 9		10. 12 10. 10
${1911 \atop 1912}$	26,784 25,506	61. 4 61. 5	1. 4 1. 5	73. 1 71. 9	6. 5 6. 6			. 1621 . 1641	31. 3 31. 2		28. 9 27. 7		9. 91 10. 04
					4.9 5.7	20.6 14.0	1.3 1.1						10. 03 10. 40
	(1911) (1912) (1913) (1913) (1907) (1908) (1910) (1911) (1911) (1911) (1912)	Year. ber of employees. [1911	Year. Num- ber of full- em- ploy- ees. Per of full- em- em- per of full- em- ploy- ees. Per of full- em- em- em- ploy- ees. Per of full- em- em- em- em- em- em- em- em- em- em	Year. Number of full-general employ-general employ-	Year. Number of full-time ployses. Number of full-time p	Year. Property of full-tile per week we	Year. Number of full-time hours ees. Number of full-time hou	Year. Number of full-time hours per week were— Verage Under foll week. Verage Ver	Year. Num- Average ber of full-time hours hoursels.	Year. Number of till-time hours bern of time hours ees. Under hours ees. Under hours bern of time hours ees. Under hours bern of time hours ees. Under hours bern of time hours and time hours bern of time hours bern of time hours bern of time hours and time hours bern of time hours and time hours bern of time hours bern of time hours and time hours bern of time hours and time hours bern of time hours and the hours and the hours bern of time hours and the hours and the hours bern of time hours and the hours and the hours bern of the hours and th	Year. Num- Num- ber of em- ber of	Year. Number of employses whose full-time hours per week were— Year. Ploy- ges. Un- week. Un- der 60 Over 60 Over 66 Over 67 Over 68 Over 68 Over 68 Over 68 Over 68 Over 68 Over 69 Over 60 Over 60	Year. Number of full-time playses. ees. Un- and or wages per hour. Sees.

AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN EACH OF THE PRINCIPAL OCCUPATIONS IN LUMBER MANUFACTURING, 1907 TO 1913—Contd.

		Num-	Average	w]	lose	of (full-ti k wer	me h		Aver-	ee	s ear	of emp ning d rat per ho	each e of	Average full-		
Occupation, and number of establishments.	Year.	Year. em- ploy- ees.		ploy- hours		Un- der 60	60	Over 60 and un- der 66	66	Over 66	rate of wages per hour.	Un- der 14 cts.	and un- der 18 cts.	18 and un- der 25 cts.	25 cts. and over.	time week- ly earn- ings.
Machine feeders, plan- ing mill: 178 establishments	(1911	1,156	61.3	1. 7	75.3	5.5	17.4		\$0.1792		42.5	28. 1	12.3	\$10.94		
	(1912	1,165	61. 1	.7	78.8 73.8	5.9	14. 6 19. 5	1.4	. 1849	14. 2 20. 0	39. 7 36. 9	33.1	12. 9	11. 27 11. 07		
253 establishments Trimmer operators:	(1913	1,531	61.1	3.1	75.6		15.2	1.0	. 1863	15.0	39.3	30.3	15.4			
37 establishments	$ \begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases} $	72 68 72 74	60. 7 60. 7 60. 7 60. 7	2.8 3.0 2.8 2.8	83.3 82.4 83.3 82.4	4. 2 4. 4 4. 2 5. 4	6.9 7.4 6.9 6.8		. 2070 . 1959 . 1971 . 1969	9.7 10.3 8.4 8.1	15.3 29.4 30.5 20.3	55.5 41.2 41.7 48.7	19. 4 19. 1 19. 4 23. 0	(1) (1) (1) (1)		
228 establishments	{1910 1911	503 485	61. 0 61. 0	1.8 1.8	78. 9 79. 0	3. 4 3. 5	15.3 15.1	.6	. 2089	11.3 11.0	18.1 18.5	46. 0 43. 7	24. 7 26. 8	12. 71 12. 85		
294 establishments	{1911 1912	479 441	61.3 61.3	1.2 1.9	75.6 75.1	5.0 5.3	17.3 17.0	.8	. 2092	11. 0 10. 4	20. 1 20. 9	41. 9 42. 8	26. 9 25. 8	12.77 12.84		
346 establishments	${1912 \atop 1913}$	511 538	61. 2 61. 0	2. 2 3. 5	75. 7 78. 1	4.3 3.9	16.8 13.6	1.0	. 2088	10. 4 7. 8	22. 5 20. 4	42.9 42.4	24.3 29.4	12. 73 13. 20		
										Un- der 20 cts.	20 and un- der 25 cts.	25 and un- der 30 cts.	30 cts. and over.			
Carriage men: 41 establishments	1907 1908 1909 1910	208 201 195 215	60. 7 60. 8 60. 8 60. 7	3.9 4.0 4.6 3.7	81. 2 80. 6 79. 5 81. 9	6. 2 6. 5 6. 7 6. 1	5.3 5.5 5.6 5.1	3. 4 3. 5 3. 6 3. 3	. 2184 . 2074 . 2115 . 2196	30. 7 42. 8 36. 4 27. 9	32. 7 29. 9 32. 3 36. 3	29. 8 20. 9 24. 1 29. 8	6.7 6.5 7.2 6.0	(1) (1) (1) (1)		
245 establishments Edgermen:	{1910 1911	1,327 1,298	61. 4 61. 3	2. 2 2. 2	72. 9 73. 9	4.7 4.8	19.7 18.4	.7	. 2088 . 2119	43.8 41.6	26.3 25.6	18. 4 20. 1	11.5 12.7	12.76 12.94		
41 establishments	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	79 78 77 84	60. 7 60. 7 60. 7 60. 7	2.6 3.9 3.9 3.6	82.3 80.8 80.5 82.1	6.3 6.4 6.5 6.0	6. 3 6. 4 6. 5 6. 0	2. 5 2. 6 2. 6 2. 4	. 2535 . 2457 . 2481 . 2647	19. 0 20. 6 20. 8 16. 8	15. 2 20. 5 19. 5 16. 7	40.5 42.3 40.3 35.7	25. 4 16. 7 19. 5 31. 0	(1) (1) (1) (1)		
245 establishments	{1910 1911	585 569	61. 2 61. 2	1.9 1.9	75. 6 76. 1	5. 2 5. 5	16. 9 16. 0	.5	. 2553 . 2589	16. 1 14. 5	19.5 18.8	37. 1 36. 6	27. 2 30. 3	15.58 15.79		
299 establishments	{1911 {1912	684 686	61.3 61.2	1.3 1.6	76. 2 76. 4	5. 2 5. 9	16.7 15.5	.6	. 2599 . 2601	14. 0 14. 0	18. 9 18. 1	37. 6 38. 5	29. 4 29. 4	15.86 15.87		
361 establishments	${1912 \atop 1913}$	751 754	61. 2 61. 0	1.7 4.0	75.8 77.1	5.7 5.8	16. 0 12. 3	.8	. 2617 . 2677	13. 2 12. 7	18. 1 15. 1	39.3 38.1	29. 4 34. 1	15. 97 16. 28		
Sawyers, resaw: 98 establishments	${1911 \atop 1912}$	149 147	60. 7 60. 7	1.3 1.4	85.9 85.7	4.7 4.8	8. 1 8. 2		. 2515 . 2556	14.8 12.9	28. 9 27. 2	30. 2 31. 3	26. 2 28. 6	15. 24 15. 48		
138 establishments Setters:	$ \left\{ \begin{array}{l} 1912 \\ 1913 \end{array} \right. $	197 192	60. 7 60. 7	1. 0 2. 1	85.3 85.4	4.1 3.6	9.6 8.9		. 2543 . 2607	14. 2 12. 5	28. 4 24. 5	30.5 31.8	26. 9 31. 3	15. 41 15. 77		
301 establishments	$ \left\{ \begin{array}{c} 1911 \\ 1912 \end{array} \right. $	714 713	61.3 61.3	1. 2 1. 6	75. 2 75. 3	5.6 5.9	16. 9 16. 3	1.0	. 2506 . 2518	15.8 15.5	22. 4 21. 3	34. 2 36. 5	27. 6 26. 6	15.30 15.37		
361 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	780 782	61. 3 61. 0	1.8 3.2	75. 4 77. 6	5.5 5.5	16. 2 12. 3	1. 2 1. 4	. 2499 . 2583	15. 6 12. 7	21. 7 20. 7	38. 3 38. 0	24. 4 28. 6	15. 29 15. 71		

¹ Not computed.

AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN EACH OF THE PRINCIPAL OCCUPATIONS IN LUMBER MANUFACTURING, 1907 TO 1913—Concid.

		Num- ber of	Average	wl	lose :	of e full-ti k wer	me h		Aver- age	ees	cent o s earn assified ages p	ning e	each e of	Average full-
Occupation, and num- ber of establish- ments.	r of establish- Year.		full- time hours per Week-	Un- der 60	60	Over 60 and un- der 66	66	Over 66	rate of wages per	Under 25 cts.	25 and un- der 30 cts.	30 and under 40 ets.	40 cts. and over.	time week- ly earn- ings.
Sawyers, gang:	(1907 1908	6	60.0		100.0				\$0.2708 .2558	33.3	66. 7 50. 0	33.3 16.7		(1)
5 establishments	1909	6 6	60.0		100. 0 100. 0				.2583		33.3 50.0	33.3		(1)
52 establishments	${1910 \atop 1911}$	64 60	61. 4 61. 6		75.0 71.7	4.7 5.0	20.3 23.3		.3092 .3006	22.0 23.4	21.9 23.3	32.8 33.3		\$18.88 18.42
66 establishments	${1911 \atop 1912}$	74 75	61.6 61.6		71.6 70.7	2.7 4.0	$25.7 \\ 25.3$.3061 .3058	19.0 14.6	27.0 30.7	31. 1 32. 0	23.0 22.7	
71 establishments	${1912} {1913}$	79 80	61.7 61.4	1.3 5.0	69. 6 68. 8	2.5 2.5	25.3 22.5			15. 2 13. 8	29.1 27.5	35. 4 38. 8	20.3 20.0	
										Under 40 ets.	40 and under 50 ets.	50 and un- der 60 ets.	60 cts. and over.	
Sawyers, band: 34 establishments	1907 1908 1909	71 69 69	60.8 60.8 60.8	2.8	85.5 85.5	4.3	7.2		. 4901 . 4807 . 4894	11.3 14.5 14.5	29.0 27.5	36.2	15.9 21.7	(1)
203 establishments	{1910 {1910 1911	73 429 432			74.6	6.5	6.8 16.5 15.7		.5007 .5431 .5535	7.5 7.2	20.7	34. 2 34. 0 32. 4	37.8	33.18
243 establishments	{1911 1912	508 492	61.2	1.6	76.4	6.3	15.7 14.8		.5503	8.1	17.3		39.4	33.6
288 establishments	{1912 1913	561 554	61.1	2.0	77.2	5.3			.5457	6.8	20.3	34.9 33.6	38.0	33.4
Sawyers, circular:	(1907	14	61.3	7.1	71.4	7.1		14.3	.5448	7.1	21.4	42.9	28.6	(1)
12 establishments	1908 1909 1910	14 13 14	61.3 61.3	7.1	71.4 69.2	7.1		14. 3 15. 4 14. 3	.5186	7.1	35.7	28.6 38.5	28.6 23.1	(1)
58 establishments	{1910 1911	81 78	61.9 62.0											
72 establishments	${1911 \atop 1912}$	95 94												
92 establishments	{1912 1913	119 123												

¹ Not computed.

Wages and hours of labor vary in different establishments. Hence the inclusion or exclusion of an establishment in a group, if the wages and hours therein differ considerably from the average, may raise or lower the average for the group. In the above table it is seen that data for laborers, for instance, are reported for 245 identical establishments in 1910 and 1911, and for 299 identical establishments in 1911 and 1912. This does not mean, however, that all of the 245 establishments in the former period are included in the 299 reported in the latter period; 26 dropped out and 80 others were added, hence, as the average earnings of laborers in the establishments which dropped out varied from the average of those which were added, the average earnings for 1911 differed in the two groups of establishments. In this occupation it is seen that the average full-time weekly earnings decreased from \$10.12 in 1910 to \$10.10 in 1911, in 245 establishments; and increased from \$9.91 in 1911 to \$10.04 in 1912, in the 299 establishments reported. As the two groups of establishments do not show exactly the same earnings for 1911, it would not be a safe comparison to state that the earnings decreased from \$10.12 in 1910 to \$10.04 in 1912. The movement from one year to another is indicated with a greater degree of certainty by the figures for identical establishments. The difference between \$10.12 and \$10.10 represents the decrease from 1910 to 1911, and the difference between \$9.91 and \$10.04 represents the increase from 1911 to 1912, as nearly as can be determined from the data available. In the table the comparable data for identical establishments are bracketed together.

Owing to variation in the number of establishments from year to year it is difficult to make a comparison of the actual data over a period of several years which will give an exact measure of the changes. To aid in the making of such a comparison relative (or index) numbers have been computed from the averages in the preceding table for full-time hours per week, rates of wages per hour, and full-time weekly earnings for each occupation for the years 1910 to 1913, inclusive. These relative or index numbers are simply percentages in which the figures for 1913 are taken as the base, or 100 per cent. The relative for each year is the per cent that the average in that year is of the average for 1913, as determined by the method explained on page 18. Thus, in the table below, the full-time weekly earnings of laborers in 1910 were 95.4 per cent of the full-time weekly earnings in 1913.

It will be observed that the general tendency of the several occupations is toward a reduction of working hours and an increase in rates of wages per hour and of earnings per full week. No data are available to show the amount of work afforded employees each year or the variation from year to year. The relative full-time hours per week indicate the change in the hours of labor of employees working full time, but do not reflect in any way the greater or less amount of full-time work afforded. This point is further discussed on page 15.

RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS IN LUMBER MANUFACTURING, 1910 TO 1913.

(1913=100.0.)

	Doggers.			E	Edgermen.						Machine feeders			yers, b	and.
Year.	tive full- time hours per	Relative rates of wages per hour.	full- time week- ly	Relative fulltime hours per week.	tive rates of wages per	Relative full-time week-ly earnings.	tive full- time	Relative rates of wages per hour.	Relative full-time week-ly earnings.	tive full- time	Relative rates of wages per hour.	Relative full-time week-ly earnings.	tive full- time	Relative rates of wages per hour.	Relative full-time week-ly earnings.
1910 1911 1912 1913	100.5 100.3 100.0	97.5 98.1 100.0	97.9 98.6 100.0	100.5 100.5 100.3 100.0	96.3 97.7 97.8 100.0	96. 7 98. 0 98. 1 100. 0	100.5 100.5 100.7 100.0	95. 1 94. 8 96. 0 100. 0	95. 4 95. 2 96. 4 100. 0	100. 8 100. 5 100. 0	94. 2 97. 2 100. 0	94.8 97.6 100.0	100.3 100.3 100.3 100.0	96. 0 97. 9 98. 0 100. 0	96. 9 98. 6 98. 7 100. 0
	Sawy	ers, cii	cular.	Saw	yers, g	ang.	Saw	yers, r	vers, resaw.		Setters		T	rimme	rs.
1910 1911 1912 1913	100. 7 100. 8 100. 7 100. 0	95. 9 96. 2 97. 2 100. 0	96. 7 97. 0 97. 9 100. 0	100. 2 100. 5 100. 5 100. 0	101.7 98.9 98.8 100.0	101. 8 99. 3 99. 2 100. 0	100. 0 100. 0 100. 0	96. 0 97. 6 100. 0	96. 2 97. 7 100. 0	100.7 100.5 100.0	96.3 96.8 100.0	96. 9 97. 3 100. 0	100.3 100.3 100.3 100.0	94.5 95.6 96.1 100.0	94. 9 95. 9 96. 4 100. 0

A like table of relative numbers is next shown for the industry as a whole, as determined by a combination of the data for the several occupations covered. Data were obtained for the principal occupations of the industry but not for all occupations. The method of computing this table is explained on page 19.

RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR AND FULL TIME WEEKLY EARNINGS IN LUMBER MANUFACTURING, 1910 TO 1913.

(1913=100.0.)

Year.	Relative	Relative	Relative
	full-time	rates of	full-time
	hours per	wages per	weekly
	week.	hour.	earnings.
1910	100. 5	94. 6	94. 9
1911	100. 5	94. 9	95. 3
1912.	100. 7	96. 2	96. 7
1913.	100. 0	100. 0	100. 0

From the table it is seen that the relative or index number for fultime hours per week in lumber manufacturing decreased from 100.5 in 1910 to 100 in 1913, or, in other words, full-time hours per week in 1910 were 100.5 per cent of what they were in 1913. The relative or index number for rate of wages per hour increased from 94.6 in 1910 to 100 in 1913. The increase in full-time weekly earnings was practically the same as the increase in wages per hour, it being from an index of 94.9 in 1910 to 100 in 1913.

In examining the relative or index numbers for the several occupations and for the industry as a whole in the two tables above, it will be observed that they have been computed with 1913 taken as the base, or 100 per cent. In the preceding reports of the Bureau relating to this industry relative numbers for rates of wages per hour and for hours of labor per week were presented back to 1890 and the base, or 100 per cent, was not the average rate of wages per hour or the average full-time hours per week in any one year, but the average rate of wages per hour and the average full-time hours per week for the 10-year period, 1890–1899. The table of such relative numbers for the years 1890 to 1912 appears on page 154.

There are several reasons for changing the base to the most recent

The primary reason for changing the base to the last available year is that as the scope of the inquiry has been enlarged in recent years it has seemed necessary in order to represent the industry adequately to include additional occupations. As no data were available for these occupations for 1890 to 1899, no relatives or index numbers could be computed for them with such period as a base. By using the last year as a base, however, it is possible to compute relatives for such additional occupations.

Again, relative or index numbers are most frequently used to compare the current year with different preceding years, and generally with the few years immediately preceding. Probably comparison between 1913 and 1912 will be made more often than between any other two years, and a comparison of any relative number with 100 conveys a clearer idea than a comparison with any other number. For example, the ratio 99.4:100 is more clearly grasped than the equal ratio 154.4:155.4.

A third reason for a change of base from 1890–1899 to 1913 is that any imperfections of data (due, for example, to a small number of establishments) are carried into the index numbers for the earlier years and continued when additions are made from year to year. The data for 1913 are the most comprehensive and satisfactory that have been gathered in any year and the data back to 1910 are more satisfactory than in the earlier years. This reason for the change of base is further explained on page 16.

For this Bulletin relative numbers have been computed back to the year 1910 on the basis of 1913 equal to 100 per cent. They were not computed for earlier years because data were available from a very much smaller number of establishments, and further because of the large amount of work involved. The relative numbers for the several occupations were computed in both the old and the new series by the same process, which is explained on page 18 The relative numbers for the occupations shown in the new series here

presented differ from those of the old series, shown in preceding reports, because of the change of the base; but the ratio existing between any two years is the same in both series. The relative numbers for the industry as a whole have likewise been recomputed with 1913 as the base.

In addition to making a change of the base year, a change has also been made in the method of computing the industry relatives; and, because of this change, the relatives for the industry as a whole here presented not only differ from the relatives computed by the old method but show a slightly different ratio of change from year to year. In Bulletin No. 129 the relative numbers for this industry were averages of the relative numbers of the several occupations. For each year, for example, the relative rate of wages per hour of each occupation was multiplied (weighted) by the number of employees in that occupation. The products thus computed for all occupations were added, and the sum divided by the total employees in all occupations.

In computing the relative numbers from 1910 to 1913 for the industry as a whole, as presented in this Bulletin, a combination was made, not of the relative numbers for the several occupations, but of the actual hours and wages of the several occupations. For each year the average hours and wages were computed for all employees in all occupations and the average for each preceding year was compared with the average for 1913 to determine the index. It was deemed necessary to make this change in method because a change in the industry is not always accurately reflected by the relative computed by averaging the occupation relatives. This reason is more fully explained on page 19.

In addition to the relative numbers shown for the several occupations and for the industry, three tables are here presented showing the per cent of increase or decrease in full-time hours of labor per week, rates of wages per hour, and full-time weekly earnings in 1913, as compared with each preceding year back to 1910. The figures of these tables are computed from the relative numbers shown on page 10, and simply reverse the method of comparison. Each of the three tables also shows the increase or decrease in 1912 as compared with 1911, and in 1911 as compared with 1910.

Referring to the third line of the first table, it is seen that the full-time hours of laborers in 1913 were 0.5 per cent lower than in 1910, 0.5 per cent lower than in 1911, and 0.7 per cent lower than in 1912. Further, it is seen that the full-time hours of labor in this occupation were 0.2 per cent higher in 1912 than in 1911 and in 1911 the same as in 1910. The other figures of the table are read in like manner.

PER CENT OF INCREASE OR DECREASE IN FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1913 COMPARED WITH EACH OF THE 3 YEARS PRECEDING, 1912 COMPARED WITH 1911, AND 1911 COMPARED WITH 1910.

FULL-TIME HOURS PER WEEK.

	Per cent hi	gher (+) or 1913 than in	Per cent higher (+) or lower (-) in—		
Occupation.	1910	1911	1912	1912 than in 1911	1911 than in 1910
Doggers Edgermen Laborers Machine feeders, planing mill Sawyers, band	(1) -0.5 5 (2) 3	-0.5 5 5 8 3	-0.3 3 7 5 3	-0.2 2 +.2 3	(2) (3) (3) (2) (3)
Sawyers, circular Sawyers, gang Sawyers, resaw Setters Trimmers	$\begin{array}{c}7 \\2 \\ (2) \\ (1) \\3 \end{array}$	8 5 (3) 7 3	7 5 (8) 5 3	$\begin{array}{c}1 \\ {3 \choose 3} \\2 \\ {3 \choose 3} \end{array}$	+0.1 $+0.3$ (2) (2) (3)
The industry	4 5	5	7	+ .2	(8)

RATES OF WAGES PER HOUR.

Doggers Edgermen. Laborers Machine feeders, planing mill Sawyers, band	(1) +3.8 +5.2 (2) +4.2	$ \begin{array}{r} +2.6 \\ +2.4 \\ +5.5 \\ +6.2 \\ +2.1 \end{array} $	$ \begin{array}{r} +1.9 \\ +2.2 \\ +4.2 \\ +2.9 \\ +2.0 \end{array} $	+0.6 +.1 +1.3 +3.2 +.1	$\begin{array}{c} (^2) \\ +1.5 \\3 \\ (^2) \\ +2.0 \end{array}$
Sawyers, circular Sawyers, gang Sawyers, resaw Setters Trimmers	+4.3 -1.7 (2) (1) +5.8	+4.0 +1.1 +4.2 +3.8 +4.6	+2.9 +1.2 +2.5 +3.3 +4.1	+1.0 1 +1.7 +.5 +.5	$\begin{array}{c} + .3 \\ -2.8 \\ (2) \\ (2) \\ +1.2 \end{array}$
The industry	4 +5.7	+5.4	+4.0	+1.4	+ .3

FULL-TIME WEEKLY EARNINGS.

Doggers	$ \begin{array}{c} (1) \\ +3.4 \\ +4.8 \\ (2) \\ +3.2 \end{array} $	$ \begin{array}{r} +2.1 \\ +2.0 \\ +5.0 \\ +5.5 \\ +1.4 \end{array} $	+1.4 $+1.9$ $+3.7$ $+2.5$ $+1.3$	+0.7 +.1 +1.3 +3.0 +.1	(2) $+1.3$ 2 (2) $+1.8$
Sawyers, circular Sawyers, gang Sawyers, resaw Setters. Trimmers	$\begin{array}{c} +3.4 \\ -1.8 \\ (2) \\ (1) \\ +5.4 \end{array}$	+3.1 $+3.7$ $+4.0$ $+3.2$ $+4.3$	$+2.1 \\ + .8 \\ +2.4 \\ +2.8 \\ +3.7$	+ .9 1 +1.6 + .4 + .5	$\begin{array}{c} + .3 \\ -2.5 \\ (2) \\ (2) \\ +1.1 \end{array}$
The industry	4 +5.4	+4.9	+3.4	+1.5	+ .4

Not shown as a separate occupation.
 No data.
 No change.

^{4 1910} data for carriage men are not considered or shown in detail in this table, but are considered and do enter in the figures for 1910 for the industry. Carriage men were divided into doggers and setters in 1911, 1912, and 1913.

EXPLANATION OF SCOPE AND METHOD.

This report includes establishments engaged in manufacturing lumber, including planing and kiln drying when carried on in connection with the sawmills. The planing is in most cases done immediately following and in connection with the sawing of lumber and is therefore quite properly considered a part of lumber industry.

All information in this report was secured from pay rolls of the various establishments by the agents of the Bureau. The number of establishments for which data were secured varied considerably during the period included in this report as follows:

1907 to 1910	40 identical establishments.
1910 and 1911	245 identical establishments.
1911 and 1912	301 identical establishments.
1912 and 1913	361 identical establishments.

The data for 1907 to 1911 were secured in 1911 and the number of establishments included for the full period for 1907 to 1910, inclusive, was limited owing to the difficulty of finding establishments that had preserved complete records for those years and also owing to the large amount of work involved.

The establishments varied from year to year, as establishments go out of business or cease to be representative and new establishments must be substituted in the wage study. Occasionally occupations are dispensed with in a mill or new occupations introduced and sometimes data are not available for all occupations desired from a mill. Data for a group of establishments in any year will not be precisely the same as for a different group in the same year, even though nearly all of the establishments may be common to both groups. In using the actual figures in this report comparison from year to year should be made only between data coming from identical establishments. In the tables the data from identical establishments are bracketed together. Data from an establishment are not included in the report unless the information for at least two years is available.

In selecting establishments from which to secure data the Bureau undertook to represent all States in which lumber manufacturing is of material importance, the measure of importance being the number of employees reported by the United States Census of Manufactures. The table which follows shows by States the number of employees in lumber manufacturing, as reported by the United States Census Office for 1910, the total number on the pay roll in the establishments from which the Bureau secured data for 1913, and the number in the selected occupations for whom data for 1913 are shown.

TOTAL NUMBER OF EMPLOYEES IN LUMBER MANUFACTURING AND NUMBER OF EMPLOYEES IN ESTABLISHMENTS FOR WHICH DATA ARE SHOWN FOR 1913.

	Number of		nents for whi y the Bures of for 1913.			
State.	employees reported by United States cen-	Number of establishments.	Number of employees-			
	sus of 1910.		On pay roll.	For whom data are shown.		
Wisconsin. Washington. Michigan Louisiana. Arkansas.	25, 445 41, 684 27, 325 43, 996 31, 404	19 25 30 23 19	4,788 6,890 5,908 5,784 5,047	2,370 2,604 2,566 2,864 2,636		
Mississippi Minnesota. Pennsylvania. Georgia Tennessee.	32, 106 16, 650 15, 707 18, 110 19, 233	16 7 19 22 29	3,596 3,464 1,281 2,845 1,849	1,877 1,737 907 1,606 1,209		
Alabama North Carolina Texas California Virginia	20, 949 30, 534 21, 519 15, 614 29, 758	14 23 12 14 23	2,757 3,352 3,653 2,934 2,567	1, 245 2, 185 1, 601 1, 600 1, 698		
Maine. West Virginia. Florida South Carolina Oregon.	13, 203 17, 629 17, 842 13, 586 13, 460	19 20 12 9 6	1,803 1,903 2,306 2,261 2,104	1, 206 1, 070 1, 250 1, 108 989		
Other States 1	81, 424					
United States	547, 178	361	67,092	34,328		

¹ Including States having less than 11,000 each.

According to the census of 1910 more than 85 per cent of the total number of employees in the industry are found in the States in which the establishments furnishing information to the Bureau of Labor Statistics are located.

The number of employees in the establishments from which the Bureau obtained 1913 data was equal to 12.3 per cent of the total in the industry in 1910, and the number of such employees for which the Bureau presents detailed information for 1913 was equal to 6.3 per cent of the total in the industry in 1910.

The pay-roll period taken each year was the one nearest May 15, except in a very few establishments where abnormal conditions made it desirable to take a pay roll for some other time of the year.

The full-time hours of labor per week shown in the tables of the report are the regular full-time hours of work of the occupation under normal conditions in the establishment. The working time is the hours on duty including intervals of waiting for work. The full-time hours per week and the relatives based thereon do not in any way indicate the extent of unemployment. Employees may work overtime, or broken time, or be laid off, or a temporary reduction may be made in working hours, without such change affecting the full-time hours per week, as presented in this Bulletin.

The rates of wages per hour appearing in the tables include the wages of time workers and the earnings of the few pieceworkers found amongst laborers in two establishments. All time rates by the day or week have been reduced to rates per hour, and the earnings of pieceworkers have been reduced to rates per hour, by dividing the earnings by the hours worked. The time workers and pieceworkers are combined in one group.

The full-time weekly earnings are the earnings per week of employees working full time, or the earnings on broken time reduced to equivalent earnings for a full week. In considering changes in fulltime earnings per week, notice should also be taken of changes in full-

time hours of labor per week.

The averages of full-time hours per week, rates of wages per hour, and full-time weekly earnings are computed by adding the data for each individual employee and dividing the total by the number of employees.

It will be observed that the average full-time weekly earnings generally are not exactly the same as the result that would be obtained by multiplying the average rate per hour by the average hours per week, owing to the fact that hourly rates for individual employees are based on varying hours per week, which has the effect of changing the relative weighting of the wages of the several employees. A hypothetical illustration shows the difference.

	Full-time hours per week.	Rates of wages per week.	Rates of wages per hour.
Employees:			1
1	48	\$15.00	\$0.3125
1	54	14.00	. 2593
1	54	16.00	. 2963
1	60	12.00	.2000
Total (4)	216	57.00	1.0681
Average	54	14.25	. 2670

The product of \$0.2670 multiplied by 54 is \$14.42, while the average earnings per week is \$14.25.

The change of the basis of comparison in computing the relative or index numbers from the average of 1890–1899 to 1913 is in part explained on page 11.

One of the reasons for the change of the base from 1890–1899 to the last year is that any imperfections in the data for earlier years are continued and compounded in the relative numbers when additions are made from year to year to an old series of relative numbers. The data for the period 1890–1899 were obtained mostly in 1901 from old and often incomplete pay rolls, and it was sometimes difficult to classify properly the employees into the several occupations.

For the 10-year period, 1890-1899, data were obtained from only 56 establishments, while data were obtained for 1912 and 1913 from 361 establishments. The number of establishments varied in the intervening years. While the average of 56 establishments possibly might have been a fairly acceptable base, the average of more than six times as many establishments recently canvassed becomes more nearly representative of the industry, and thus a more satisfactory base. Data are available from 301 establishments for 1911 and 1912 and from 245 establishments for 1910 and 1911.

Were the relative numbers for the occupations recomputed back to 1890 with 1913 as the base, any imperfections in the data for the earlier years would of course be carried into the index numbers for those years, but would not appear in the index numbers for the later vears.

With either period as the base, the relative numbers would show with the same degree of accuracy the trend from one year to the next. With 1890-1899 as the base, however, any fault in the relative number for the early years is continued and the relative for 1913 will be at fault. But with the last year as the base, the relative number for any of the recent years is as nearly accurate and representative as the data collected for such years, and does not retain in itself because of a faulty base any imperfections of data gathered in the earlier years. In one series, the relative number, if beginning in fault, continues in fault even though the data of later years be entirely satisfactory. In the other series with the large volume of data for 1913 as the base, any weakness of earlier years does not appear except in such years.

To illustrate the change in the relatives produced by the change of base, relative full-time hours of labor and relative rates of wages per hour of band sawyers for the years 1910 to 1913 are given in the table following, computed with 1913 as the base, and with the average 1890-1899 as the base, so that the relative numbers computed on the two bases may be compared.

RELATIVE FULL-TIME HOURS PER WEEK AND RATE OF WAGES PER HOUR OF BAND SAWYERS COMPUTED ON TWO BASES: AVERAGE 1890-1899=100 AND 1913=100.

		full-time er week.	Relative rate of wages per hour.						
Year.	Relative, average 1890–1899 equals 100.	Relative, 1913 equals 100.	Relative, average 1890–1899 equals 100.	Relative, 1913 equals 100.					
1910	96. 6 96. 6 96. 6 96. 3	100. 3 100. 3 100. 3 100. 0	135. 9 138. 5 138. 7 141. 6	96. 0 97. 9 98. 0 100. 0					

The first column of relative numbers indicates that the hours per week in 1910 were 96.6 per cent of the average hours in the period 1890–1899, while the next column shows the hours in 1910 to be 100.3 per cent of the hours in 1913. Both series of relatives indicate the same change from 1910 to 1913, each making a decrease of 0.3 per cent.

The first series of relative wages per hour shows an increase from relative 135.9 in 1910 to relative 141.6 in 1913, an increase of 4.2 per cent. The second series shows an increase from 96 in 1910 to 100 per cent in 1913, an increase of 4.2 per cent, or identically the same per cent of increase as in the other series.

The relative rates of wages per hour and the relative full-time hours per week from 1890 to 1912 on the basis of 1890–1899 equal to 100, published in Bulletin No. 129 are reproduced in this Bulletin on pages 151 to 156.

Relative or index numbers for the several occupations and for the industry as a whole from 1910 to 1913 are presented on page 10.

The method of computing such relative or index numbers for an occupation can best be explained by an illustration. The rates of wages per hour of edgermen are taken as an example.

	Number of identi-		Year.							
	cal estab- lish- ments.	1910	1911	1912	1913					
Rate of wages per hour.	{ 245 299 361	\$0.2553	\$0.2589 .2599	\$0.2601 .2617	\$0.2677					
Relative rate of wages per hour computed therefrom Rate of wages per hour in identical establishments		96.3	97.7	97.8	100.0					
covering the full four years. Relative rate of wages per hour computed therefrom.	201	.2546 96.3	.2580 97.6	.2590 98.0	. 2644 100. 0					

The rate per hour for 1913 is taken as the base (100), then \$0.2617 divided by \$0.2677 equals 97.8, the relative for 1912. The ratio of 1911 to 1912 is \$0.2599 to \$0.2601. The relative for 1912 just determined, 97.8, multiplied by \$0.2599, divided by \$0.2601 equals 97.7, the relative for 1911. The ratio of 1910 to 1911 is \$0.2553 to \$0.2589. The relative for 1911, 97.7, multiplied by \$0.2553, divided by \$0.2589 equals 96.3, the relative for 1910.

This method of computing relative numbers over a period of years, as illustrated above, is used because of the changes which occur in the number of establishments.

A method of computing a series of relative numbers should take into account changes in establishments from year to year, as changes naturally occur, some establishments discontinuing operations or ceasing to be representative, and new establishments entering the

The method explained above, bringing in the new establishments, has been followed in computing the relatives in this report. Otherwise no use could have been made in the index of the data from the additional establishments obtained for the later years.

Of the 245 establishments reporting data for 1910-11, 44 dropped out later and only 201 reported for the entire period. The average rates of wages per hour for the 201 establishments reporting for the entire period are shown also in the above table, with relatives computed therefrom. As might be expected, these relatives differ from the relatives based on the greater number of establishments. Presumptively they are not as nearly representative as are the relatives based on the greater number of establishments, but they are given here as an illustration of the difference shown by relatives based on different amounts of data.

Data concerning rates of wages and hours of labor for the period 1907 to 1910, being available from a preceding Bulletin, are here reproduced, but, as before stated, owing to the small number of establishments in that period, and limited funds, it has not been deemed advisable to compute relative numbers therefor, and average full-time weekly earnings have not been computed for that period.

A word of caution is given as to the use of relative numbers. per cent of increase or decrease from one year to another is not the difference between the relative numbers for the years. Thus, in the table above, the relative rate of wages per hour increased from 96.3 in 1910 to 100 in 1913, an increase in the relative of 3.7 over the relative 96.3, making an increase of 3.8 per cent.

While the base for the computation of the relative numbers for the several occupations has been changed from the average of 1890-1899 to 1913, the method of computation has remained the same.

The relative numbers for the industry as a whole, however, have been computed for this Bulletin not only with a change of base but in a different manner than for preceding Bulletins and hence may be expected to show some variations in results. The change is referred to on page 12. The relative numbers for the industry published in Bulletin No. 129 were computed from the relative numbers of the several occupations. The relative numbers for the industry here presented, covering 1910 to 1913, are computed directly from the average hours of labor, rates of wages per hour, and weekly earnings of all employees in all occupations combined. In other words, the relatives for the industry as a whole have been computed for this report in the same manner as the relatives for each occupation.

It was deemed necessary to make this change because by this method the changes in the industry are more accurately reflected by the relative thus computed than by computing the industry relative from

the relatives of the several occupations.

The following table for a hypothetical industry illustrates how a change in the industry as a whole may not be reflected by a combination of the relatives of the occupations:

Actual wages.

		1912			1913	
Occupation.	Em- ployees.	Rate of wages per day.	Aggregate.	Employees.	Rate of wages per day.	Aggregate.
Occupation A	20 20	\$1.20 3.60	\$24.00 72.00	30 10	\$1.33\frac{1}{3} 4.00	\$40.00 40.00
Total. Average. Relative	40		96.00 2.40 120.0	40		80.00 2.00 100.0
	Relative	wages.				
Occupation A	20 20	90	1,800 1,800	30 10	100 100	3,000 1,000
Total	40		3,600 90.0	40		4,000 100.0

In this hypothetical table it is assumed that there were two occupations, A and B. Each occupation received an advance of wages in 1913, but there was a change in the number of employees in the two occupations, a larger proportion of lower skilled employees being

employed.

The average rate of wages of both occupations combined in 1912 was \$2.40 and in 1913 it was \$2. Taking 1913 as the base, the relative for the industry for 1912 would be 120. On the other hand, computing the relative for each occupation, combining the relatives, and making the average thereof, the relative for 1912 is 90 as against 100 for 1913. Computed from occupation relatives, the relative rate of wages for the industry appears to increase from 90 to 100, while the relative for the industry as a whole, computed from the average rates, because of the change in number of employees in the occupations, actually decreased from 120 to 100.

The general tendency of many industries is toward an increase in the proportion of unskilled or low skilled employees to highly skilled employees, because of specialization and the increasing efficiency of machinery.

Even though it were possible to cover the same number of establishments each year, it would not be possible to cover identical establishments for a considerable number of years, as firms go out of business or for some reason it becomes impossible to get acceptable data from some firms. The desire of the Bureau is to enlarge the scope of the study from time to time by covering a larger number of

establishments. In computing the relative from year to year, it is necessary, therefore, to use the method described on page 18, grouping the data for identical establishments in groups of two or more years as available. This method is necessary whether the industry relative be computed from the actual average wages and hours of all occupations or an average of the relatives of all occupations.

In the necessary use of the method described, a material statistical error may result if the industry relative is computed from the relatives of the occupations instead of the average for the industry. If the establishments should remain identical through a period of a few years and wages and hours in a later year return to the same wages and hours as in a preceding year, industry relatives computed from actual averages will be the same for the same averages occurring in the different years. If, however, the industry relative be computed from the relatives of the several occupations, like averages will not be represented by like relatives.

The subject is illustrated in the table below, showing a hypothetical industry of three occupations, A, B, and C, of one employee each.

		19	11	19	12	19	13
Occupation.	Employees.	Rate of wages per day.	Relative wage, as com- pared with 1912.	Rate of wages per day.	Relative wage, as com- pared with 1913.	Rate of wages per day.	Relative wage.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
AB	1 1 1	\$1.00 2.00 3.00	100.00 80.00 66.67	\$1.00 2.50 4.50	100.00 125.00 150.00	\$1.00 2.00 3.00	100.00 100.00 100.00
Total		6.00 2.00 atives by	246. 67 82. 22	8.00 2.66 ² / ₃	375. 00 125. 00	6. 00 2. 00	300.00 100.00
method described. 1913 equal Relative average rate 1911 (\$2) cage rate 1912 (\$2.66\frac{2}{3})	ompared v		102. 78 75. 00		125. 00		100.00
Relative computed from average tions. 1913 equals 100	e rate of a	ll occupa-	100.00		133.33		100.00

In this table column 7 shows the wages of each employee in 1913, and the average wages, \$2. Columns 3 and 5 show the detailed wages and average wages in 1911 and 1912, respectively. Column 8 shows the relative wages with 1913 as the base (100). Column 6 shows the relative wage of each occupation for 1912 as compared with 1913 and the average of such relatives, namely, 125. Column 4 shows the relatives for 1911 as compared with 1912 and the average of such relatives namely, 82.22.

Below the line of the average is the relative for the industry as computed from the averages of the several occupation relatives by

the method explained on page 18, with 1913 equal to 100. The relative for 1912 is 125 as compared with 1913. Computing 82.22 per cent of 125 produces the relative 102.78, the relative for 1911 on the basis of 1913 equal to 100. Thus, the relative for the industry computed from the relatives of the occupations, beginning with 1913 as 100 and working back to 1911, are: 1913 equals 100; 1912 equals 125; 1911 equals 102.78. The actual average wages, however, are: \$2,\$2.66\frac{2}{3}\$, and \$2. Thus, the same average wage for the industry is not represented by the same relative.

Comparing \$2.66\(\frac{2}{3}\), the average rate for 1912, with \$2, the average rate for 1913, the relative is found to be 133.33. Comparing the average rate for 1911 (\\$2) with the average rate for 1912 (\\$2.66\(\frac{2}{3}\)), the relative is 75, and 75 per cent of 133.33, the relative for 1912, is 100, the relative for 1911 on the basis of 1913 equal to 100, as computed by the described method from the average wages of the industry.

Thus, the illustration shows that the industry relative computed from the average wages for the industry by the described method in identical establishments gives like industry relatives for like industry averages, but that if the industry relative be computed from the relatives of the several occupations, the industry relative may not be the same for the same average wages for the industry in another year.

The industry relatives given in this Bulletin have been computed from the actual average full-time hours per week, rates of wages per hour, and full-time weekly earnings for all employees reported for the industry in the same manner as for each separate occupation. While this method always produces like relatives to represent like actual wages and hours when applied to the data for two groups of establishments, both having one and the same average for any year, it must not be understood that the like relatives will appear for the same concrete numbers when the relatives are computed from data where different groups of establishments show different averages for one and the same year.

Thus, on page 18 it is shown that the relative rate per hour in 1910 as computed through successive pairs of comparable data is 96.3, although \$0.2553, the average rate for 1910 in 245 establishments, is 95.4 per cent of \$0.2677, the average rate shown for 1913 in 361 establishments.

The relative numbers for the lumber manufacturing industry, computed by both methods, are brought into comparison in the table given below. It will be observed that the results obtained by the two methods differ to some extent.

RELATIVE FULL-TIME HOURS PER WEEK AND RATES OF WAGES PER HOUR IN THE LUMBER-MANUFACTURING INDUSTRY COMPUTED ON TWO BASES; 1913=100 AND AVERAGE 1890-1899=100.

	Method us	sed in this reequals 100.	Method used in prece ing report, avera 1890–1899 equals 100				
Year.	Relative	Relative	Relative	Relative	Relative		
	full-time	rates of	full-time	full-time	rates of		
	hours per	wages per	weekly	hours per	wages per		
	week.	hour.	earnings.	week.	hour.		
1910	100.5	94. 6	94.9	96.5	130. 0		
	100.5	94. 9	95.3	96.5	129. 9		
	100.7	96. 2	96.7	96.6	131. 5		
	100.0	100. 0	100.0	(1)	(1)		

1 Not computed.

The figures computed according to the present method show an increase of relative hours of labor from 100.5 in 1910 to 100.7 in 1912, an increase of 0.2 per cent. The figures by the other method show an increase of relative hours from 96.5 in 1910 to 96.6 in 1912, or 0.1 per cent.

Relative rates of wages per hour computed by the present method show an increase from relative 94.6 in 1910 to 96.2 in 1912, an increase of 1.7 per cent. According to the figures by the other method, the increase was from 130 in 1910 to 131.5 in 1912, an increase of 1.2 per cent. Relative full-time earnings were not computed by the other method.

In addition to the text tables presented in the summary, 7 general tables are given, namely:

Table I.—Average and classified rates of wages per hour in the United States, by years, 1907 to 1913.

Table II.—Average and classified rates of wages per hour in each year, by States, 1912 and 1913.

Table III.—Average and classified rates of wages per hour in each State, by years, 1912 and 1913.

Table IV.—Average and classified full-time hours of work per week in the United States, by years, 1907 to 1913.

Table V.—Average and classified full-time hours of work per week in each year, by States, 1912 and 1913.

Table VI.—Average and classified full-time hours of work per week in each State, by years, 1912 and 1913.

Table VII.—Average full-time hours of work per week and average full-time weekly earnings, by States, 1912 and 1913.

In Tables I and IV, in addition to actual data, percentages computed therefrom are given. The data from these two tables are summarized in the text table on pages 6 to 8.

When sufficient data for a State are available to warrant presentation, such data are presented by States in Tables II, III, V, and VI. Tables III and VI repeat the data for the several States given in Tables II and V rearranged for the convenience of the reader.

DESCRIPTION OF PRINCIPAL PRODUCTIVE OCCUPATIONS.

The lumber industry as treated in this report, begins with the work on the log pond and ends with the delivery of the finished product to the carrier for shipment.

Considerable difference in equipment and method of operation exists in the various sections of the country, due in part to the size of the logs, the size of the plant, and also to some extent to the nature of the output; that is, whether largely boards, largely timbers, or a fair proportion of each.

The equipment of a sawmill consists of several or all of the following: Band saw, circular saw, gang saw, resaw, edger, trimmer, and slasher. The band saw is a steel band or belt having a saw-tooth edge. This saw is operated over two wheels, one above and the other below the saw deck. The circular saw is a disk with the cutting teeth on the perimeter. The gang saw is a set of several straight saws set parallel in a frame, which frame operates up and down as the cant is propelled through it.

The band saw is much thinner than the circular and slightly thinner than the gang, and therefore makes less waste in sawdust and a correspondingly greater marketable output from a given log. The resaw is used to saw boards from slabs, to separate into halves the thicker boards, to standardize boards of odd sizes, to cut boards having a bad side to give a clear board, and to increase capacity.

The selected occupations for which data as to wages and hours of labor are compiled by the Bureau are as follows:

Doggers.
Edgermen.
Laborers.
Machine feeders planing mill.
Sawvers, band.

Sawyers, circular. Sawyers, gang. Sawyers, resaw. Setters. Trimmer operators.

The work of these occupations is performed exclusively by males. A description of the occupations follows.

DOGGERS.

The dogger works on the carriage. He secures the log in place by means of barbs or "dogs" located in the headblocks of the carriage. These "dogs" are operated through levers, by which a downward movement drives them into the log and secures it in place, while an upward movement releases it for turning, etc. In the reports for the years 1907–1911 the occupation term carriage men was used to designate the men working on the carriage, including both doggers and setters.

EDGERMEN.

The edger is a machine having adjustable saws, used to remove the rough edges from the boards and to reduce them to specified widths. The duties of the edgerman are to adjust the saws of the edger to cut the desired widths and to feed the boards into the machine. He inspects the boards to determine the width and adjusts the saws by means of levers.

LABORERS.

This occupation includes the following subdivisions: In sawmill:

Cant setters. Deck men. Dock men. Edger helpers. Edger tailers. Gang tailers. Pond men.

Resaw tailers or off-bearers.

Transfer men. Trimmer loaders. Truckers, shed, yard. Saw tailers. Unstackers.

In planing mill:

Feeder helpers. Loaders, buggy, dolly, truck, and railroad car. Off-bearers or machine tailers.

Setters, truck or dolly. Shed men. Tiers or tiers-up. Truckers.

Sawyer helpers, resaw.

Stackers, kiln, shed, yard.

Sizer men.

Slasher men.

Cant setters.—The work of the cant setter is that of placing the cants in position for the gang saw. A cant is a log from which two slabs have been sawed from two opposite sides. If the cants are made from small logs they may be piled one on top of another to a height that will barely pass through the machine, and the cants are also placed side by side to make up the desired width. The logs are moved over rolls as a rule and the work is mainly done by hand with the aid of cant hooks and bars. A few plants have a power crane which is used in setting heavy cants.

Deck men.—The duties of the deck men are to keep the logs straight on the log deck and to roll them down for loading on the carriage. The deck inclines downward to the carriage in order that gravity may do a good deal of the work of rolling down, but irregularities in the logs make the work of the deck men necessary.

Dock men.—Usually the men who handle the timbers going directly from the sawmill to the timber dock as well as those working on the dock and at loading are called dock men. It is not uncommon for the dock men to be known by different names suggested by the particular part of the work they do. The men who come immediately after the live rolls and are the first ones to handle timbers leaving the

mill are sometimes called butting saw men. The men who move the timbers over the rolls from the sawmill to the yard are called roll men or roller men. Those working immediately on the dock may be called skid men and loaders.

Edger helpers.—In large mills the edgerman has one or more helpers whose duty it is to place the boards in such position on the edger table that the edgerman may readily inspect them and be able to adjust his machine without loss of time.

Edger tailers.—These employees are stationed beside the live rolls behind the edger and remove the strips or edgings to the slasher conveyor. This conveyor runs beneath the edger roll table and at right angles to it, so the edgings are simply pulled off the side of the

roll table and dropped on the conveyor.

Gang tailers.—The men who work behind the gang saw and take care of the product of that machine are called tailers. They pick out the shims, bark, and other material that becomes entangled or gets in the way, keep the boards in position if they tend to fall down, and, when the sawing is completed, transfer them to the edger. The work is all done by hand except the transferring, which is done by live rolls controlled by a lever.

Pond men.—The men working on the pond, or pound as it is sometimes called, propel the logs to the foot of the incline and start them on the chain which carries them up to the log deck in the mill. They stand on a board walk barely above the surface of the pond, on a small flatboat, or even on the floating logs themselves to do their work, and use a pike pole with which to propel the logs. Incidentally, these men raise the logs which may have sunk in the pond and carry them to the chain by supporting them on the surface of the water.

Resaw tailers.—These men work behind the resaw, take the waste material from the roll table and place it on the conveyor beneath. If a given slab is capable of yielding another board, it is placed on another conveyor, which returns it to the front of the resaw.

Saw tailers.—The slabs, the boards, and the timbers must be removed promptly from the band and circular saws and the accomplishment of this work is the chief duty of the saw tailer. The actual removal of the material is achieved by "live rolls," but some of the material takes a diagonal position on the rolls as it falls from the saw, and the saw tailer must straighten this so that it will go straight over them. To do this he uses a short-handled, sharp-pointed hook, with which he catches the rear end of the timber, board, or slab, and moves it toward or from him, as the case may be, so that it will run straight. Slabs do not run well over the rolls with the bark side down, so the saw tailer, using his hook, gives the slab a quick pull from the lower edge just as it is cut off and causes it to fall face down.

The boards are transferred from the live rolls by this employee by means of two levers. The one lifts a stop on the roll table and bars the progress of the boards, while the other lifts a set of transfer chains which run across the live rolls and pick up the boards and deposit them in front of the edger. In some cases the saw tailer also removes the slabs from the live rolls to the slasher conveyor with the same kind of device used for transferring the boards to the edger. In other cases this work is done by the slasher man. A band mill has a guide through which the band saw runs to hold it steady and causes it to run true through the log. The position of this guide is immediately above the log and of course to meet this demand the guide must be adjustable. It is the duty of the saw tailer to adjust this guide, which he does with a lever. This duty does not apply in the case of a circular saw, but every other duty of the tailer is the same in both types of mill.

Sawyer helpers, resaw.—When conditions demand it, one helper or more assists the sawyer in placing the slabs in position on the resaw table.

Sizer men.—All of the employees under this occupation name are timber handlers. The timbers are carried from the sawmill over the dead rolls to the sizer, which reduces the timber to exact size, and thence to the ramps or timber dock.

Slasher men.—The slabs and edgings are thrown on a conveyor and carried laterally through the slasher, where they are cut into 4-foot lengths. An employee who attends this conveyor and keeps the material going smoothly is called a slasher man.

Sorters:—These employees stand alongside the sorting chain or table, each one taking off a specified grade and placing it on the trucks or dollies.

Stackers, kiln.—The stacking by hand for the kilns is done in the same manner as the yard stacking, but this work when done by machine or patent stacker, as it is frequently called, is quite a different work, yet it is not skilled labor. The power stacker is a chain transfer apparatus which stacks the boards automatically and requires a smaller number of employees to handle the output of a mill than is necessary to do the work by hand. The movements of the machine are controlled by a lever, and when one layer has been placed it is stopped, the strips laid, the machine started again and another layer placed; in this way the operation is repeated until a full car is stacked.

Stackers, shed.—The shed stackers take care of the storing of the kiln-dried lumber. They stack or pile the product in the shed, working in somewhat the same way as the stackers in the yard, except that no transverse strips are placed between successive layers of boards.

Stackers, yard.—This is the work of storing the lumber in the yard for air drying. The men work in pairs, one, standing on the stack which he is building, receives the boards from the other, who stands on the ground and passes the boards to him one by one. In piling transverse sticks are placed at intervals between the layers of lumber in order to permit the passage of air through the piles and thus expedite the drying. An occasional mill delivers the lumber to the yard on wagons, dumping it in the driveway. It is then piled against the stack upon which it is to be placed. This work is also called stacking.

Transfer men.—Between the live-roll tables and the trimmer is a chain transfer or conveyor which delivers the product in front of the trimmer and one man usually attends this for the purpose of disengaging entangled boards. He is sometimes called conveyor man.

Following the work of sorting, the lumber is sometimes handled on a transfer car, and employees handling this work are called transfer men. This work differs from that of the transfer man inside the mill. The transfer car runs on a track parallel to the sorting table and in a depression which brings the top of the car on a level with the floor upon which the trucks stand. These are on tracks running at right angles to the sorting table, and there are corresponding tracks across the top of the transfer car. Transfer men remove the trucks to the transfer car and by it carry them either to the desired track leading to the yard, or to some other place from which the trucks can be taken by team to the yard. There is also a similar track arrangement and transfer car between the sorting table or stacker and the kiln. The cars in both these cases are usually moved by hand and the operators are called transfer men.

Trimmer loaders.—The chain transfer which conveys the lumber to the trimmer ends at the front of the trimmer. Two men, called trimmer loaders, stand here on opposite sides of the conveyor and lift the lumber from the conveyor to the trimmer. They place it so that it will be drawn to the saws regularly and in position to be trimmed most economically.

Other employees are engaged behind the trimmer to keep the product running smoothly on the sorting chain and the waste going into the burner conveyor.

From the trimmer the product passes over a long sorting table, or sorting chain, as it is frequently called, and one or more laborers are usually employed on this to take care of entanglements and move short stock over to one side.

Truckers, shed.—Trucking to the shed is handwork and consists of moving the loaded trucks from the kilns to the dry shed.

Truckers, yard.—These employees move the loaded trucks from the sorting chain to the yard.

Unstackers.—After the cars of dry lumber have been removed from the kilns, the unstackers remove it to the trucks preparatory to carrying to the dry shed for storage or to the planing mill for further

manufacture. A few mills do unstacking mechanically.

If the entire product of the mill goes through the kilns it may not be graded while green, but after being dried. In this case the unstackers place the lumber on the head end of a sorting chain or table and it is then graded and sorted in the same manner as at the green sorting chain behind the trimmer. In this way there may be graders and sorters at the kilns.

Feeder helpers.—When heavy stock is being planed, the feeder has an assistant called a helper. He aids the feeder in placing the lumber in position for the machine. He incidentally learns the work of feeding and may succeed to that position.

Loaders, truck or dolly and railroad car.—Lumber is placed on trucks or dollies for transportation about the plant and on railroad cars for

shipment by men designated as loaders.

Off-bearers or machine tailers.—If the machine is turning out material that does not require grading an employee called a tailer or off-bearer stands behind it and removes the product.

Setters, truck or dolly.—This work is that of the common laborer, and consists of removing the empty truck and placing the loaded one

in position for the machine feeder.

Shed men.—Lumber which is not for immediate shipment is stored in a shed built for this purpose, and is stacked therein by men called shed men or shed stackers.

Tiers or tiers-up.—Molding and light boards, such as ceiling and flooring, are usually tied in small bundles, and this work constitutes the duty of the tier. The grader places the material in racks in the desired quantity for a bundle and the tier secures the bundle with short pieces of tarred cord and places it on a dolly.

Truckers.—The employees in this occupation move the loaded hand trucks from place to place about the plant as conditions may demand. In some cases the same crew may do both loading and

trucking.

MACHINE FEEDERS, PLANING MILL.

The work of the feeder is that of taking the lumber from the truck or dolly and feeding it into the machine. His skill lies in his ability to determine quickly the position that the board should be given in order to get the best results. It frequently happens that he must turn the board over or even turn it end for end. On what are known as slow machines it is possible for the feeder to place the boards in position to get the very best results and highest grade of product, but a feeder of a fast machine must place the boards practically as they come to him.

SAWYERS, BAND OR CIRCULAR.

The duties of the sawyer are the same in both the band and circular mill. He controls the movements of the carriage holding the log and also the "nigger," a power appliance used to turn the log on the carriage. In this work he uses levers, and his efficiency depends upon his ability to make the movements of the carriage prompt and uniform, as well as to make the manipulation of the "nigger" sure and timely, and above all to determine how to saw the log with the least waste and get from it the most desirable size and quality of lumber. The successful working of the entire plant depends upon the sawyer more than upon any other one wageworker in the mill, possibly with the exception of the filer. The setter and the dogger work under the sawyer's direction.

SAWYERS, GANG.

The duties of the gang sawyer are to adjust the pressure rolls which hold the logs in position for the gang saw and to regulate the feed of the machine. Large cants may be sawed singly, but small ones are stacked one on top of another and side by side to make a load as large as can be put through the machine. When the cants have been placed in position the sawyer, by use of a lever, lowers the pressure rolls which lie on top of the cants and hold them firmly in position as they pass through the machine. The rolls upon which the cants lie drive them through the machine. By the use of another lever the speed of the feed is controlled; if the timber is hard or the load especially large the feed may be slower, while if the timber is soft or the load small the feed may be faster.

SAWYERS, RESAW.

Some mills conserve a part of the waste by resawing all slabs that are thick enough to make one or more short boards, while others relieve their band or circular saw by making the boards double the desired thickness and reducing this heavy stock by the resaw. The resaw sawyer has charge of the operation of resawing. A horizontal band saw is usually used for resawing slabs and a vertical band saw for resawing heavy lumber.

SETTERS.

The setter works on the carriage. It is his duty to move the log into position for each successive line to be sawed. This is usually handwork and is accomplished by means of a ratchet connected with the headblocks by a shaft and cogs. The ratchet is turned by a lever and has a graduated dial and indicator by which the setter determines when the log is in position for the desired cut. In some mills the ratchet is moved by steam power, the setter controlling the power by a lever. (See also doggers.)

TRIMMER OPERATORS.

The trimmer is a machine used to cut boards to standard length and to square the ends of them. It has saws set at intervals of 2 feet across and above or below the surface of the machine. The board goes across the machine sidewise, and such saw as is desired to cut the board is raised into position by the operator.

This employee usually occupies a pulpit located several feet in front of the trimmer and immediately over the conveyor. He accomplishes his work in different ways, depending on the construction of the machine. Some have cords properly attached with ends hanging in front of the operator, who pulls the cord controlling the saw which he desires to bring into operation; some have levers which accomplish the same work; while others have a keyboard and keys communicating pneumatically with the mechanism of the machine. In a small mill the saw operator helps to load the trimmer and operates the saws by means of foot levers located near the floor at the loader's position.

Table I.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]

NUMBER.

			Aver-	Aver-	Er	nploy	ees ea	rning	each	classi	fied r	ate o	f wa	ges p	er h	our.
Occupation, and number of establishments.	Year.	Num- ber of em- ploy- ees.	age full- time hours per week.	age rate of wages per hour.	Un- der 10 cts.	and under 12 cts.	and under 14 cts.	and un- der 16 ets.	16 and un- der 18 ets.	18 and under 20 ets.	20 and un- der 25 cts.	25 and un- der 30 cts.	30 and un- der 40 cts.	40 and un- der 50 cts.	50 and un- der 60 cts.	60 cts. and over.
Carriage men:	(1907	208	60 7	\$0.2184		3	12	16	20	13	68	62	14			
41 establishments.	1908 1909 1910	201 195 215	60. 8 60. 8 60. 7	. 2074 . 2115 . 2196		3	18 19 18	15 13 13	28 29 19	10 10 10	60 63 78	42 47 64	13 14 13			
245 establishments.	{1910 1911	1,327 1,298	61. 4 61. 3	. 2088	1 1	27 25	173 151	116 126	192 170	73 68	349 332	244 261	151 163	1 1		
Doggers: 273 establish- ments.	{1911 1912	852 869	61. 5 61. 4	.1791	2	28 25	171 148	116 128	146 162	51 66	274 278	64 62				
334 establish- ments.	{1912 1913	973 939	61. 4 61. 2	.1810 .1845		31 18	154 119	152 172	174 162	73 71	315 296	72 92	2 7			
Edgermen: 41 establishments.	1907 1908 1909 1910	79 78 77 84	60. 7 60. 7 60. 7 60. 7	. 2535 . 2457 . 2481 . 2647		2 2 2		2 4 3 4	7 8 6 4	3 2 3 4	12 16 15 14	32 33 31 30	19 12 14 23	1 1 1 2	 1	
245 establish- ments.	{1910 1911	585 569	61. 2 61. 2	. 2553		2 2	17 17	26 21	17 20	33 22	114 107	217 208	151 162	7 9	1 1	
299 establish- ments.	{1911 1912	684 686	61.3 61.2	. 2599		5 2	16 16	23 25	21 19	31 34	129 124	257 264	185 184	16 17	1 1	
361 establishments.	{1912 1913	751 754	61. 2 61. 0	. 2617 . 2677		2	16 12	28 23	20 24	33 36	136 114	295 287	198 230	22 26	1	
Laborers: 41 establishments.	1907 1908 1909 1910	4,097 3,662 3,910 4,582	60. 5 60. 6 60. 5	.1827 .1665 .1708 .1832	77 113 101 62	163 227 226 252	392 370 328 312	440 578 402 321	948 1,280 1,375 950	426 676	1,478 612 732 1,667	214 54 68 199	7 2 2 3			
245 establish- ments.	{1910 1911	20,327 19,256	61.3 61.3	.1660 .1655	543 299	2,822 2,664	2,600 2,638	2,522 2,566	3,760 3,963	2,162 2,072	5,309 4,440	580 574	29 40			
299 establish- ments.	${1911 \atop 1912}$	26,784 25,506	61. 4 61. 5	. 1621 . 1641						2,274 1,927		746 911	67 153	16		2
361 establish- ments. Machine feeders,	{1912 1913	29, 365 28, 835	61. 5 61. 1	.1639 .1708	397 199	3,809 2,590	5,084 4,858	4,993 5,043	5,757 5,028	2,130 2,545	5, 895 6, 788	1128 1532	158 235	14 17		
planing mill: 178 establish- ments.	{1911 1912	1,156 1,165	61.3 61.1	.1792		48 27	152 138	203 162	288 300		240 267	122 131	18 20	1		
253 establish- ments. Sawyers, band:	{1912 1913	1,548 1,531	61. 4 61. 1	. 1810 . 1863		65 48	242 179	208 262	363 339		335 330	160 173	25 62	i		
34 establishments.	1907 1908 1909 1910	71 69 69 73	60. 8 60. 8 60. 8 60. 7	. 4901 . 4807 . 4894 . 5007									8 10 10 9	23 20 19 21	28 28 25 25	12 11 15 18
203 establish- ments.	{1910 1911	429 432	61. 2 61. 2	. 5431							1 2	2		89 83	146 140	
243 establishments.	{1911 1912	508 492	61. 2 61. 2								3 2	3 3		88 92	179 165	200 199
288 establish- ments. Sawyers, circular:	{1912 1913	561 554	61. 1 60. 9	. 5457 . 5568							2	4 6		114 100	196 186	213 232
12 establishments.	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	14 14 13 14	61. 3 61. 3 61. 3	. 5254									1 1 1	3 5 4 5	6 4 5 4	3

TABLE I.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913—Continued.

NUMBER—Concluded.

			Aver-	Aver-	Eı	nploy	rees ea	rning	each	classi	fied r	ate o	f wa	ges I	er h	our.
Occupation, and number of establishments.	Year.	Number of employ-ees.	age full- time hours per week.	age rate of wages per hour.	Un- der 10 cts.	and under 12 cts.	and un- der 14 cts.	and un- der 16 cts.	16 and under 18 cts.	18 and un- der 20 cts.	20 and un- der 25 cts.	25 and un- der 30 ets.	30 and un- der 40 ets.	40 and un- der 50 ets.	50 and un- der 60 ets.	60 cts. and over.
Sawyers, circular —Concluded. 58 establish- ments.	{1910 1911	81 78	61. 9 62. 0	\$0.4964 .4976								2 2	7 7	26 23	32 32	14 14
72 establish- ments.	{1911 1912	95 94	62. 6 62. 5	. 5036							2	3 4	8	27 18	40 44	17 18
92 establish- ments.	{1912 1913	119 123	62. 4 62. 0	. 4990					1		3 2	5 4	13 13	24 26	49 46	24 32
Sawyers, gang:	CT 000		00.0							117				-		
5 establish- ments.	$ \begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases} $	6 6 6 6	60.0 60.0	. 2583							2 2 1	3 2 3	2 1 2 2			
52 establish- ments.	{1910 1911	64 60	61.4 61.6	.3092			1 1	1 1		1 1	11 11	14 14	21 20	13 12	2	
66 establish- ments.	{1911 1912	74 75	61.6 61.6				2	1 4		2 2	9	20 23	23 24	17 17		
71 establish- ments.	{1912 1913	79 80	61.7 61.4	.3072				3 2	<u>i</u>	2 2	7 6	23 22	28 31	15 14	1 2	
Sawyer, resaw: 98 establish- ments.	{1911 1912	149 147	60.7 60.7	. 2515				5 5	9 8	8 6	43 40		38 41	1 1		
138 establish- ments.	{1912 1913	197 192	60.7 60.7	. 2543			3 1	8 6	9 8	8 9	56 47	60 61	48 55	5 5		
Setters: 301 establish- ments.	{1911 1912	714 713	61.3 61.3	. 2506		1 1	19 15		35 27	25 32	160 152					
361 establishments. Trimmer operators:	{1912 1913	780 782	61.3 61.0	. 2499		1 1	16 13				169 162					
37 establishments.	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	72 68 72 74	60.7 60.7 60.7 60.7	. 2070 . 1959 . 1971 . 1969		2 2 2 2 2	5 4		17	10 12	33 18 18 27		5			
228 establish- ments.	{1910 1911	503 485	61.0 61.0			11 10	45 43	37 36	54 54		192 185		36 34			
294 establish- ments.	{1911 1912	479 441	61.3 61.3	. 2092		15 15	38 31	42 44		25 24	176 165		25 25	4 5		
346 establishments.	${ 1912 \atop 1913 }$	511 538	61.2 61.0	. 2088 . 2172		15 14		57 54	58 56		190 202					
					PE	R C	ENT.									
Carriage men:		-										-				
41 establishments.	1907 1908 1909 1910	208 201 195 215	60.8 60.8	. 2115		1.4	9.0	7.5	13.9 14.9	10.9	29.9 32.3	20.9 24.1	6.5			
245 establishments. Doggers:	{1910 1911	1,327 1,298	61.4 61.3		0.1	2. 0 1. 9	13.0 11.6	8.7 9.7	14.5 13.1	5.5 5.2	26.3 25.6	18. 4 20. 1	11. 4 12. 6	0.1		
273 establishments.	${ \{ \substack{1911 \\ 1912} }$	852 869				3.3 2.9	20.1 17.0	13.6 14.7	17.1 18.6	6. 0 7. 6	32. 2 32. 0	7.5 7.1				
334 establishments.	{1912 1913	973 939			2	3.2 1.9	15.8 12.7	15. 6 18. 3	17.9 17.3	7.5 7.6	32. 4 31. 5	7.4	.2			
45410°-	-Bull	. 153-	-14-	3												

TABLE I.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913—Continued.

PER CENT-Continued.

											0 -			0.1		
			Aver-		En	nploy	ees ea	rning	each	classi	fied r	ate o	f wa	ges p	er h	our.
Occupation, and number of establishments.	Year.	Number of employees.	age full- time hours per week.	age rate of wages per hour.	Un- der 10 cts.	and under 12 cts.	and un- der 14 ets.	and un- der 16 cts.	16 and un- der 18 ets.	18 and un- der 20 cts.	20 and un- der 25 ets.	and un- der 30 cts.	30 and un- der 40 cts.	40 and un- der 50 cts.	and un- der 60 cts.	60 cts. and over.
Edgermen:			17					7 -4								
41 establishments.	1907 1908 1909 1910	79 78 77 84	60.7 60.7 60.7 60.7	\$0. 2535 . 2457 . 2481 . 2647	·····	2. 5 2. 6 2. 6	1.3 2.6 2.4	2.5 5.1 3.9 4.8	8.9 10.3 7.8 4.8	3.8 2.6 3.9 4.8	20.5	42.3	24. 1 15. 4 18. 2 27. 4	1.3		
245 establishments.	{1910 1911	585 569	61. 2 61. 2	. 2553 . 2589		.3	2.9 3.0	4.4 3.7	2.9 3.5	5.6 3.9			25. 8 28. 5	1.2 1.6	.2	
299 establishments.	{1911 1912	684 686	61.3 61.2	. 2599		.7	2.3 2.3	3. 4 3. 6	3.1 2.8	4.5 5.0	18.9 18.1	37. 6 38. 5	27. 0 26. 8	2.3 2.5	.1	
361 establish- ments. Laborers:	{1912 1913	751 754	61. 2 61. 0	. 2617 . 2677		.3	2.1 1.6	3.7 3.1	2.7 3.2	4. 4 4. 8		39.3 38.1		2.9 3.4	.1	
41 establishments.	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	4,097 3,662 3,910 4,582	60. 5 60. 6 60. 5		1.9 3.1 2.6 1.4	4.0 6.2 5.8 5.5	9.6 10.1 8.4 6.8	15.8 10.3	23.1 35.0 35.2 20.7	9. 2 11. 6 17. 3 17. 8	36.1 16.7 18.7 36.4	1.5				
245 establishments.	{1910 1911	20,327 19,256	61.3 61.3	.1660 .1655	2.7	13.9 13.8	12.8 13.7	12. 4 13. 3	18.5 20.6		26.1 23.1		.1			
299 establish- ments.	{1911 {1912	26,784 25,506	61. 4 61. 5	.1621	1.9 1.4		15.8 16.9		19.8 20.3	8.5 7.6	20. 4 20. 1		.3			(1)
361 establish- ments. Machine feeders,	{1912 1913	29,365 28,835	61.5 61.1	.1639 .1708	1.4	13.0 9.0	17.3 16.8		19.6 17.4		20.1 23.5	3.8 5.3		(1) •1		
planing mill: 178 establish- ments.	${1911 \atop 1912}$	1,156 1,165	61.3 61.1			4. 2 2. 3	13.1 11.8		24.9 25.8			10. 6 11. 2	1.6 1.7			
253 establishments. Sawyers, band:	${1912 \atop 1913}$	1,548 1,531	61. 4 61. 1		.1	4.2 3.1	15.6 11.7	13.4 17.1	23. 4 22. 1	9.6 8.8		10.3 11.3	1.6 4.0			
34 establishments.	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	71 69 69 73	60. 8 60. 8 60. 8 60. 7	. 4807									11.3 14.5 14.5 12.3	29.0 27.5	40.6	21.7
203 establishments.	{1910 1911	429 432	61. 2 61. 2								.2	.5	6.8 6.5	20. 7 19. 2	34. 0 32. 4	37.8 41.2
243 establish- ments.	${ 1911 \atop 1912 }$	508 492	61. 2 61. 2								.6	.6			35. 2 33. 5	
288 establish- ments. Sawyers, circular:	${1912 \atop 1913}$	561 554	61. 1 60. 9								.4	1.1	5.7 5.2		34. 9 33. 6	
12 establishments.	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	14 14 13 14	61.3 61.3 61.3 61.3	.5186									7.1	35.7 30.8	42. 9 28. 6 38. 5 28. 6	28.6 23.1
58 establish- ments.	$ \{ \begin{matrix} 1910 \\ 1911 \end{matrix} $	81 78	61. 9 62. 0									2.5 2.6			39.5 41.0	
72 establish- ments.	${1911 \atop 1912}$	95 94	62. 6 62. 5								2.1	3. 2 4. 3		28. 4 19. 1	42. 1 46. 8	17.9 19.1
92 establish- ments. Sawyers, gang:	${ 1912 \atop 1913}$	119 123	62. 4 62. 0						.8		2. 5 1. 6		10.9 10.6			
5 establishments.	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	6 6 6 6		. 2558							33.3	50.0 33.3	33.3 16.7 33.3 33.3			

¹ Less than one-tenth of 1 per cent.

TABLE I.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913—Concluded.

PER CENT—Concluded.

			Aver-	Aver-	Er	nploy	ees ea	rning	each	classi	fied r	atec	of wa	ges p	er h	our.
Occupation, and number of establishments.	Year.	Number of employ- ees.		ull- rate ime of ours wages per per		and under 12 cts.	and under 14 cts.	and un- der 16 cts.	16 and un- der 18 ets.	18 and un- der 20 cts.	20 and un- der 25 cts.	and un- der 30 cts.	30 and un- der 40 cts.	and under 50 cts.	un- der 60	60 cts. and over
Sawyers, gang— Concluded. 52 establish- ments.	{1910 1911	64 60		\$0.3092 .3006			1.6 1.7	1.6 1.7		1.6 1.7		21.9 23.3				
66 establishments.	{1911 1912	74 75	61. 6 61. 6	.3061 .3058			2.7 1.3	1.4 5.3		2.7 2.7		27. 0 30. 7				
71 establishments.	{1912 1913	79 80	61. 7 61. 4	.3072 .3109				3.8 2.5	1.3	2.5 2.5		29. 1 27. 5				
Sawyers, resaw: 98 establish- ments.	{1911 1912	149 147		. 2515 . 2556				3. 4 3. 4	6.0 5.4	5. 4 4. 1		30. 2 31. 3				
138 establishments.	${1912 \atop 1913}$	197 192	60. 7 60. 7	. 2543 . 2607			1.5 .5	4.1 3.1	4.6 4 2	4. 1 4. 7		30. 5 31. 8				
Setters: 301 establish- ments.	${1911 \atop 1912}$	714 713		. 2506 . 2518		0.1	2.7 2.1	4.6 5.0	4.9 3.8	3.5 4.5		34. 2 36. 5				
361 establishments. Trimmer operators:	$\begin{cases} 1912 \\ 1913 \end{cases}$	780 782		. 2499 . 2583		.1	2. 1 1. 7	4. 6 2. 9			21.7 20.7	38. 3 38. 0	24. 2 26. 0	2.7		
37 establishments.	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	72 68 72 74	60. 7 60. 7 60. 7 60. 7	. 2070 . 1959 . 1971 . 1969		2.8 2.9 2.8 2.7			20. 6 23. 6	14.7 16.7	26.5 25.0	12. 5 13. 2 12. 5 12. 2	5.9			
228 establishments.	{1910 1911	503 485			0.2	2. 2 2. 1	8.9 8.9	7.4 7.4		7.8 5.6		16. 9 19. 2				
294 establishments.	${1911 \atop 1912}$	479 441		. 2092		3.1 3.4	7.9 7.0	8.8 10.0	11.3 10.9	5. 2 5. 4		20. 9 19. 0	5. 2 5. 7			
346 establishments.	{1912 1913	511 538	61. 2 61. 0	. 2088		2.9 2.6	7. 4 5. 2		11. 4 10. 4	5.7 4.8		16. 6 18. 6		1.2 1.3		

TABLE II.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913.

DOGGERS.

	Manne	Manage	Aver-	Aver-	Nu	mber	of em	ploye	es ear	ning o	each c	lassif	ied r	ate o	f wa	ges
Year and State.	berof	Number of employ-ees.	age full- time hours per week.	age rate of wages per hour.	Under 10 cts.	and under 12 cts.	and under 14 ets.	and under 16 cts.	16 and under 18 cts.	and un- der 20 cts.	20 and un- der 25 cts.	and under 30 cts.	30 and un- der 40 cts.	40 and un- der 50 cts.	50 and un- der 60 cts.	60 ets. and over.
1912.																
Alabama. Arkansas. California Florida. Georgia	14 19 13 12 18	74 33 49	60. 8 60. 2 63. 3	. 2263 . 1523		7	22 8 14	11 19 32 20	2 40 7 2	10	5 28 2	5				
Louisiana Maine Michigan Minnesota Mississippi	23 14 30 4 16	25 91 30	62. 8 60. 0 60. 0	. 2141 . 2052 . 2313			31	4 17	31 2 14 8	12 5 10	43 14 65 24	4 2 6				
North Carolina. Oregon. Pennsylvania. South Carolina. Tennessee.	20 6 14 8 28	20 19 34	62.3 61.8	. 2467 . 1921 . 1343		4 4 1	27 20 3	12 9 17	3 2 1 13	8	1 4 9	16				
Texas. Virginia. Washington West Virginia. Wisconsin	12 23 25 18 17	59 79 28	60.0	. 2297		8	26	3 8	24 14 3 4 4		15 2 49 15 33	24 3 12				
Total	334	973	61.4	. 1810		31	154	152	174	73	315	72	2			
1913.																Le la
Alabama. Arkansas. California Florida. Georgia.	19 13 12	72 33 2 49	60.0 60.2 63.3	. 1737 . 2286 . 1545		7	10	9 10 31 19	4		2 8 26 4	6	i			
Louisiana Maine, Michigan, Minnesota, Mississippi	30	88 1 12	62. 8 60. 0 60. 0	. 2101 . 2124 . 2463			3		2	6	50 15 81 6					
North Carolina, Oregon, Pennsylvania South Carolina Tennessee,	14	20 1 19 3 34	60. 0 61. 6 61. 8	. 2550 . 1969 . 1351		4	19	11	17	9	1 3 10 4		i			
Texas	23 25 18	62 67 68 67 68	63. 1 60. 0 62. 0	. 1464 . 2452 . 2103		3	26	15	20 13 2 6	1 1 5		40	1			
Total	334	939	61.2	. 1848	2	18	119	172	162	71	296	92	7			
					ED	GER	ME	٧.		- 1						
1912.	1				1	1	1						-			
AlabamaArkansasCaliforniaFloridaGeorgia	19	9 52 4 32 2 19	60. 6 60. 2 63. 4	3393	3		3		1	3	8 ii	39	27	2		

EDGERMEN—Concluded.

			Aver-	Aver-	Nu	mber	of em	ploye		rning per ho		elassif	ied r	ate	of wa	ges
Year and State.	Num- ber of estab- lish- ments	ber of em- ploy-	age full- time hours per week.	age rate of wages per hour.	Under 10 cts.	and under 12 ets.	and under 14 cts.	and under 16 ets.	16 and under 18 cts.	18 and un- der 20 cts.	20 and un- der 25 ets.	and under 30 ets.	30 and un- der 40 ets.	40 and un- der 50 cts.	50 and un- der 60 ets.	60 ets. and over
1912—Concld.																
Louisiana Maine Michigan Minnesota Mississippi	23 19 30 7 16	62 33 75 60 36	62. 0 60. 0 60. 0	. 2607				3		2 7	6 5 14 17	39 14 57	14 14 3 60 1	1 1		
North Carolina. Oregon Pennsylvania South Carolina. Tennessee	23 6 19 9 29	35 12 25 20 34	59.9 61.9	.3714 .2568 .2162		2	5 1 1	11 2 2		1 1 1	5 8 9 11	3 14 6 13	1 5 1 2	7 1		
Texas. Virginia. Washington West Virginia. Wisconsin	12 23 25 20 19	33 35 33 31 77	60. 1 63. 0 60. 0 61. 9 60. 0	. 3599			4	5	5	6	6 7 3 10	22 7 2 13 46	5 1 20 15 21	10	i	
Total	361	751	61.2	. 2617		2	16	28	20	33	136	295	198	22	1	
1913.							Bill.					4.5				
AlabamaArkansasCaliforniaFloridaGeorgia	14 19 14 12 22	18	59.9 60.2 63.3	.3402			2	3		5 1 3 5	10	2 39 3 3 3	3 28 3 4	2		
Louisiana Maine. Michigan. Minnesota. Mississippi	30	77 60	61.7 60.0 60.0	. 2900 . 2675 . 3283			 i		3	14	6 4 9 14	26 15 58 	32 16 9 60 1			
North Carolina. Oregon Pennsylvania South Carolina. Tennessee	23 6 19 9 29	10 25 19	60.0 61.4 61.9	.3850 .2355 .2144		1	1	11 3	6	3	7	14 8 14	2 3 3 4	7 1		
Texas Virginia Washington West Virginia Wisconsin	25	39 32 31	62.9 60.0 62.0	. 2034 . 3772 . 2868			3	2	7	ii	3 7 7	20 7 2 16 41	7 2 14 15 24		i	
Total	361	754	61.0	. 2677		1	12	23	24	36	114	287	230	26	1	
					LA	BOR	ERS									
1019						1					1					
Alabama. Arkansas. California Florida Georgia.	19 14 12	2,141 1,311 1,208	60.6 60.1 63.5	. 2015	11	272	275	1,163	467 331 61	66 170 21	132	127 1	10			
Louisiana Maine Michigan Minnesota Mississippi	19 30 7	865	60.0	.1847 .1758 .2204	33	1	21 17	889 40 87 212	359 1,219 33	158 407 126	252 269 890	284	9 2 4	8		

LABORERS—Concluded.

			Aver-	Aver-	Nu	mber	of em	ploye	es ear	ning o		lassif	ied r	ate o	f wa	ges
Year and State.	Number of estab- lish- ments	ber of em- ploy-	age full- time hours per week.	age rate of wages per hour.	Under 10 ets.	and under 12 ets.	and un- der 14 ets.	and under 16 ets.	16 and under 18 ets.	and under 20 ets.	20 and un- der 25 ets.	and under 30 ets.	40	40 and un- der 50 cts.	un- der 60	60 ets. and over
1912—Concld.																
North Carolina. Oregon Pennsylvania South Carolina. Tennessee	23 6 19 9 29	767 834 1,037	59.9 61.8 61.4	.1888	34 76 2	789 510 49	610 10 389 298	247 16 46 509	42 34 249 12 87	3 10 239 2 11	7 487 298 2 28	213 18				
Texas Virginia Washington West Virginia Wisconsin		1,289 2,594 907	63.0 60.0 62.2	. 2124	65	321 	82 382 23 12 12	575 304 155 32 37	483 148 343 213 732	207	173 51 1,496 402 441	332 31 25	-86	5		
Total	361	29,365	61.5	.1639	397	3,809	5,084	4,993	5,757	2,130	5,895	1,128	158	14		
1913.														- 1		
Alabama Arkansas California Florida Georgia	14 19 14 12 22	2,205 1,389 1,072	60.0 60.1 63.3	. 1557 . 2071 . 1359	38 10 26		506 256 395 694	1, 157 361	540 62 79	123	104 999 7 11	133				
Louisiana Maine Michigan Minnesota Mississippi	23 19 30 7	1,000 2,080 1,418	61.8 60.0 60.0	. 1853 . 1794 . 2374		137 2 113		30 32	388 876 6	254 757 16	277 412 965	354		14		
North Carolina. Oregon. Pennsylvania. South Carolina. Tennessee.	19	842 751 957	60.0 61.5 61.3	. 2351 . 1979 . 1147	49	2	8	10 27	98	203	2					
Texas. Virginia. Washington. West Virginia. Wisconsin.	. 20	1,434 5 2,211 882	63. 2 60. 0 2 62. 2	. 1375 . 2289 . 1962		355	19 448 5	352 12	170 158 210	20 54 195	58 1,359 424	505 29	120			
Total	. 36:	28,83	61.1	.1708	199	2,590	4,858	5,043	5,028	2,545	6,788	1,532	235	17		

MACHINE FEEDERS, PLANING MILL.

1912.																
Alabama	12	77	65.98	30. 1312	1	7	60	8	1							
Arkansas	12 18	205	60.4	. 1694		3	10	8 52	86	22	30	1	- 1		0000	
California	9	36	60.0	. 2278					4	3	21	5	3			
Florida	11 16	45	63.5	. 1640		1	12	17	4	4	4	2	1			
Georgia	16	60	64.1	. 1407		10	30	9	5	3	3					
	-	400									-			175		
Louisiana	22	169	60.9	. 1766		1	2	14	97	22	33					
Maine	15	34	63.0	. 2132					5	12	9	7	1			
Michigan	15 10	117	60.0	. 1897				1	38	33	40		1			
Minnesota	5	59	60.0	. 2256					1	2	38	18				
Mississippi	16	92	64.4	. 1435		11	37	35	5	1	3					
Nouth Constina	40	100	01 0	1400	1	14		35	22	0	0		1		1	3
North Carolina.	19	120	61.2	. 1426		14	44	30	22	2	2					
Oregon	6 9 7	53	59.9	. 2725					1		2	39	11			
Pennsylvania	9	16	63.4	. 2246						4	7	5				
South Carolina.		35	63.3	. 1355		2	24	6	3							
Tennessee	6]	17	62.5	. 1585			7	4		3	3					

MACHINE FEEDERS, PLANING MILL—Concluded.

	37	37	Aver-	Aver-	Nu	mber	of em	ploye		ning er ho		elassif	ied r	ate o	of wa	ges
Year and State.	ber of	ploy-	age full- time hours per week.	age rate of wages per hour.	Under 10 cts.	and under 12 ets.	and under 14 cts.	and un- der 16 ets.	16 and un- der 18 ets.	18 and un- der 20 ets.	20 and un- der 25 ets.	25 and un- der 30 cts.	30 and up- der 40 cts.	un- der 50	un- der 60	ets
1912—Concld.			1				7	1	-113							
Texas Virginia Washington West Virginia Wisconsin	12 13 23 13 11	52 160 36	63.8 60.0 61.9	.2344		16	3 13	17 7 3	57 6 16 1 11	3 3 1 7 23	17 6 62 23 32	72 5	1 6			
Total	253	1,548	61.4	. 1810	2	65	242	208	363	148	335	160	25			
1913.												-1.				
Alabama Arkansas California Florida Georgia	12 18 9 11 16	197 45 45	59. 7 60. 0 63. 6	. 1693 . 2289 . 1549	3	11 1 7	45 7 10 34	11 57 25 15	3 84 4 5	23 4 1 1	24 27 3 6	2 11 1	3			
Louisiana Maine. Michigan Minnesota Mississippi	22 15 10 5 16	34 83 47	60. 8 63. 0 60. 0 60. 0 60. 0	.2134 .1931 .2419		2	3	25 1 52	94 1 18 	22 10 26	45 17 33 29 4	2 6 4 18 1	2 			
North Carolina. Oregon. Pennsylvania. South Carolina. Tennessee.	19 6 9 7 6	66 16 40	60. 0 62. 3 62. 7	. 2806 . 2331 . 1364		13	29 17 1	43 12 6		3	4 4 11 4	35 4 2	26 1	i		
Texas. Virginia. Washington. West Virginia. Wisconsin.	12 13 23 13 11	47 133	63. 6 60. 0 62. 5	.1553 .2574 .2072		6	1 18	77	49 6 2 3 10	4 1 5 9 20	29 7 25 18 40	3 1 74 4 5	1 27			
Total	253	1,531	61.1	. 1863	3	48	179	262	339	134	330	173	62	1		

SAWYERS, BAND.

	-								-		-	-			
1912.															
Alabama	6	7		\$0.5416					 				1	6	
Arkansas	17	33	60.9						 				1	2	30
California	11 6	26	60.0						 				10	11	5
Florida	11	12 16	63.0 62.9						 					0	0
Georgia	11	10	02.9	. 5/15					 				1	8	1
Louisiana	17	35	60.8	. 6643	100	1	1					100		4	31
Maine	13	27	61.5						 				7	16	4
Michigan	28	62	60.0			1		1	 			2	14	36	10
Minnesota	7	45	60.0						 						45
Mississippi	9	18	64.0	. 5717					 					11	. 7
		-	00.0			-					1 - 2				
North Carolina.	17	27	62.9						 	1		2	6	16	2 5
Oregon Pennsylvania	16	8 23	59.9 62.1						 			10	11	3	9
South Carolina.	8	17	61. 9						 		1	10	11	1 7	8
Tennessee	29	35	60.4						 	1	1	11	2 12	6	1
1 6111163366	20	00	00. 4	. 1211					 	1	1	11	12	0	-
Texas	10	21	60.1	.6071					 					5	16
Virginia	22	35	63.0						 		1	2	17	15	
Washington	17	33	60.0						 			2 2 3	7	. 7	17
West Virginia	20	31	62.1						 		1	3	21	5	1
Wisconsin	19	50	60.0	. 5505					 				4	31	15
Total	288	561	61.1	. 5457					 	2	4	32	114	196	213
=					-	_	-	-	 						

SAWYERS, BAND-Concluded.

	Num-	Nam	Aver-	Aver-	Nu	mber	of en	ploye		ning per ho		elassif	ied r	ate o	of wa	ges
Year and State.	ber of estab- lish- ments	ber of em- ploy-	age full- time hours per week.	age rate of wages per hour.	Under 10 cts.	10 and un- der 12 ets.	and un- der 14 cts.	and un- der 16 cts.	16 and un- der 18 cts.	18 and un- der 20 cts.	20 and un- der 25 ets.	25 and un- der 30 cts.	30 and un- der 40 cts.	and under 50 cts.	un- der	60 cts. and over
1913.							-					73				To the
AlabamaArkansasCaliforniaFloridaGeorgia	6 17 11 6 11	7 33 26 12 17	60. 1 60. 0	. 5368										1 8	5 12 4 9	3
Louisiana. Maine Michigan Minnesota Mississippi	17 13 28 7 9	59 45	61. 2 60. 0 60. 0	. 7311									2	6 12	1 17 34 6	1 4 1
North Carolina. Oregon Pennsylvania South Carolina. Tennessee	5	8 23 17	61.6 61.9	.6406 .3937 .5897							1	1 1 2	10	11 2	16 1 1 7 7	
Texas Virginia Washington West Virginia Wisconsin	10 22 17 20 19	35 30 31	63.0	.5817								i 1	3	5	10 8]
Total	288	554	60.9	. 5568							1	6	29	100	186	23
				SAV	VYE	RS,	CIRC	ULA	R.							
1912.																
Alabama Arkansas California Florida Georgia	3 6	3 9	60. 0 62. 0 64. 0	.5375							·····i	1 i	1 4	3 3 3	2 2 2	
Louisiana Maine Michigan Mississippi North Carolina	6	17	64.3 60.0 64.8	. 4292 . 5206 . 5173					· · · · · · · · · · · · · · · · · · ·		2	2	1 2 1 1	3 4	13	
Oregon Pennsylvania Texas Washington Wisconsin	4	5 5 12	60.6 60.0 60.0	.3427 .5500 .5750								i	3	1 1	0	
Other States	2	2	61.5	. 4774			-,							1	1	
Total	92	119	62. 4	. 4990					1		3	5	13	24	49	5
Alabama. Arkansas. California. Florida. Georgia.	. 3	3 3	59.3 62.0 64.0	.5513 .5208 .5326								1	1	1 3	2 2	
Louisiana Maine Michigan Mississippi North Carolina.	. 6	16	64.3 60.0 60.0	. 4253 . 5366 . 5550							2		1 2	3 3	9	

SAWYERS, CIRCULAR—Concluded.

	27	37	Aver-	Aver-	Nu	ımber	of en	ploye	ees ear	rning per ho		classi	fied r	ate	of wa	ges
Year and State.	berof	ploy-	full- time	age rate of wages per	Under 10 ets.	and under 12 cts.	and un- der 14 ets.	and un- der 16 ets.	16 and un- der 18 cts.	18 and un- der 20 ets.	20 and un- der 25 ets.	25 and un- der 30 ets.		un- der 50	der 60	60 ets. and over
1913—Concld.																
Oregon Pennsylvania Texas Washington Wisconsin	2 4 4 11 2	5 5 13	60. 6 60. 0 60. 0	. 5600 . 5962								i 	3	i	1 3 4 2	
Other States	2	3	61.0	. 4929										1	2	
Total	92	123	62.0	. 5134							2	4	13	26	46	3:

SAWYERS, GANG.

1912.								1 8			100			1	100	100
Alabama	6	. 8	66.1	\$0.2185		13.5	-	2	12764	1	2	3				
Arkansas		. 8	60.0					1				1	5	2		
California	8 2 5		60.0									î				1
Florida	5	2 5	64. 8								1	3				
Georgia	4	4	64.5					1			- 1	1				
deorgia	**	4	04.0	. 2020				1			1	1	. T			
ouisiana	9	9	60.6	. 3669	9, 50.								5	4		100
Aichigan	3	3	60.0					1			2	11.6	1			1
Innesota	3	5	60.0								-		3	2		
dississippi	6	6	63.0								1	3		- 4		
regon	4	4	60.0							1	1	. 0	3	1		
regon	4	4	00.0	. 3500									9	1		
Pennsylvania	2 3	2	62.5	. 2844		k						1	1			
'exas	3	3	60.3									1		- 2	1	1000
7irginia	2	2	66.0									1		1	-	
Washington	2	2	60.0									1				
Visconsin	8	11	60.0									6	3	2		
V ISCOLISIII	0	11	00.0	. 5025								0	9	- 2		
Other States	4	5	60.0	. 3050								3	1	1		
Total	71	79	61.7	.3072				3		2	7	23	28	15	1	
1913.																
. labama	0	0	00 1	2000		1 3 3			17.						18.50	
Alabama	6	8	66.1	. 2298				2			2	4				
rkansas	8	8	59.6									1	5	2		
California	2	2	60.0									1	1			
Florida	5	6	65.0							1		2	3			
deorgia	• 4	4	64.5	. 2491					1		1	1	1			
Louisiana		9	60.4	. 3704		100		Mad .					_			
	9												5	4		
Aichigan	3	3	60.0								1	1	1			
Innesota	3	5	60.0										3	2		
fississippi	6	6	60.0							1		3	2			
)regon	4	4	60.0	. 3563									- 3	1		
Pennsylvania	. 0	2	59. 5	. 2976		1						1	1		1	
	2											1	1			
rexas	3	3	60.3											2	1	
Virginia	2 3 2 2 8	2 2	66.0									1		1		
Washington	2	2	60.0										2 3	····i		
Visconsin	8	11	60.0	. 3105							2	4	3	1	1	
ther States	4	5	61.2	. 3100								3	1	1		
								-	-	2			-		-	-

SAWYERS, RESAW.

			Aver-	Aver-	Nun	nber	of em	ploye		ning per ho	each our.	classi	fied :	rate	of w	ages
Year and State.		ber of em- ploy-	age full- time hours per week.	age rate of wages per hour.	Un- der 10 cts.	and under 12 ets.	and un- der 14 ets.	and un- der 16 ets.	16 and un- der 18 ets.	18 and un- der 20 ets.	20 and un- der 25 ets.	and under 30 ets.	un- der 40	40 and un- der 50 cts.	50 and un- der 60 cts.	60 ets. and over.
1912.							1		Sax -					86		
Arkansas. California. Florida. Georgia Louisiana.	3 7 2 2 4	4 13 2 2 2 4	60. 0 60. 0 62. 8	. 2000 . 2159					·····i	·····i	3 8 2 2	1 4 2	i			
Maine. Michigan Minnesota. Mississippi North Carolina.	5 20 5 2 11	6 30 13 2 11		. 2750 . 1932			2	1 2	2	1 1 2	14 14 1	3 11 7 2	4 6			
Oregon	6 5 6 5 11	10 9 7 6 12	63. 0 61. 1 60. 0	. 2348 . 2040 . 2208			i	₂	2 1 3	1	1 5 3 4	2 4 2 1	5	2		
Washington West Virginia Wisconsin Other States	23 7 13 1	32 7 26 1	60. 0 61. 7 60. 0 60. 0	.2851 .2565						2	9	8 5 7 1	20 2 8			
Total	138	197	60.7	. 2543			3	8	9	8	56	60	48	5		
Arkansas. California. Florida. Georgia. Louisiana.	3 7 2 2 4	4 14 2 2 2 4	60. 0 60. 0 60. 0 62. 8 63. 0	. 2482 . 2250 . 2156					·····i	1	2 8 1 2 1	2 3 1 1	3			
Maine. Michigan. Minnesota Mississippi North Carolina.	5 20 5 2 11	7 25 13 2 11	60. 6 60. 0 60. 0 60. 0 62. 6	. 2544 . 2827 . 2175			 i	2	2	1 1 1 3	10 	3 9 7 1 2	5 6			
Oregon	6 5 6 5 11	11 8 7 6 14	60.0	. 2308 . 2147 . 2333				 1 3	1 4	i	5 2 3 4	3	2			
Washington West Virginia Wisconsin Other States	23 7, 13 1	31 7 23 1	60. 0 61. 6 60. 0 60. 0	.2680							1 5	2 5 12 1	1 6			
Total	138	192	60.7	. 2607			1	6	8	6	47	61	55	5		
					S	etti	ERS.									
1912.								- 5								
AlabamaArkansasCaliforniaFloridaGeorgia	14 19 14 12 22	21 35 29 21 31	60. 9 60. 2 63. 4	.2660		i	8	5	3		9 10 11	26 15 4	3			

SETTERS—Concluded.

	Num-	Num-	Aver-	Aver-	Nur	nber	of em	ploye		ning per ho	each our.	classi	fied	rate	of w	ages
Year and State.	ber of	ber of em- ploy-	full- time hours per week.	age rate of wages per hour.	Un- der 10 ets.	and under 12 ets.	and un- der 14 cts.	and un- der 16 cts.	and under 18 ets.	and under 20 cts.	20 and un- der 25 ets.	25 and un- der 30 ets.	30 and un- der 40 cts.	40 and un- der 50 cts.	un- der	60 ets. and over
1912—Concld.																
Louisiana Maine Michigan Minnesota Mississippi	23 19 30 7 16	55 42 81 78 33	61. 1 61. 6 60. 0 60. 0 64. 4	. 2687					4	6	14 2 6 19	26 29 56	14 11 19 78			
North Carolina. Oregon. Pennsylvania. South Carolina. Tennessee.	23 6 19 9 29	42 10 32 19 36	62. 1 59. 9 61. 6 62. 2 60. 6	. 1925			1	10 5 7	3 8	10 3	10 15 5 9	1 7 16 3 10	3 1 			
TexasVirginiaWashingtonWest VirginiaWisconsin	12 23 25 20 19	32 37 51 35 60	60. 1 62. 9 60. 0 62. 0 60. 0	. 2508 . 1973 . 2809 . 2572 . 2681			3	9	4	4	10 5 3 9 15	18 11 25 20 21	4 1 23 6 24			
Total	361	780	61.3	. 2499		1	16	36	30	39	169	299	189	1		
1913. Alabama. Arkansas. California Florida. Georgia	14 19 14 12 22	21 35 29 21 31	65. 1 60. 0 60. 2 63. 4 64. 5	.1947 .2519 .2721 .2136 .1971		····i		4 i	3	5 5 2	9 10 8 12 9	24 17 3 8	1 2 1	2		
Louisiana Maine Michigan Minnesota Mississippi	23 19 30 7 16	54 44 77 88 32	61. 0 61. 4 60. 0 60. 0 60. 0	. 2571 . 2800 . 2782 . 3459 . 2219					2	1	13 2 2 2 17	31 20 52 	9 22 23 70			
North Carolina. Oregon Pennsylvania South Carolina. Fennessee	23 6 19 9 29	41 12 32 19 38	62. 0 60. 0 61. 2 62. 2 60. 8	. 1854 . 2979 . 2587 . 2004 . 2081			3	6 2	11 1 9	7 4	14 10 2 15	2 21 6 11	10 1 			
rexasVirginia Washington West Virginia Wisconsin	12 23 25 20 19	28 37 48 35 60	59. 9 62. 9 60. 0 62. 1 60. 0	. 2563 . 2039 . 2901 . 2608 . 2747			2	6	7	i	7 9 3 8 12	16 11 18 21 23	5 1 26 6 25			
Total	361	782	61.0	. 2583		1	13	23	35	27	162	297	203	21		
				TRI	имв	er o	PER.	ATO	RS.						4	
1912.																
Alabama	14 19	17 26		\$0.1442 .1799		1	9	4 6	2 4	1 4						

1912.														
Alabama	14	17	64.8	\$0.1442	 1	9	4	2	1				 	
Arkansas	19	26	60.7			1	6	4	4	11			 	
California	14	27	60.2							6	19	2	 	
Florida	12	16	64.1		5	1	2	5	1	2			 	
Georgia	20	21	64.0	. 1539	 3	6	6	1	. 1	3	1		 	
Louisiana	23	31	61.1	. 2138	 	. 7	2	2	1	- 20	6		 	
Maine	8	20	60.5	. 1891	 			12	1	5			 	
Michigan	30	61	60.0	. 2125	 			3	5	49	4		 	
Minnesota	7	26	60.0							4	22		 	
Mississippi	16	21	64.3	.1604	 1	5	9	1	2	3			 	

TRIMMER OPERATORS—Concluded.

			Aver-	Aver-	Nur	nber	of em	ploye		ning per ho		classi	fied	rate	of w	ages
Year and State.	berof	ploy-	age full- time hours per week.	age rate of	Under 10 ets.	and under 12 ets.	and un- der 14 cts.	and un- der 16 cts.	16 and un- der 18 cts.	18 and un- der 20 ets.	20 and un- der 25 cts.	25 and un- der 30 cts.	un-	40 and un- der 50 cts.	un- der 60	60 cts, and over
1912—Concld.																
North Carolina. Oregon. Pennsylvania. South Carolina. Fennessee.	23 6 19 9 29	28 12 26 13 29	62. 2 60. 0 61. 5 61. 7 60. 3	. 2154		4	5 3 3	····i	2	2 i	1 16 3 9		9			
rexas Virginia Washington West Virginia Wisconsin	12 23 23 20 19	18 25 36 21 37	60. 1 62. 5 60. 0 62. 2 60. 0	.3081		i	5	3	6 2 1 5	3 2 4	11 9 8 8 22		3	6		
Total	346	511	61.2	. 2088		15	38	57	58	29	190	85	33	6	,	
1913.									- C.				- 1		199	
Alabama Arkansas California Florida Georgia	14 19 14 12 20	26 16	64. 5 59. 9 60. 2 64. 1 64. 0	. 1875 . 2666 . 1533		1 5 4	1 4	5 7 3 5	1 5 1 4 2		1 10 5 2 3	15				
Louisiana Maine. Michigan Minnesota Mississippi	23 8 30 7 16	58 49	61. 0 60. 0 60. 0 60. 0 60. 0	.1878 .2199 .2607			2	3	1 12 2 7	1 1 2	16 10 48 12 5	6 29	8			
North Carolina. Oregon. Pennsylvania. South Carolina. Tennessee.	23 6 19 9 29	13 26 13	60.0	. 3192 . 2291 . 1830		3	1 2	11 -4 7	5 1 2 6	 i	15 4 14	100		i		
Texas. Virginia. Washington. West Virginia. Wisconsin	12 23 23 20 19	26 37 22	60. 0 62. 6 60. 0 62. 6 60. 0	. 1832 . 3226 . 2423		i	6	3	1 1 1 4	1 3 1 4	6 10	3 6 7	19			
Total	346	538	61.0	. 2172		14	28	54	56	26	202	100	51	-		

[The figures set opposite each bracketed group of years are for identical establishments.]

DOGGERS.

		Num-	Aver-	Aver-	Nu	mbe	rofe	mplo	yees e		ng eac hour		ssifie	d rat	te of	wage
State, and number of establishments.	Year.	ber of em- ploy- ees.		age rate of wages per hour.	Un- der 10 cts.	and un- der 12 ets.	and un- der 14 cts.	and un- der 16 cts.	16 and un- der 18 cts.	and un- der 20 cts.	20 and un- der 25 cts.	and un- der 30 cts.	30 and un- der 40 ets.	40 and un- der 50 cts.	and under 60 cts.	60 cts. and over
Alabama: 14 establishments.	(1912 1913	42 43	65. 2 65. 1	\$0. 1353 . 1411		7 7	22 22	11 9	2 1	2	2					
Arkansas: 19 establishments.	{1912 1913	74 72	60. 8 60. 0	. 1701				19 10	40 42	10	5 8					
California: 13 establishments.	\(\) \(\) \(\) \(\) \(\) \(\) \(\) \(\)	33 33	60. 2 60. 2	. 2263							28 26	5 6	_i			
Florida: 12 establishments. Georgia:	{1912 1913	49 49	63.3 63.3	. 1523 . 1545			8 10	32 31	7 4		2 4					
18 establishments. Louisiana:	{1912 1913	43 45	63.5 63.6	.1400	2	7 4	14 11	20 19	2 6							
23 establishments. Maine:	${1912 \atop 1913}$	93 95	60. 5 60. 3	.1860			3	2	31 27	12 13	43 50		::::			
14 establishments. Michigan:	{1912 1913	25 27	62. 8 62. 8	.2141					2	5 6	14 15	4		::::		
30 establishments. Minnesota:	{1912 1913	91 88	60.0	. 2052					14	10 6	65 81	1	::::			
4 establishments Mississippi:	(1912 \(1913\)	30 12 59	60. 0 60. 0 64. 0	. 2313			31	177		3	24 6	6				
16 establishments. North Carolina:	{1912 1913 (1912	60	60.0	. 1464 . 1537		4	27	17 35 12	18	. 3						
20 establishments. Oregon:	\(\frac{1912}{1913}\)	46	62. 4	. 1444			22	19	4		1 4	16				
6 establishments. Pennsylvania:	(1913	20	60.0	. 2550					2		3	16				
14 establishments. South Carolina: 8 establishments	(1913	19	61. 6	. 1969		4	20	9		9	10					
Tennessee: 28 establishments.	(1913) (1912)	34 43	61.8	.1351		1	19	11 17	13	3	6					
Texas: 12 establishments.	(1913)	45	60.8	. 1639			2	21	17 24	2	15					
Virginia: 23 establishments.	\(\)1913 \(\)1912 \(\)1913	59 62	63.3	. 1872 . 1426 . 1464		8 3	26 26	8 15	20 14 13	1 1 1	21					
Washington: 25 establishments.	{1913 {1912 1913	79 67	60.0	. 2297			20		3		49 22	24 40	2 4			
West Virginia: 18 establishments. Wisconsin:	{1912 1913	28 28	61.9	. 2039					4 2	6	15 18	3 2	i			
17 establishments.	{1912 1913	61 52	60. 0 60. 0	. 2115 . 2182					4 6	12 8	33 21	12 17				

TABLE III.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913—Continued.

EDGERMEN.

			Aver-		Nu	mbe	rofe	mploy	yees ea		g eacl		ssifie	d rat	e of	wage
State, and number of establishments.	Year.	Number of employees.	age	Average rate of wages per hour.	Under 10 cts.	10 and un- der 12 ets.	and un- der 14 cts.	and un- der 16 cts.	and under 18 cts.	18 and un- der 20 cts.	20 and un- der 25 cts.	25 and un- der 30 ets.	30 and un- der 40 ets.	40 and un- der 50 ets.	50 and un- der 60 ets.	cts
Alabama:	(1912	21	65 1	\$0. 1911			2	3		C	9	1				
14 establishments.	1913	22	65.1	. 1926			2	3	1	5	9	2				
Arkansas:	(1912	52	60.6	. 2570					1	1	8	39	3			
19 establishments.	1913	53	59.9	. 2558						1	10	39	3			
California:	(1912	32	60.2	. 3393								3	27	2		
14 establishments.	(1913	33	60.2	.3402								3	28	2		
Florida: 12 establishments.	£1912	19	63.5	. 2339						3	11	2	3			
Georgia:	11913	18	63.3	. 2379						3	9	3	3			
22 establishments.	£1912	26	64.1	. 2086			3	2	1	5	7	6	2			
Louisiana:	1913	25	64.0	.2100			1	4	3	5	5	3	4			
23 establishments.	{1912 1913	62 65	61.0							2	6	39 26	14 32	1		
Maine:			60.8							1	6	20	34			
19 establishments.	$\begin{cases} 1912 \\ 1913 \end{cases}$	33 35	62.0 61.7	. 2820							5 4	14 15	14 16			
Michigan:																
30 establishments.	$\begin{cases} 1912 \\ 1913 \end{cases}$	75 77	60.0								14	57 58	3 9	1		
Minnesota:	(1912	60	60.0						* .						- 1	
7 establishments	1913	60	60.0										60			
Mississippi:	(1912	36	64.0	. 2187				3		7	17	8	1			
16 establishments. North Carolina:	1913	37	60.0				1		3	4	14	14	1			
23 establishments.	(1912	35	62.2	. 1750		2	5	11	7	1	5	3	1			
Oregon:	(1913	35	62.2	. 1785		1	4	11	6		6	2	2			
6 establishments	£1912	12	59.9	.3714									5	7		
Pennsylvania:	(1913	10	60.0	.3850									3	7		
19 establishments.	£1912	25	61.9							1	8	14	1	1		
South Carolina:	1913	25	61. 4	. 2655							7	14	3	1		
9 establishments	£1912	20 19					1	2		1	9	6				
Tennessee:	(1913				100			3		3	5					
29 establishments.	{1912 1913	34 36	60.6				1 1	2	5 4		11 13	13 14				
Texas:	CTOTO											- 57				
12 establishments.	${1912 \atop 1913}$	33 30									6 3	22 20				
Virginia:	(1912	35	63.0				4	5	5	6	7					
23 establishments.	1913	39					3			11	7	7	2			111
Washington:	(1912	33	60.0	.3599								2	20	10	1	10
25 establishments.	(1913	32						,				2		15		
West Virginia: 20 establishments.	ſ1912	31	61.9								3	13	15			
Wisconsin:	1913	31	62.0	. 2868								16	15			
19 establishments.	£1912	77	60.0								10		21			
	(1913	72	60.0	. 2786							7	41	24			
				L	ABO	REI	RS.									
Alabama:		1														1
14 establishments.	£1912	1,574	65. 4	\$0.1200							7					
Arkansas:	(1913	1,038	1.550			365			with the		4					
19 establishments.	{1912 1913	2,141 2,205	60.6 60.0	. 1544		34	275	1,163	467	66	132	4				

LABORERS—Concluded.

					Nı	mbe	rofe	mplo	vees e	arniı	ng eac	h cla	ssifie	ed ra	te of	wage
		>T	Aver-	Aver-	110		010	mpro,	y 005 0		hour.		(1) LII	Julia	00 01	mago
State, and number of establishments.	Year.	Number of employees.	age full- time hours per week.	age rate of wages per hour.	Un- der 10 ets.	and un- der 12 cts.	and un- der 14 ets.	and un- der 16 cts.	16 and un- der 18 cts.	and un- der 20 cts.	20 and un- der 25 cts.	and un- der 30 ets.	30 and un- der 40 cts.	40 and un- der 50 cts.	50 and un- der 60 cts.	60 cts. and over
California: 14 establishments.	{1912 1913	1,311 1,389	60. 1 60. 1	\$0. 2015 . 2071				1	331 62	170 185	672 999		10 10			
Florida: 12 establishments.	{1912 1913	1,208 1,072	63. 5 63. 3	. 1332 . 1359	11 10	272 201	512 395	328 361	61 79	21 19	3 7					
Georgia: 22 establishments. Louisiana:	{1912 1913	1,529 1,379	64. 0 63. 9	. 1266 . 1308	72 26	527 323	609 694	230 263	73 57	7 5	10 11	1				
23 establishments.	$\begin{cases} 1912 \\ 1913 \end{cases}$	2,519 2,368	61. 0 60. 9	. 1618 . 1635	9	136 137	270 252	889 753	824 829	94 106	255 264	25 27	9	8		
19 establishments. Michigan:	${1912 \atop 1913}$	865 1,000	61. 9 61. 8	. 1847 . 1853		1 2	21 19	40 30	359 388	158 254	252 277	32 29				
30 establishments. Minnesota:		2,001 2,080	60. 0 60. 0	.1758 .1794			17	87 32	1,219 876	407 757	269 412	1 3				
7 establishments	{1912 1913	1,337 1,418	60. 0 60. 0	. 2204					33 6	126 16	890 965	284 354	63	14		
16 establishments.	${ 1912 \atop 1913 }$	1,730 1,587	64. 6 60. 2	. 1305 . 1395	33	483 113	900 706	212 599	42 131	38 24	20 14					
23 establishments.	${ 1912 \atop 1913 }$	1,732 1,868	61. 7 61. 7	.1227	34 45	789 498	610 939	247 312	42 63	3 1	7 10	::::				
6 establishments Pennsylvania:	${1912 \atop 1913}$	767 842	59.9 60.0	. 2256 . 2351					34	10	487 527	213 288	23 27			
19 establishments.	{1912 1913	834 751	61. 8 61. 5	.1888		4 2	10 8	16 10	249 98	239 203	298 406	18 24				
9 establishments Tennessee:	${1912 \atop 1913}$	1,037 957	61. 4 61. 3	.1155	76 49	510 537	389 328	46 27	12 11	3	2 2			-,		
29 establishments. Texas:	{1912 1913	992 1,002	60.7	.1463	2	49 37	298 283	509 512	87	11 23	28 29	6	1			
12 establishments. Virginia:	(1912 (1913	1,380 1,362	60.1	.1658		201	82 19	575 459	483 571	35 46	173 236	26 31				
23 establishments. Washington:	{1912 1913 (1912	1,289 1,434 2,594	63. 0 63. 2	. 1350 . 1375	65 31	321 355	382 448 23	304 352 155	148 170 343	18 20	51 58 1,496	332	86	5		
25 establishments. West Virginia:	(1913	2,211	60.0	. 2289	1		12	12	158 213		1,359	505	120	3		
20 establishments. Wisconsin:	(1913	882	62. 2	. 1962			5 12	10 37	210 732	195 358	424	29 25	9			
19 establishments.	(1913	1,990	60.0	. 1915				49	652	506	680	99	4		••••	
		MAC	CHIN	e fee	DEI	RS,	PLA	NIN	G M	ILL	10					
labama: 12 establishments.	${1912} \\ {1913}$	77 75	65. 9 65. 8	\$0.1312 .1326	1 3	7 11	60 45	8 11	1 3	2						
10 octoblishments	{1912 1913	205 197	60. 4 59. 7	. 1694 . 1693		3	10 7	52 57	86 84	22 23	30 24	1 2	1			
0	$\begin{cases} 1912 \\ 1913 \end{cases}$	36 45	60. 0 60. 0	. 2278					4	3	$\frac{21}{27}$	5 11	3			

MACHINE FEEDERS, PLANING MILL-Concluded.

			Aver-	Aver-	Nu	mbe	rofe	mplo	yees e	arnin per	ng eacl hour.	h clas	ssifie	d rat	te of	vages
State, and number of establishments.	Year.	Number of employ-ees.	age full- time hours per week.	age rate of wages per hour.	Un- der 10 cts.	10 and un- der 12 ets.	and un- der 14 cts.	and un- der 16 cts.	16 and un- der 18 ets.	18 and un- der 20 cts.	20 and un- der 25 cts.	and un- der 30 cts.	30 and un- der 40 cts.	40 and un- der 50 cts.	50 and un- der 60 ets.	60 cts. and over
Florida: 11 establishments.	{1912 1913	45 45	63. 5 63. 6	\$0.1640 .1549		1 1	12 10	17 25	4 4	4	4 3	2	1			
Georgia: 16 establishments.	(1912 (1913	60 68	64. 1 63. 9	. 1407	-	10	30 34	9 15	5 5	3 1	3 6					
Louisiana: 22 establishments.	{1912 1913	169 193	60.9 60.8	. 1766		1	2 3	14 25	97 94	22 22	33 45	2	2			
Maine: 15 establishments.	{1912 1913	34 34	63. 0 63. 0						5 1	12 10	9 17	7 6	1			
Michigan: 10 establishments.	{1912 1913	117 83	60.0 60.0					1 1	38 18	33 26	40	4 4	1			
Minnesota: 5 establishments	{1912 (1913	59 47	60.0						1	2	38 29	18 18				
Mississippi: 16 establishments. North Carolina:	{1912 1913	92 104	64. 4 60. 0			11 2	37 14	35 52	5 29	1 2	3 4	····i				
19 establishments. Oregon:	{1912 1913	120 120	61. 2 61. 5			14 13	44 29	35 43	22 28		2 4					
6 establishments Pennsylvania:	{1912 1913	53 66	59.9 60.0	. 2725					1		2 4	39 35	11 26	1		
9 establishments South Carolina:	{1912 1913	16 16	63. 4 62. 3							4	7 11	5 4	1			
7 establishments Tennessee:	{1912 1913	35 40		. 1364		8	24 17	6 12								
6 establishments Texas:	{1912 1913	17 15		. 1862			7	6		3 1	4	2				
12 establishments. Virginia:	(1919	99	60.0	. 1836			3 1	7	49		29	3			1000	
13 establishments. Washington:	(1919	52 47	63.6	. 1553			13 18	7		1	. 7	1	1			
23 establishments. West Virginia:	(1019	160 133 36	60.0	. 2574				3	16 2	5	25	74	27			
13 establishments. Wisconsin:	(1012	34	62.5	. 2072	2				11	9	18	4		1		
11 establishments.	1913	76						1								
				SAW	YEI	RS,	BAN	D.								
Alabama: 6 establishments.	{1912 1913	7	65.1	\$0.5416	6										1 (
Arkansas: 17 establishments. California:	{1912 1913	38													1	2 . 3
11 establishments. Florida:	{1912 1913													10	8 15	
6 establishments.	${1912 \atop 1913}$									J					-	3

SAWYERS, BAND-Concluded.

			Aver-	Aver-	Nu	mbe	rofe	mplo	yees e	arnii per	ng eac hour	h cla	ssifie	d rat	e of v	vages
State, and number of establishments.	Year.	Number of employ-ees.	age full- time hours per week.	age rate of wages per hour.	Un- der 10 cts.	10 and un- der 12 ets.	and un- der 14 cts.	and un- der 16 cts.	16 and un- der 18 cts.	and un- der 20 ets.	20 and un- der 25 ets.	25 and un- der 30 ets.	30 and un- der 40 ets.	40 and un- der 50 cts.	50 and un- der 60 cts.	60 cts. and over.
Georgia:	ſ1912	16	62.9	\$0.5715										1	8	7
11 establishments. Louisiana:	(1913	17	63. 1	.5761			••••								9	8
17 establishments. Maine:	${1912 \atop 1913}$	35 36	60.8												1	31 35
13 establishments.	{1912 1913	27 28	61.5 61.2	.5126										7 6	16 17	4 5
Michigan: 28 establishments.	{1912 1913	62 59	60.0 60.0	.5048									2 2	14 12	36 34	10 11
Minnesota: 7 establishments Mississippi:	{1912 1913	45 45	60.0 60.0	.7267 .7311												45 45
9 establishments North Carolina:	{1912 1913	18 18	64. 0 60. 0												11 6	7 12
17 establishments. Oregon:	${1912 \atop 1913}$	27 27	62.9 62.9	. 4851 . 4876							1	···i	2 2	6	16 16	2 2
5 establishments Pennsylvania:	${1912 \atop 1913}$	8	59.9 60.0	.6132 .6406											3 1	5 7
16 establishments. South Carolina:	{1912 1913	23 23	62. 1 61. 6	. 3840 . 3937								1 1	10 10	11 11	1 1	
8 establishments Tennessee:	{1912 1913	17	61. 9 61. 9											2 2	7 7	8
29 establishments. Texas:	{1912 1913	35 35	60. 4 60. 6	. 4247 . 4274							1		11 9	12 12	6 7	4
10 establishments. Virginia:	{1912 1913	21 20	60. 1 59. 9												5 4	16 16
22 establishments. Washington:	{1912 1913	35 35	63. 0 63. 0									1 1	3	1	0. 3	
17 establishments. West Virginia:	{1912 1913	33 30	60.0	. 5817									2	5		
20 establishments. Wisconsin:	{1912 1913	31 31	62. 1 62. 2	1								1	3 3	18	8	1
19 establishments.	{1912 1913	50 47	60.0											3	31 29	15 15
			S	AWYE	RS,	CII	RCU	LAR								
Alabama:	(1019	14	GE 1	\$0. 5010				-						3		2
10 establishments. Arkansas:	{1912 1913	14 14	65. 1	. 4876								1	i		6	2
2 establishments California:	{1912 1913 (1912	2 2	60. 0 59. 3 62. 0	. 5513											2 2 2	
3 establishments Florida:	(1913	3 3	62. 0	. 5208										1 1	2	
6 establishments Georgia:	{1912 1913	9	64. 0 64. 0	. 5326									1	1	2	3
11 establishments.	$\begin{cases} 1912 \\ 1913 \end{cases}$	13 14	66. 0 66. 3								1	1 1	2		6	

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SAWYERS, CIRCULAR—Concluded.

		Mum	Aver-	Aver-	Nu	mbe	rofe	mplog	yees ea	arnin per l		h cla	ssifie	d rat	eofv	wage
State, and number of establishments.	Year.	Number of employ-ees.	age full- time hours per week.	age rate of wages per hour.	Un- der 10 cts.	and un- der 12 cts.	un- der 14	and un- der 16 cts.	16 and un- der 18 ets.	and un- der 20 cts.	un- der 25	and un- der 30 ets.	un- der 40	un- der 50	un- der 60	60 cts. and over
Louisiana:																
9 establishments Maine:	${1912 \atop 1913}$	10		\$0. 5942 . 5983									1	,	3 4	
6 establishments	${1912 \atop 1913}$	6 6	64.3 64.3										2 2	4 4		
6 establishments Mississippi:	${1912 \atop 1913}$	17 16	60. 0 60. 0											3		
7 establishments	${1912 \atop 1913}$	10 10	64. 8 60. 0										1	3		
7 establishments	${1912 \atop 1913}$	8 8	60. 0 60. 0						1		2 2	2 1	1 3			
Oregon: 2 establishments	{1912 1913	2 3	59. 8 60. 0												1	
Pennsylvania: 4 establishments Texas:	{1912 1913	5 5	60. 6 60. 6									1	3	1		
4 establishments	${1912 \atop 1913}$	5 5	60. 0 60. 0												3	
Washington: 11 establishments.	{1912 1913	12 13												1 1		
Wisconsin: 2 establishments	{1912 1913	2 2	60. 0 60. 0												2 2	

Alabama:						-								
6 establishments	(1912	8		\$0.2185.	 	2		1	2	3				
Arkansas:	(1913	8	66. 1	. 2298 .	 	2			2	4				
8 establishments	{1912 1913	8	60. 0 59. 6		 					1	5	2		
California:	(1919		59. 0		 ••••					1	9	4		
2 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	2 2	60. 0 60. 0		 					1	1			
Florida:	`				 					- 1	. 1			
5 establishments	{1912 1913	5	64. 8 65. 0		 				1	3 2	1 3			
Georgia:	(2 10 1	1	 									
4 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	4 4	64. 5 64. 5	. 2523 - 2491 -	 	1	1		1	-1	1		::::	
Louisiana:		0									-	4		
9 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	9	60.6	.3669 .	 						5 5	4		
Michigan:	(1912	3	60.0	. 2583					9		1			
3 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	3	60.0		 				1	1	1			
Minnesota:	(1912	5	60.0	.3670							3	2		
3 establishments	1913	5	60.0		 	-,					3	2		
Mississippi:	(1912	6	63.0	. 2558				1	1	3	1			
6 establishments	1913	. 6	60.0		 			î		3 3	1 2			
Oregon:	(1912	4	60.0	.3500	 						3	1		
4 establishments	(1913	4	60.0		 						3	1		
Pennsylvania: 2 establishments	(1912	2 2	62.5	.2844 .	 					1	1			
z establishments	(1913	2	59.5	. 2976	 					1	1			

SAWYERS, GANG—Concluded.

			SAW	YERS,	, GA	ING	—Co	nelud	led.							
		Num-	Aver-	Aver-	Nu	ımbe	or of e	mplo	yees e	arnii per	ng eachour.	h cla	ssifie	d rat	te of	wages
State, and number of establishments.	Year.	ber of	full- time hours per week.	age rate of wages per hour.	Un- der 10 ets.	and un- der 12 ets.	der 14	and un- der 16 ets.	and under 18 ets.	and un- der 20 ets.	20 and un- der 25 ets.	25 and un- der 30 ets.	30 and un- der 40 cts.	40 and un- der 50 cts.	50 and un- der 60 ets.	
Texas: 3 establishments	{1912 1913	3 3	60.3	\$0.4417 .4417										2 2		- A-
Virginia: 2 establishments Washington:	{1912 1913	2 2	66.0 66.0	.3296								1		1		
2 establishments Wisconsin:	{1912 1913	2 2	60.0 60.0	. 3250									2 2			
8 establishments	{1912 1913	11 11	60.0								2	6 4	3	2	i	
				SAW	YEI	RS,	RES	SAW								
Arkansas:			×													
3 establishments California:	{1912 1913	4 4	60.0								3 2	1 2				
7 establishments Florida:	{1912 1913 (1912	13 14 2	60.0 60.0	.2482							8 8 2	3	3			
2 establishments Georgia:	(1912	2 2	60.0	. 2250							1 2	1				
2 establishments Louisiana:	(1913	2	62.8	. 2156					1	1	2	2				
4 establishments Maine:	{1913 (1912	6	63.0	.2074					î	1	1 2	1 3				
5 establishments Michigan:	(1913)	30	60.6	. 2407						1	2 14	3 11	1 4			
20 establishments. Minnesota: 5 establishments	(1913) (1912)	25 13	60.0	. 2750						1	10	9	5 6			
Mississippi: 2 establishments	\1913 \frac{1912}{}	13	60.0	.1932				1			1	7	6			
North Carolina: 11 establishments.	1913	11	60.0	.1777			2	2 2	2 2	2 3	1	2 2				
Oregon: 6 establishments	\1913 \frac{1912}{1913}	11 10 11	62.6 60.0 60.0	. 3253							1	2 4	5 5	2 2		
Pennsylvania: 5 establishments	\(\) 1912 \(\) 1913	9 8	63.0 62.8	. 2348							5 5	4 3				
South Carolina: 6 establishments	{1912 1913	7 7	61.1 61.1	. 2040				2	2		2		2 2			
Tennessee: 5 establishments	{1912 {1913	6 6	60.0 60.0						1		3	2 3				
Virginia: 11 establishments.	{1912 1913	12 14	62.6 62.6				1	3 3	3 4		4	1 2				
Washington: 23 establishments.	{1912 1913	32 31	60.0 60.0								1	8 2	20 26	3		
West Virginia: 7establishments Wisconsin:	{1912 1913	7 7	61.7 61.6								i	5 5	2 1			
13 establishments.	{1912 1913	26 23	60.0							2	9 5	7 12	8 6			

TABLE III.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913—Continued.

SETTERS.

			Aver-	Aver-	Nu	mbe	rofe	mploy	700S 08		g eacl	helas	ssifie	d rat	eof	wage
State, and number of establishments.	Year.	Number of employees.	age full- time hours per week.	age rate of wages per hour.	Un- der 10 cts.	and un- der 12 cts.	and un- der 14 cts.	and un- der 16 ets.	16 and un- der 18 ets.	and un- der 20 cts.	20 and un- der 25 ets.	and un- der 30 cts.	30 and un- der 40 cts.	40 and un- der 50 ets.	50 and un- der 60 ets.	60 cts.
Alabama:																
14 establishments.	{1912 1913	21 21	65.1	\$0.1855 .1947				5 4	3 3	-6	7 9					
Arkansas:								-								1
19 establishments.	\(\) 1912 \(\) 1913	35 35	60.9 60.0	.2496							9 10	26 24	1			
California:				1 2 1										1		
14 establishments.	\(1912 \) \(1913 \)	29 29	60.2 60.2								10 8	15	- 3	1 2		
Florida:	(1912	21	63.4							-	11					
12 establishments.	1912	21	63.4							5 5	12	3	1 1			
Georgia:	(1912	31	64.5	.1960		1	8		1	4	10	7				
22 establishments.	1913	31	64.5			1	8		2	2	9					
Louisiana:	ſ1912	55	61.1	.2606			7			1	14	26	14			
23 establishments.	1913	54	61.0							1	13	31	9			
Maine:	(1912	42	61.6	.2728		1					2	29	11			
19 establishments.	1913	44									2	20				
Michigan:	(1912	81	60.0	. 2687							6	56	19			
30 establishments.	{1912 1913	77	60.0								2		23			
Minnesota: 7 establishments	ſ1912	78	60.0	. 3283									78			
Mississippi:	11913	88	60.0	. 3459									70	18		
16 establishments.	J1912	33							4	6	19					
North Carolina:	(1913	32	60.0	.2219					2	2	17	11				
23 establishments.	{1912 1913	42					4				10	1				
Oregon:	(1913	41	62.0	. 1854			3	4	11	7	14	2				
6 establishments	{1912 1913	10										7 2	10			
Pennsylvania:			1		1											
19 establishments.	{1912 1913	32									15	16		1		
South Carolina:								1								
9 establishments	\frac{1912}{1913}	19						5								
Tennessee:	1	17.				1	1								1	
29 establishments.	{1912 1913	36					1	7 2			15				1	
Texas:		32						135		1				1 -		
12 establishments.	{1912 1913	28									10					
Virginia:	(1912	37	62.9	1973	2		3	9		4		11	1			
23 establishments.	1913	37					2			1	6					
Washington:	ſ1912	51	60.0	. 2809								3 25	5 23	3		
25 establishments.	(1913	48	60.0	2901							1					
West Virginia:	(1912	35	62.0	. 2572	2						9	20) (3		
20 establishments.	(1913	35									. 8					
Wisconsin: 19 establishments.	ſ1912	60	60.0								13			1		
19 establishments.	(1913	60	60.0	. 274	7						12	2 23	3 2	5		
			- 7	FRIMN	TER	OI	ER.	ATO	RS.					,	-	
Alabamas	1	1	1	1	1	1	1	1	1	T	1	T	Ī	T	1	1
Alabama:	(1912	17	64.8	\$0.1442		1	9	4	2	1						
14 establishments.	1913	17	64.5			1		5	1	1	1					
Arkansas: 19 establishments.	(1912	26		.1799			1	6	4	4	11					
19 establishments.	11913	27						7	5	5	10					

TRIMMER OPERATORS—Concluded.

		Numer	Average	Aver-	Nu	mber	of e	mploy		rnin per h		h cla	ssifie	d rat	eof	wage
State, and number of establishments.	Year.	Number of em- ploy- ees.	full- time hours per week.	age rate of wages per hour.	Un- der 10 cts.	and under 12 cts.	and un- der 14 cts.	and un- der 16 cts.	16 and un- der 18 ets.	and un- der 20 cts.	20 and un- der 25 ets.	and un- der 30 cts.	30 and un- der 40 cts.	and under 50 cts.	50 and un- der 60 cts.	60 ets. and over
California: 14 establishments.	{1912 1913	27 26	60. 2 60. 2	\$0. 2659 . 2666					_i		6 5	19 15				
Florida: 12 establishments.	{1912 1913	16 16	64.1 64.1	. 1544		5 5	1 1	2 3	5 4	1	2 2					
Georgia: 20 establishments.	{1912 1913	21 21	64. 0 64. 0			3 4	6	6 5	1 2	1 2	3	1 1				
Louisiana: 23 establishments.	{1912 1913	31 30	61. 1 61. 0	. 2138				2 3	2	1 1	20 16	6 8	i			
Maine: 8 establishments	{1912 1913	20 23	60.5 60.0	.1891					12 12	1	5 10	2				
Michigan: 30 establishments.	${1912 \atop 1913}$	61 58	60.0 60.0	. 2125					3 2	5 2	49 48	4 6				
Minnesota: 7 establishments	${1912 \atop 1913}$	26 49	60. 0 60. 0	. 2644 . 2607							4 12	22 29	8			
Mississippi: 16 establishments.	{1912 {1913	21 21	64.3 60.0	.1604 .1714			5 2	9	17	2	3 5	i				
North Carolina: 23 establishments.	${1912 \atop 1913}$	28 28	62. 2 62. 2	. 1491 . 1545		4 3	5 4	13 11	2 5	2 3	1	1 1				
Oregon: 6 establishments Pennsylvania:	${1912} {1913}$	12 13	60. 0 60. 0	.3127 .3192								3 2	9 10	i		
19 establishments.	${1912 \atop 1913}$	26 26	61.5 61.3	. 2154 . 2291				1	2	1	16 15	6 10				
9 establishments	${ 1912 \atop 1913}$	13 13	61. 7 61. 7	. 1749 . 1830			3	3 4	3 2	_i	3 4	1				
29 establishments. Pexas:	{1912 1913	29 31	60.3 60.6	.1792 .1831			3 2	7 7	7 6	1	9 14	2 2				
12 establishments.	$ \begin{cases} 1912 \\ 1913 \end{cases} $	18 17	60.1 60.0	. 1931 . 2160				1	. 6	i	11 13	2	::::			
23 establishments. Washington:	${1912 \atop 1913}$	25 26	62. 5 62. 6	.1811 .1832		1	5 6	3	2 1	3 3	9	2 3				
23 establishments. West Virginia:	{1912 {1913	36 37	60. 0 60. 0	.3081 .3226							8 6	5 6	17 19	6		
20 establishments. Wisconsin:	$ \begin{cases} 1912 \\ 1913 \end{cases} $	21 22	62. 2 62. 6	. 2392 . 2423					1	2	8 10	7 7	3			
19 establishments.	${1912 \atop 1913}$	37 37	60.0	. 2157 . 2285					5 4	4	22 18	4 6	2 5			

TABLE IV.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]

				NUM	BER.						
			Aver-	E	mployee	es whos	e full-ti	me hour	rs per w	eek wer	·e—
Occupation, and number of establishments.	Year.	Number of em- ploy- ees.	age full- time hours per week.	Under 54	54 and under 57	57 and under 60	60	Over 60 and under 63	63 and under 66	66	Over 66
Carriage men: 41 establishments	$ \begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases} $	208 201 195 215	60. 7 60. 8 60. 8 60. 7		2 2 2 2 2	6 6 7 6	169 162 155 176	4 4 4 4	9 9 9 9	11 11 11 11	7 7 7
245 establishments	$\left\{ \begin{array}{c} 1910 \\ 1911 \end{array} \right.$	1,327 1,298	61. 4 61. 3		6 6	22 22	967 959	12 12	50 51	261 239	9
Doggers: 273 establishments	$\left\{ \begin{array}{c} 1911 \\ 1912 \end{array} \right.$	852 869	61. 5 61. 4		1 2	14 15	610 628	4 6	37 39	178 171	8 8
334 establishments	$\left\{\begin{array}{c} 1912 \\ 1913 \end{array}\right.$	973 939	61. 4 61. 2			18 36	702 691	11 11	37 39	193 150	12 12
Edgermen: 41 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	79 78 77 84	60. 7 60. 7 60. 7 60. 7		1 1 1 1	1 2 2 2	65 63 62 69	2 2 2 2 2	3 3 3 3	5 5 5 5	2 2 2 2
245 establishments	$\begin{cases} 1910 \\ 1911 \end{cases}$	585 569	61. 2 61. 2		3 3	8 8	442 433	5 5	25 26	99 91	3 3
299 establishments	$\left\{ \begin{array}{c} 1911 \\ 1912 \end{array} \right.$	684 686	61.3 61.2		$\frac{1}{2}$	8 9	521 524	3 3	33 38	114 106	4 4
361 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	751 754	61. 2 61. 0		<u>1</u>	13 29	569 581	8 8	35 36	120 93	6 6
Laborers: 41 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	4,097 3,662 3,910 4,582	60. 5 60. 6 60. 5 60. 5		12 12 12 12 15	121 185 171 228	3,544 3,027 3,278 3,890	50 51 52 53	171 188 193 187	147 148 152 158	52 51 52 51
245 establishments	$\left\{ \begin{array}{c} 1910 \\ 1911 \end{array} \right.$	20, 327 19, 256	61.3 61.3		47 46	556 450	15,008 14,176	207 226	801 801	3,596 3,443	112 114
299 establishments	$\begin{cases} 1911 \\ 1912 \end{cases}$	26, 784 25, 506	61. 4 61. 5		11 25	388 355	19, 567 18, 336	145 145	1,601 1,531	4,872 4,851	200 263
361 establishments Machine feeders, plan-	{ 1912 1913	29, 365 28, 835	61. 5 61. 1		16	483 914	21, 015 21, 901	336 381	1, 104 1, 261	6,050 4,050	377 312
ing mill: 178 establishments	$\begin{cases} 1911 \\ 1912 \end{cases}$	1, 156 1, 165	61.3 61.1			20 8	871 918	7 8	57 61	201 170	
253 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	1,548 1,531	61. 4 61. 1		6	11 41	1, 143 1, 158	19 21	52 57	302 233	21 15
Sawyers, band: 34 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	71 69 69 73	60. 8 60. 8 60. 8 60. 7		1 1 1 1	1 1 1 1	60 59 59 63	2 1 1 1	2 2 2 2 2	5 5 5 5	
203 establishments	$\left\{\begin{array}{c} 1910 \\ 1911 \end{array}\right.$	429 432	61. 2 61. 2		3 3	7 7	320 325	3 3	25 26	71 68	
243 establishments	$\left\{ \begin{array}{c} 1911 \\ 1912 \end{array} \right.$	508 492	61. 2 61. 2		1 2	7 8	388 379	2 3	30 27	80 73	
288 establishments	$\left\{ \begin{array}{c} 1912 \\ 1913 \end{array} \right.$	561 554	61. 1 60. 9		i	11 19	433 433	5 5	25 25	87 71	
Sawyers, circular: 12 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	14 14 13 14	61.3 61.3 61.3 61.3			1 1 1 1	10 10 9 10		1 1 1 1		2 2 2 2 2

TABLE IV.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913— Continued.

NUMBER-Concluded.

		4	Aver-	Eı	nployee	s whose	full-tir	ne hour	s per we	eek wer	9—
Occupation, and number of establishments.	Year.	Num- ber of em- ploy- ees.	age full- time hours per week.	Un- der 54	54 and under 57	57 and under 60	60	Over 60 and under 63	63 and under 66	66	Over 66
Sawyers, circular— Concluded. 58 establishments	f 1910	81	61.9			1	54		2	21	3 3
	(1911	78 95	62. 0 62. 6			1	51 54		2 4	21	3
72 establishments	(1912 (1912	94	62. 5 62. 4			1 3	55 69	1	8	28	6 8
92 establishments Sawyers, gang:	1913	123	62.0			4	79	1	8	22	9
5 establishments	$ \begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases} $	6 6 6 6	60. 0 60. 0 60. 0				6 6 6 6				
52 establishments	$\left\{\begin{array}{c} 1910 \\ 1911 \end{array}\right.$	64 60	61. 4 61. 6				48 43	1 1	2 2	13 14	
66 establishments	$\left\{ \begin{array}{c} 1911 \\ 1912 \end{array} \right.$	74 75	61. 6 61. 6				53 53		2 3	19 19	
71 establishments	{ 1912 1913	79 80	61.7 61.4			1 4	55 55	1 1	1 1	20 18	1 1
Sawyers, resaw: 93 establishments	$\begin{cases} 1911 \\ 1912 \end{cases}$	149 147	60.7 60.7			2 2	128 126		7 7	12 12	
138 establishments.	$\left\{ \begin{array}{c} 1912 \\ 1913 \end{array} \right.$	197 192	60.7			2 4	168 164	1 1	7 6	19 17	
Setters: 301 establishments	$\left\{ \begin{array}{c} 1911 \\ 1912 \end{array} \right.$	714 713	61.3 61.3		1 2	8 9	537 537	3 3	38 39	121 116	6 7
361 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	780 782	61.3 61.0		·····i	14 24	588 607	6 6	37 37	126 96	9 11
Trimmer operators: 37 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	72 68 72 74	60.7 60.7 60.7 60.7		1 1 1 1	1 1 1 1	60 56 60 61	1 1 1 2	2 2 2 2 2	5 5 5 5	2 2 2 2
228 establishments	$\begin{cases} 1910 \\ 1911 \end{cases}$	503 485	61.0 61.0		4 4	5 5	397 383	5 5	12 12	77 73	3 3
294 establishments	{ 1911 1912	479 441	61.3 61.3		1 2	5 6	362 331	3 2	21 21	83 75	4 4
346 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	511 538	61. 2 61. 0		<u>i</u>	11 18	387 420	5 5	17 16	86 73	5 5
				PER C	ENT.						
Carriage men:	(1007	900	60 =		1.0	9.0	01.0	1.0	4.0		
41 establishments	$ \begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases} $	208 201 195 215	60.7 60.8 60.8 60.7		1.0 1.0 1.0 .9	2.9 3.0 3.6 2.8	81. 2 80. 6 79. 5 81. 9	1.9 2.0 2.1 1.9	4.3 4.5 4.6 4.2	5.3 5.5 5.6 5.1	3.4 3.5 3.6 3.3
245 establishments Doggers:	$\begin{cases} 1910 \\ 1911 \end{cases}$	1,327 1,298	61.4 61.3		.5	1.7 1.7	72.9 73.9	.9	3.8 3.9	19.7 18.4	.7 .7
273 establishments	$\begin{cases} 1911 \\ 1912 \end{cases}$	852 869	61.5 61.4		.1	1.6 1.7	71.6 72.3	.5	4.3 4.5	20.9 19.7	.9
334 establishments	$\left\{ \begin{array}{c} 1912 \\ 1913 \end{array} \right $	973 939	61.4 61.2			1.8 3.8	72.1 73.6	1.1 1.2	3.8 4.2	19.8 16.0	1.2 1.3

TABLE IV.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913— Continued.

PER CENT—Continued.

		4.5	Aver-	Er	nployee	s whose	full-tin	ne hours	per we	ek were	_
Occupation, and number of establishments.	Year.	Number of em- ploy- ees.	age full- time hours per week.	Un- der 54	54 and under 57	57 and under 60	60	Over 60 and under 63	63 and under 66	66	Over 66
Edgermen:									7.73		
41 establishments	$ \begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases} $	79 78 77 84	60.7 60.7 60.7 60.7		1.3 1.3 1.3 1.2	1.3 2.6 2.6 2.4	82.3 80.8 80.5 82.1	2.5 2.6 2.6 2.4	3.8 3.8 3.9 3.6	6.3 6.4 6.5 6.0	2.8 2.6 2.6 2.4
245 establishments	{ 1910 1911	585 569	61.2 61.2		.5	1.4 1.4	75.6 76.1	.9	4.3	16.9 16.0	.!
299 establishments	$\begin{cases} 1911 \\ 1912 \end{cases}$	684 686	61.3 61.2		.1	1.2 1.3	$76.2 \\ 76.4$.4	4.8 5.5	16.7 15.5	. (
361 establishments.	$\begin{cases} 1912 \\ 1913 \end{cases}$	751 754	61.2 61.0		i	1.7 3.8	75.8 77.1	1.1 1.1	4.7 4.8	16.0 12.3	
Laborers: 41 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	4,097 3,662 3,910 4,582	60.5 60.6 60.5 60.5			3.0 5.1 4.4 5.0	86.5 82.7 83.8 84.9	1.2 1.4 1.3 1.2	4.2 5.1 4.9 4.1	3.6 4.0 3.9 3.4	1.3 1.4 1.3 1.3
245 establishments	{ 1910 1911	20,327 19,256	61.3 61.3		.2	2.7 2.3	73.8 73.6	1.0 1.2	3.9 4.2	17.7 17.9	:
299 establishments	{ 1911 1912	26, 784 25, 506	61.4 61.5		(1)	1.4	73.1 71.9	.5	6.0	18.2 19.0	1.
361 establishments Machine feeders, plan-	{ 1912 1913	29,365 28,835	61.5 61.1		.1	1.6 3.2	71.6 76.0	1.1 1.3	3.8 4.4	20.6 14.0	1. 1.
ing mill: 178 establishments	{ 1911 1912	1,156 1,165	61.3 61.1			1.7	75.3 78.8	.6	4.9 5.2	17.4 14.6	
253 establishments	{ 1912 1913	1,548 1,531	61.4		.4	2.7	73.8 75.6	1.2 1.4	3.4 3.7	19.5 15.2	1. 1.
Sawyers, band: 34 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	71 69 69 73	60.8 60.8 60.8 60.7		1.4 1.4 1.4 1.4	1.4 1.4 1.4 1.4	84.5 85.5 85.5 86.3	2.8 1.4 1.4 1.4	2.8 2.9 2.9 2.7	7.0 7.2 7.2 6.8	
203 establishments	{ 1910 1911	429 432	61.2 61.2		.7	1.6 1.6	74.6 75.2	.7	5.8 6.0	16.5 15.7	
243 establishments	{ 1911 1912	508 492	61.2 61.2		.2	1.4 1.6	76.4 77.0	.4	5.9 5.5	15.7 14.8	
288 establishments	{ 1912 1913	561 554	61.1		.2	2.0 3.4	77.2 78.2	.9	4.5 4.5	15.5 12.8	
Sawyers, circular: 12 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	14 14 13 14	61.3 61.3 61.3			7.1 7.1 7.7 7.1	71.4 71.4 69.2 71.4		7.1 7.1 7.7 7.1		14. 14. 15. 14.
58 establishments	{ 1910 1911	81 78	61.9 62.0			1.2 1.3	66. 7 65. 4		2.5 2.6	25. 9 26. 9	3. 3.
72 establishments	{ 1911 1912	95 94	62. 6 62. 5			1.1 1.1	56. 8 58. 5		4.2 4.3	34.7 29.8	3. 6.
92 establishments	{ 1912 1913	119 123	62. 4 62. 0			2.5 3.3	58. 0 64. 2	.8	6. 7 6. 5	25. 2 17. 9	6.7.
Sawyers, gang:	[1907	6	60.0				100.0				
5 establishments	1908 1909 1910	6 6					100.0 100.0 100.0				

¹ Less than one-tenth of 1 per cent.

TABLE IV.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913—Concluded.

PER CENT-Concluded.

			Aver-	Eı	nployee	s whose	full-tir	ne hour	s per we	ek wer	e—
Occupation, and number of establishments.	Year. of po	Num- ber of em- ploy- ees.	age full- time hours per week.	Un- der 54	54 and under 57	57 and under 60	60	Over 60 and under 63	63 and under 66	66	Over 66
Sawyers, gang—Con. 52 establishments	{ 1910 1911	64 60	61.4				75. 0 71. 7	1.6 1.7	3.1	20.3 23.3	
66 establishments	$\begin{cases} 1911 \\ 1912 \end{cases}$	74 75	61. 6 61. 6				71.6 70.7		2.7 4.0	25.7 25.3	
71 establishments	$\left\{ \begin{array}{c} 1912 \\ 1913 \end{array} \right.$	79 80	61.7 61.4			1.3 5.0	69.6 68.8	1.3 1.3	1.3 1.3	25.3 22.5	1.3
Sawyers, resaw: 98 establishments	{ 1911 1912	149 147	60.7 60.7			1.3	85. 9 85. 7		4.7	8.1 8.2	
138 establishments Setters:	$\begin{cases} 1912 \\ 1913 \end{cases}$	197 192	60.7 60.7			1.0 2.1	85.3 85.4	.5	3.6 3.1	9.6 8.9	
301 establishments	$\left\{ \begin{array}{c} 1911 \\ 1912 \end{array} \right.$	714 713	61.3 61.3		0.1	1.1 1.3	$75.2 \\ 75.3$.4	5. 2 5. 5	16.9 16.3	1.0
361 establishments Trimmer operators:	$\left\{ \begin{array}{c} 1912 \\ 1913 \end{array} \right.$	780 782	61.3 61.0		1	1.8 3.1	75. 4 77. 6	.8	4.7	16. 2 12. 3	1.5
37 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	72 68 72 74	60.7 60.7 60.7 60.7		1.4 1.5 1.4 1.4	1.4 1.5 1.4 1.4	83.3 82.4 83.3 82.4	1.4 1.5 1.4 2.7	2.8 2.9 2.8 2.7	6.9 7.4 6.9 6.8	2. 8 2. 8 2. 8 2. 8
228 establishments	$\begin{cases} 1910 \\ 1911 \end{cases}$	503 485	61.0 61.0		.8	1.0 1.0	78.9 79.0	1.0 1.0	2. 4 2. 5	15.3 15.1	. (
294 establishments	$\left\{ \begin{array}{c} 1911 \\ 1912 \end{array} \right.$	479 441	61.3 61.3		.2	1.0	75.6 75.1	.6	4.4 4.8	17.3 17.0	.8
346 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	511 ° 538	61. 2 61. 0		.2	2.2	75.7 78.1	1.0	3.3 3.0	16.8 13.6	1.6

Table V.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913.

DOGGERS.

	Num-	Num-	Aver-	Nur	nber o	f emple	oyees v	whose i	full-tin -	ne hou	rs per v	week
Year and State.	ber of estab- lish- ments.	ber of em- ploy- ees.	age full- time hours per week.	Un- der 48	48	Over 48 and under '51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
1912.				413								
Alabama	14	42	65.2								7	35
Arkansas	19	74	60.8								64	1
California Florida	13 12	33	60. 2 63. 3								32 22	2
deorgia	18	43	63.5				2.9				20	2
Louisiana	23	93	60.5						TE BUILDING		85	
Maine	14	25	62.8								10	1
Michigan	30	91	60.0								91	
Minnesota	4	30	60.0								30	
Mississippi	16	59	64.0								20	3
North Carolina	20	47	62.2							4	24	1
Oregon	6 14	20	59.9 62.3							4 2	16 9	
South Carolina	8	19 34	61.8							2	20	1
Γennessee	28	43	60.5							3	36	
Downs	12	44	60.1								40	
rexasVirginia	23	59	63.3							5	17	3
Washington	25	79	60.0								79	
West Virginia	18	28	61.9								19	
Wisconsin	17	61	60.0								61	
Total	334	973	61.4							18	702	25
1913.			1.32									
Alabama	. 14	43	65.1								- 8	3
Arkansas	19	72	60.0							7	63	
California Florida	13 12	33 49	60.2								32 22	2
Georgia	18	45	63.6				1				20	2
Louisiana	00	95	00.0			1000	1397			9	78	
Maine	23 14	27	60.3							1	10	1
Michigan	30	88	60.0								88	
Minnesota	4	12	60.0								12	
Mississippi	16	60	60.0								60	
North Carolina	20	46	62.4							4	22	2
Oregon	6	20	60.0								20	
Pennsylvania South Carolina	14 8	19 34	61.6							2	11 20]
rennessee	28	45	60.8							3	35	
rexas	12	42	60.0					13.	1	3	35	
Virginia	23	62	63.1							5	20	1 8
Washington	25	67	60.0								67	
West Virginia Wisconsin	18 17	28 52	62.0							2	16	1
		-	60.0								52	
Total	334	939	61.2							. 36	691	21
			E	DGEE	MEN							
1912.						1	1	1				
		0.1	0-									
Alabama Arkansas	14 19	21 52	65.1								4	1
California	14	32	60. 2								47 31	
Florida	12	19	63.5								8	1
Georgia	22	26	64.1								9	1 1

Table V.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

EDGERMEN—Concluded.

Year and State. Deest lit mest literate literat	Num- ber of stab- lish- nents. 23 19 30 7 16 23 6 19 9 29 12 23 25 20 19 361 14 19 14 12	62 33 75 60 03 36 35 12 25 20 34 33 35 33 35 77 751	age age hours per week. 61.0 62.0 60.0 60.0 60.0 64.0 62.2 61.9 61.9 60.0 60.0 61.9 65.1 55.9 961.9 60.0 60.0 61.9 60.0 60.0 61.9 60.0 60.0 61.9 60.0 60.0 61.9 60.0 60.0 61.9 60.0 60.0 61.9 60.0 60.0 61.9 60.0 60.0 61.9 60.0 60.0 61.9 60.0 60.0 61.9 60.0 60.0 61.9 60.0 60.0 61.9 60.0 60.0 61.9 60.0 60.0 60.0 61.9 60.0 60.0 60.0 60.0 60.0 60.0 60.0 60	der 48		Over 48 and under 51		Over 54 and under 57	2 2 3 3 3	51 19 75 60 12 19 10 13 12 27 29 12 33 21 77	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Louisiana Maine. Maine. Michigan Minnesota Mississippi North Carolina Oregon Pennsylvania Salabama Arkansas California Florida Georgia Louisiana Minnesota Mississippi North Carolina Total 1913. Alabama Arkansas California Florida Georgia Louisiana Minnesota Mississippi North Carolina Oregon Pennsylvania South Carolina South Carolina Minnesota Oregon Pennsylvania South Carolina South Carolina South Carolina	19 30 7 16 23 6 19 9 29 12 23 25 20 19 361	33 75 60 36 35 12 25 20 34 33 35 33 31 77 751	62. 0 60. 0 60. 0 64. 0 62. 2 59. 9 61. 8 60. 6 60. 1 63. 0 60. 0 61. 9 60. 0						2 2 3 3 3	19 75 60 12 19 10 13 12 27 29 12 33 21 77	2 1
Maine, Michigan, Minnesota, Mississippi North Carolina, Oregon Pennsylvania South Carolina Pennessee. I exas. Virginia Washington West Virginia Wisconsin Total 1913. Alabama Arkansas. California Florida. Georgia Louisiana Maine Michigan Mississippi North Carolina Oregon Pennsylvania South Carolina South Carolina South Carolina	19 30 7 16 23 6 19 9 29 12 23 25 20 19 361	33 75 60 36 35 12 25 20 34 33 35 33 31 77 751	62. 0 60. 0 60. 0 64. 0 62. 2 59. 9 61. 8 60. 6 60. 1 63. 0 60. 0 61. 9 60. 0						2 2 3 3 3	19 75 60 12 19 10 13 12 27 29 12 33 21 77	2 1
North Carolina. Dregon. Pennsylvania. South Carolina. Fennessee. Fexas. Virginia. Washington. West Virginia. Wisconsin. Total 1913. Alabama. Arkansas. Jalifornia Florida. Georgia. Louisiana Maine. Michigan. Minnesota. Mississippi. North Carolina. Dregon. Pennsylvania. South Carolina. South Carolina.	23 6 19 9 29 12 23 25 20 19 361	35 12 25 20 34 33 35 33 31 31 77 751	62. 2 59. 9 61. 9 61. 8 60. 6 60. 1 63. 0 60. 0 61. 9 60. 0						2 2 3 3	19 10 13 12 27 29 12 33 21 77	2
Oregon Pennsylvania Oouth Carolina Pennsylvania Oouth Carolina Pennsese. Pexas Virginia Washington West Virginia Potal	6 19 9 29 12 23 25 20 19 361	12 25 20 34 33 35 33 31 77 751	59. 9 61. 9 61. 8 60. 6 60. 1 63. 0 60. 0 61. 9 60. 0 61. 2						3	10 13 12 27 29 12 33 21 77	2
Virginia Washington West Virginia Wisconsin Total 1913. Alabama Arkansas California Florida Georgia Louisiana Maine Michigan Minnesota Mississippi North Carolina Oregon Pennsylvania South Carolina South Carolina	23 25 20 19 361 14 19 14	35 33 31 77 751 22 53	63. 0 60. 0 61. 9 60. 0 61. 2							12 33 21 77	1
Total 1913. Alabama. Arkansas -alifornia Florida Georgia Louisiana Maine. Michigan Minnesota. Mississippi North Carolina Oregon. Pennsylvania South Carolina. South Carolina.	361 14 19 14	77 751 22 53	60.0							77	
1913. Alabama. Arkansas. Salifornia Florida. Georgia. Louisiana Maine. Michigan. Minnesota. Mississippi. North Carolina. Oregon. Pennsylvania. South Carolina.	14 19 14	22 53	65. 1				 				
Alabama. Arkansas. Salifornia Florida. Georgia. Louisiana Maine. Michigan. Minnesota. Mississippi North Carolina. Oregon. Pennsylvania. South Carolina.	19 14	53							13	569	10
Louisiana	22	33 18 25	60. 2 63. 3 64. 0				 		7	4 45 32 8 9	1 1 1
Mississippi	23 19 30 7	65 35 77 60	60. 8 61. 7 60. 0 60. 0				 		6 1	48 21 77 60	1 1
OregonPennsylvaniaSouth Carolina	16	37	60.0							37	
Tennessee	23 6 19 9 29	35 10 25 19 36	62. 2 60. 0 61. 4 61. 9 60. 9				 	······	3	19 10 15 11 25	1
TexasVirginia	12 23	30 39	60. 0 62. 9						2 3	24 14	2
Washington West Virginia Wisconsin	25 20 19	32 31 72	60. 0 62. 0 60. 0				 		2	32 18 72	i
Total	361	754	61.0				 	1	29	581	14
				-	-			Province.			
			1	ABO	RERS						

1912.								
Alabama	14	1,574	65. 4	 	 	 	 198	1,37
Arkansas	19 14	2,141	60.6	 	 	 	 1,944 1,289	19
FloridaGeorgia	12 22	1,208 1,529	63. 5 64. 0	 	 	 	 509 578	69 95
Louisiana	23	2,519	61.0	 	 	 	 2,057	46
Maine	19 30	865 2,001	61. 9	 	 	 	 509	35
Ainnesota	7	1,337 1,730	60.0	 	 	 	 1,337	1,3

LABORERS—Concluded.

	Num-	Num-	Average	Nu	mber o	of emp	loyees	whose were—		me ho	urs per	week
Year and State.	ber of estab- lish- ments.	em- ploy-	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Ōver 60
1912—Concluded.												
North CarolinaOregonPennsylvania.South CarolinaTennessee.	23 6 19 9 29	1,732 767 834 1,037 992	61. 7 59. 9 61. 8 61. 4 60. 7							101 124 92 55	1,105 643 454 704 810	526 288 333 127
Texas. Virginia. Washington. West Virginia. Wisconsin.	12 23 25 20 19	1,380 1,289 2,551 907 1,618	60. 1 63. 0 60. 0 62. 2 60. 0							111	1,228 457 2,594 568 1,618	152 721 339
Total	361	29,365	61.5							483	21,015	7,867
1913.							-		13.			
Alabama. Arkansas. California Florida. Georgia.	14 19 14 12 22	1,038 2,205 1,389 1,072 1,379	65. 2 60. 0 60. 1 63. 3 63. 9							205	173 1,949 1,369 477 531	865 51 20 595 848
Louisiana Maine. Michigan Minnesota Mississippi	23 19 30 7 16	2,368 1,000 2,080 1,418 1,587	60. 9 61. 8 60. 0 60. 0 60. 2							219 31	1,707 566 2,080 1,418 1,535	442 408
North Carolina Oregon Pennsylvania South Carolina Tennessee	23 6 19 9 29	1,868 842 751 957 1,002	61. 7 60. 0 61. 5 61. 3 61. 1						16	76 113 54	1, 214 842 411 656 717	227 301 218
Texas Virginia Washington West Virginia Wisconsin	12 23 25 20 19	1,362 1,434 2,211 882 1,990	60. 1 63. 2 60. 0 62. 2 60. 0							60 113 43	1,106 445 2,211 504 1,990	196 876
Total	361	28,835	61.1					7	16	914	21,901	6,004

MACHINE FEEDERS, PLANING MILL.

					-
1912.					
Alabama	12	77	65.9		5 75
Arkansas	18	205	60.4		00 1
California	9	36	60.0		36
Florida	11	45	63.5		19 20
Georgia	16	60	64.1		20 40
Louisiana	22	169	60.9	1.	12 2
Maine	15	34	63.0		12 2
Michigan	10	117	60.0		17
Minnesota	5	59	60.0		59
Mississippi	16	92	64. 4		24 68
North Carolina	19	120	61. 2	1	2 2
Oregon	6	53	59.9		16
Pennsylvania	9	16	63. 4	2	4 1
South Carolina	7	35	63. 3		11 2
Tennessee	6	17	62. 5		10

MACHINE FEEDERS, PLANING MILL-Concluded.

	Num-	Num-	Aver-	Nu	mber o	of emp	loyees	whose were-		me hou	irs per	week
Year and State.	ber of estab- lish- ments.	ber of em- ploy- ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
1912—Concluded.					1		7.3					
Pexas Virginia. Washington. West Virginia. Wisconsin.	12 13 23 13 11	99 52 160 36 66	60. 1 63. 8 60. 0 61. 9 60. 0							1	90 16 160 24 66	3.
Total	253	1,548	61.4							11	1,143	39
1913.					-							
Alabama. Arkansas. California Florida Georgia	12 18 9 11 16	75 197 45 45 68	65. 8 59. 7 60. 0 63. 6 63. 9							16	5 176 45 18 25	7 2 4
Louisiana Maine Michigan Minnesota Mississippi	22 15 10 5 16	193 34 83 47 104	60. 8 63. 0 60. 0 60. 0 60. 0							14	146 12 83 47 104	3 2
North Carolina	19 6 9 7 6	120 66 16 40 15	61. 5 60. 0 62. 3 62. 7 64. 5						1	2	86 66 7 14 2	3 2 1
l'exas Virginia. Washington. West Virginia Wisconsin	12 13 23 13 11	93 47 133 34 76	60. 0 63. 6 60. 0 62. 5 60. 0							4 2 2	81 15 133 17 76	3
Total	253	1,531	61.1					5	1	41	1,158	32

1912.					1				
Alabama	6	7	65.1	 	 	 		1	6 5
Arkansas	17	33	60.9	 	 	 		28	5
California	11	26	60.0	 	 	 		26	
Florida	6	12	63.0	 	 	 		6	6
Georgia	11	16	62.9	 	 	 		8	. 8
Louisiana	17	35	60.8	 	 	 		30	5 8
Maine	13	27	61.5	 	 	 		19	8
Michigan	28	62	60.0	 	 	 		62	
Minnesota	7	45	60.0	 	 	 		45	
Mississippi	9	18	64.0	 	 	 		6	12
North Carolina	17	27	62.9	 	 		2	11	14
Oregon	5	8	59.9	 	 	 	1	7	
Pennsylvania	16	23	62.1	 	 	 	2	12	9
South Carolina	8	. 17	61.9	 	 	 		10	. 7
Tennessee	29	35	60.4	 	 	 	3	28	4
Texas	10	21	60.1	 	 	 		19	2
Virginia	22	35	63.0	 	 	 	3	12	20
Washington	17	33	60.0	 	 	 		33	
West Virginia	20	. 31	62.1	 	 	 		20	11
Wisconsin	19	50	60.0	 	 	 		50	
Total	288	561	61.1	 	 	 	11	433	117

Table V.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

SAWYERS, BAND—Concluded.

	Num-	Num-	Aver-	Nu	mber o	of empl		whose were—		me hou	rs per	week
Year and State.	ber of estab- lish- ments.	ber of em- ploy- ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
1913.												
Alabama Arkansas. California Florida Georgia	6 17 11 6 11	7 33 26 12 17	65. 1 60. 1 60. 0 63. 0 63. 1							2	30 26 6 8	6 9
Louisiana Maine Michigan Minnesota Mississippi	17 13 28 7 9	36 28 59 45 18	60. 6 61. 2 60. 0 60. 0 60. 0							3 1	28 20 59 45 18	57
North CarolinaOregonPennsylvania South CarolinaTennessee.	17 5 16 8 29	27 8 23 17 35	62.9 60.0 61.6 61.9 60.6						·····i	2 2 3	11 8 14 10 26	77 77 5
Texas Virginia Washington West Virginia Wisconsin	10 22 17 20 19	20 35 30 31 47	59. 9 63. 0 60. 0 62. 2 60. 0							2 3 1	16 12 30 18 47	20
Total	288	554	60.9						1	, 19	433	101

SAWYERS, CIRCULAR.

1912.	17 21										
Alabama.	10	14	65.1		 					3	11
Arkansas	2	2	60.0		 					2	
California	2 3	3	62.0		 					2 2 3	1
Florida.	6	9	64.0		 					3	6
Georgia	11	13	66.0		 					2	11
Louisiana	9	9	61.2						7	7	2
Maine.	6	6	64.3								6
Michigan.		17	60.0							17	
Mississippi	6 7 7	10	64.8		 					9.	8
North Carolina.	7	8	60.0					13 9 3 3 7 0		8	C
North Carolina	- 1		00.0		 					0	
Oregon	2 4	2 5	59.8		 				1 2	1 2	
Pennsylvania	4	5	60.6		 				2	2	1
Texas	4	5	60.0							5	
Washington	11	12	60.0							12	
Wisconsin	2	2	60.0		 					2	
W ISCONSIII	4	4	00.0		 					4	
Other States	2	2	61.5		 					1	1
Total	92	119	62, 4		 				3	69	47
1913.			no by								
Alabama	10	14	65.1		 					3	11
Arkansas	2	2	59.3						1	1	
California	2 3	3	62.0		 			20000		3 1 2 3	1
Florida	6	9	64. 0		 					3	1
Georgia	11	14	66.3							2	12
Georgia	11	14	00.5		 					4	12
Louisiana	9	10	61.0	1.0016	 	196	H.P.K.		1	7	9
Maine	6	6	64.3								2
Michigan	6	16	60.0		 					16	1
Mississippi	7	10	60.0		 					10	
North Carolina	7 7	8	60.0		 *****					8	
TYOI OH OHIDA	6 }	0	1 00.0	1000000	 					0	

Table V.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

SAWYERS, CIRCULAR—Concluded.

Voor and State	Num-	Num-	Aver- age	Nu	mber	of emp	loyees	whose were-		me hou	rs per	week
Year and State.	ber of establishments.	ber of em- ploy- ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
1913—Concluded. Oregon. Pennsylvania Texas Washington Wisconsin. Other States	2 4 4 11 2	3 5 5 13 2	60. 0 60. 6 60. 0 60. 0 60. 0							2	3 2 5 13 2	1
Total	92	123	62.0							4	79	4

SAWYERS, GANG.

						4 92 1				L. E. I	
1912.									/		
Alabama	6	8	66. 1	1.3	7.0						1 8
Arkansas	8	8	60. 0				 			8	
California	2	2	60. 0							2	
Florida	5	5	64. 8							1	
		4	64. 5							1	
Georgia	4	4	64.5				 			1	
Louisiana	9	9	60.6				 			8	
Michigan	3	3	60.0				 			3	
Minnesota	3	5	60.0							5	
Mississippi	6	6	63. 0							3	
Oregon	4	4	60.0							4	
		100					 				
Pennsylvania	2	2	62.5						. 1		
Texas	3	3	60.3				 			2	
Virginia	2	2	66.0								
Washington	2 2	2	60.0				 			2	
Wisconsin	8	11	60.0		·		 			11	
Other States	4	5	60.0				 			5	
Total	71	79	61.7	,			 		1	55	23
1913.			19 -							100	
Alabama	6	. 8	66, 1						17.125		1 8
Arkansas	8	8	59.6				 		2	6	
California	2	2	60. 0				 		2	2	
Florida	5										
		6	65.0							1	
Georgia	4	4	64.5				 			1	
Jouisiana	9	9	60, 4	193			 		1	7	
Michigan	3	3	60. 0							3	
Minnesota	3	5	60. 0							5	
Mississippi	6	6	60. 0							6	
Oregon	4	. 4	60.0				 			4	
Pennsylvania	2 3	2	59.5						1	1	
rexas	3	3	60.3						-	2	
	2	2	66. 0								1
	2	2	60. 0							2	Hun p
			60. 0								
Washington							 			11	
Washington	8	11	00.0			V 1		ALLEY SALES			
WashingtonWisconsin		5	61. 2				 			4]
Virginia Washington Wisconsin Other States Total	8						 		4	55	21

TABLE V.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

SAWYERS, RESAW.

Num- per of stab- lish- nents. 3 7 2 2 4	Number of employ-ees.	age full-time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
7 2 2 4	13 2 2	60. 0 60. 0									
7 2 2 4	13 2 2	60. 0 60. 0									300
7 2 2 4	13 2 2	60. 0 60. 0								3	
2 4	2		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							13	
4		62.8								2	
E	4	63. 0								2	
13	6	60.8								5	
20	30	60.0				·				30	
5 2	13	60. 0 66. 0								13	
11	11	62.6								6	
6	10	60.0							1	9	
5	9										
5	6	60.0								6	
11	12	62.6							1	5	
23	32	60.0								32	
									9		2
100	151	00. 1								100	
	1										
3	4	60.0								4	
2	2	60.0								2	
2	2	62.8								1	
	7	60.6							1	5	
5	13	60.0								13	
										2	
	11 8	60.0									
6	7	61.1								5	
		60.0							2		
		-									
7	7	61.6			337777				1	4	
13	23	60.0								23	
20								1			
1	1	60.0								1	
	11 6 5 6 6 5 11 23 7 13 1 138 2 2 2 4 4 5 20 0 5 5 2 2 11 6 6 5 6 6 5 11 23	11	11	11	11	11	11	11	11 11 62.6 6 10 60.0 5 9 63.0 6 7 61.1 5 6 60.0 11 12 62.6 23 32 60.0 7 7 61.7 13 26 60.0 1 1 60.0 23 4 60.0 24 60.0 60.0 25 26.0 60.0 26 20.0 20.0 27 60.6 60.0 20 25 60.0 25 25 60.0 26 20.0 25 27 60.0 60.0 20 25 60.0 21 160.0 60.0 22 260.0 11 11 14 62.6 23 31 60.0 60.0 31 60.0 60.0 60.0 40 60.0 60.0 60.0 5 6 60.0 60.0 11 14 62.6 60.0 23 31 60.0 60.0	11 11 62.6	11 11 62.6 6 6 6 10 60.0 1 9 5 9 63.0 4 4 6 7 761.1 5 5 6 60.0 1 5 6 11 1 5 6 61.1 1 5 6 61.1 1 5 6 61.7 1 5 6 60.0 26 26 1 1 5 6 60.0 26 1 1 6 6 7 7 61.7 5 5 1 3 26 60.0 26 <td< th=""></td<>

Table V_{\bullet} —AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

SETTERS—Concluded.

	Num-	Num-	Aver-	Num	ber of	emplo	oyees v	whose were-	full-tir	ne hou	rs per	week
Year and State.	ber of estab- lish ments.	ber of em- ploy-	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
1912—Concluded.												
Louisiana Maine Michigan Minnesota Mississippi	23 19 30 7 16	55 42 81 78 33	61.1 61.6 60.0 60.0 64.4								44 28 81 78 9	2
North CarolinaOregonPennsylvaniaSouth CarolinaFennessee.	23 6 19 9 29	42 10 32 19 36	62.1 59.9 61.6 62.2 60.6							2 2 4 3	24 8 18 10 29	10
Texas Virginia. Washington West Virginia Wisconsin	12 23 25 20 19	32 37 51 35 60	60.1 62.9 60.0 62.0 60.0							3	30 14 51 23 60	20
Total	361	780	61.3							14	588	17
1913. Alabama. Arkansas. California. Florida. Georgia	14 19 14 12 22	21 35 29 21 31	65.1 60.0 60.2 63.4 64.5							3	4 31 28 9 10	1 1 2
Louisiana Maine Michigan Minnesota Mississippi	30	54 44 77 88 32	61. 0 61. 4 60. 0 60. 0 60. 0							4 1	39 30 77 88 32	1
North Carolina Oregon Pennsylvania South Carolina Tennessee	23 6 19 9 29	41 12 32 19 38	62. 0 60. 0 61. 2 62. 2 60. 8							2 4 3	24 12 20 10 27	1
Texas. Virginia. Washington. West Virginia. Wisconsin.	12 23 25 20 19	28 37 48 35 60	59. 9 62. 9 60. 0 62. 1 60. 0							3 3 1	23 14 48 21 60	2 1
Total	361	782	61.0						1	24	607	15
		T	RIMIN	TER C	PER	АТОБ	RS.					
1912.												
Alabama. Arkansas. California Florida. Georgia	14 19 14 12 20	17 26 27 16 21	64. 8 60. 7 60. 2 64. 1 64. 0								4 23 26 5 8	1 1 1
Louisiana Maine Michigan Minnesota Mississippi	23 8 30 7 16	31 20 61 26 21	61. 1 60. 5 60. 0 60. 0 64. 3								25 17 61 26 6	

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Table V_* —AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913—Concluded.

TRIMMER OPERATORS—Concluded.

	Num-	Num-	Aver-	Num	ber of	emplo	yees v	whose were-		ne hour	rs per	week
Year and State.	ber of estab- lish- ments.	ber of em- ploy- ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
1912—Concluded.												
North Carolina Dregon Pennsylvania South Carolina Fennessee	23 6 19 9 29	28 12 26 13 29	62. 2 60. 0 61. 5 61. 7 60. 3							1 1 4 3	16 11 14 8 24	11 8 5 2
Fexas. Virginia. Washington. West Virginia. Wisconsin.	12 23 23 20 19	18 25 36 21 37	60. 1 62. 5 60. 0 62. 2 60. 0							2	16 11 36 13 37	2 12 8
Total	346	511	61.2							11	387	113
1913. Alabama. Arkansas. California Florida. Georgia	14 19 14 12 20	17 27 26 16 21	64. 5 59. 9 60. 2 64. 1 64. 0							4	4 22 25 5 8	13 1 1 11 13
Louisiana Maine. Michigan. Minnesota. Mississippi	23 8 30 7 16	30 23 58 49 21	61. 0 60. 0 60. 0 60. 0 60. 0							2	22 22 58 49 21	6 1
North Carolina Oregon Pennsylvania South Carolina Tennessee	23 6 19 9 29	28 13 26 13 31	62. 2 60. 0 61. 3 61. 7 60. 6							1 4 3	16 13 15 8 22	7 5 5
Texas. Virginia. Washington. West Virginia. Wisconsin.	23 23	17 26 37 22 37	60. 0 62. 6 60. 0 62. 6 60. 0							1 2 1	14 11 37 11 37	13
Total	346	538	61.0						1	18	420	99

[The figures set opposite each bracketed group of years are for identical establishments.]

DOGGERS.

		1	1	JOGG	2110130							
		Num-	Aver-		iber o	f empl	oyees	whose were-	full-ti	me hou	ırs pe	r weel
State, and number of establishments.	Year.	ber of em- ploy- ees.	age full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	O ver
Alabama:	4040											
14 establishments Arkansas:	{1912 1913	42 43	65. 2 65. 1								7 8	35 35
19 establishments	{1912 1913	74 72	60.8							7	64 63	10
California: 13 establishments	{1912 1913	33 33	60. 2 60. 2								32 32	1 1
Florida: 12 establishments	{1912 {1913	49 49	63.3								22 22	27
Georgia:	(1913	43	63.5								20	23
18 establishments Louisiana:	1913	45	63.6								20	25
23 establishments Maine:	${1912 \atop 1913}$	93 95	60.5							9	85 78	8
14 establishments	{1912 (1913	25 27	62.8 62.8							····i	10 10	15 16
Michigan: 30 establishments	{1912 1913	91 88	60.0 60.0								. 91 88	
Minnesota: 4 establishments	{1912 1913	30 12	60.0								30 12	
Mississippi: 16 establishments	{1912 {1913	59 60	64. 0 60. 0								20 60	39
North Carolina:	ſ1912	47	62.2							4	24	19
20 establishments Oregon:	(1913	46	62. 4 59. 9							4	22 16	20
6 establishments Pennsylvania:	11913	20	60.0								20	
14 establishments	{1912 {1913	19 19	62.3 61.6							2 2	9	8
South Carolina: 8 establishments	${1912 \atop 1913}$	34 34	61.8 61.8								20 20	14 14
Tennessee: 28 establishments	{1912 1913	43 45	60.5							3 3	36 35	47
Texas: 12 establishments	{1912 1913	44 42	60.1 60.0							3	40 35	4 4
Virginia: 23 establishments	{1912 1913	59 62	63.3							5	17 20	37 37
Washington: 25 establishments	(1912	79	63.1								79	
West Virginia:	(1913	67	60.0								67	9
18 establishments Wisconsin:	(1913	28	62.0							2	16	10
17 establishments	{1912 1913	61 52	60. 0 60. 0								61 52	
			EI	GER	MEN.							
Alabama:	(1912	21	65.1						*		4	17
14 establishments Arkansas:	(1913	22	65.1								4	18
19 establishments	{1912 1913	52 53	60.6 59.9							7	47 45	5 1

EDGERMEN-Concluded.

		Num-	Aver-	Num	ber of	empl	oyees	whose were—	full-ti	ne ho	urs per	r week
State, and number of establishments.	Year.	ber of employ-ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
California:												
14 establishments	{1912 {1913	32 33	60.2								31 32	1
Florida: 12 establishments	{1912 1913	19 18	63. 5 63. 3								8 8	11 10
Georgia: 22 establishments	{1912 1913	26 25	64. 1 64. 0): 		9 9	17 16
Louisiana: 23 establishments	{1912 1913	62 65	61.0							6	51 48	11 11
Maine: 19 establishments	{1912 1913	33 35	62.0 61.7							1	19 21	14 13
Michigan: 30 establishments	{1912 1913	75 77	60.0								75 77	
Minnesota: 7 establishments	1912 1913	60	60.0								60 60	
Mississippi: 16 establishments	{1912 1913	36 37	64. 0 60. 0								12 37	24
North Carolina: 23 establishments	{1912 {1913	35 35	62. 2 62. 2							2 2	19	14 14
Oregon: 6 establishments	{1912 1913	12 10	59.9							2	10	
Pennsylvania: 19 establishments	{1912 {1913	25 25	61.9							3 3	13 15	9 7
South Carolina: 9 establishments	{1912 {1913	20 19	61.8								12	8 8
Tennessee: 29 establishments	1912 1913	34 36	60.6						1	3 3	27 25	4 7
Texas: 12 establishments	{1912 1913	33 30	60.1							2	29 24	4 4
Virginia: 23 establishments	{1912 {1913	35 39	63.0							3 3	12 14	20 22
Washington: 25 establishments	{1912 1913	33 32	60.0								33 32	
West Virginia: 20 establishments	{1912 1913	31 31	61. 9 62. 0							2	21 18	10
Wisconsin: 19 establishments	{1912 {1913	77 72	60.0								77 72	
	1(2020			ABOE	RERS.							
Alabama: 14 establishments	{1912 {1913	1,574 1,038	65. 4 65. 2								198 173	1,376
Arkansas: 19 establishments	{1912 {1913	2, 141 2, 205	60.6							205	1,944 1,949	197 51
California: 14 establishments	ſ1912	1,311	60.1							200	1, 289 1, 369	22 20
Florida:	(1913	1,389	60.1	1							1,009	20

 $12 \text{ establishments} \dots = \begin{bmatrix} 1912 & 1,208 & 63.5 \\ 1913 & 1,072 & 63.3 \end{bmatrix} \dots$

LABORERS-Concluded.

		Num-	Aver-		ber of	emplo	vees v	whose :		ne hou	rs per	week
State, and number of establishments.	Year.	ber of em- ploy- ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
Georgia:	(1010	7 500	C1 0								F70	0.71
22 establishments	${1912 \atop 1913}$	1,529 1,379	64. 0 63. 9								578 531	951 848
Louisiana: 23 establishments	£1912	2, 519 2, 368	61.0								2,057 1,707	462
Maine:			60.9							219	P. P. Walter	442
19 establishments	{1912 1913	865 1,000	61.9							31	509 566	356 403
Michigan:	(1912	2,001	60.0								2,001	
30 establishments	1913	2,080	60.0								2,001	
Minnesota: 7 establishments	(1912	1,337	60.0								1,337	
Mississippi:	1913	1,418	60.0								1,418	
16 establishments	ſ1912	1,730 1,587	64.6								412	1,318
North Carolina:			60.2								1,535	52
23 establishments	${1912 \atop 1913}$	1,732 1,868	61.7 61.7							101 76	1,105 1,214	526 578
Oregon:	(1912	767	59.9								643	-
6 establishments	1913	842	60.0							124	842	
Pennsylvania:	(1912	834	61.8							92	454	288
19 establishments South Carolina:	(1913	751	61.5							113	411	227
9 establishments	(1912	1,037	61.4								704	333
Tennessee:	1913	957	61.3								656	301
29 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	992 1,002	60.7 61.1						16	55 54	810 717	127 215
Texas:									10	01		
12 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	1,380 1,362	60.1 60.1							60	1,228 1,106	152 196
Virginia:		1,289	63.0							111	457	721
23 establishments	1913	1,434	63. 2							113	445	876
Washington: 25 establishments		2,594	60.0								2,594	
West Virginia:	(1913	2,211	60.0								2, 211	
20 establishments	{1912 1913	907 882	62. 2 62. 2							43	568	339 335
Wisconsin:											504	999
19 establishments		1,618 1,990	60.0								1,618 1,990	
	MAC	HINE	FEE	DERS	, PLA	INING	3 MII	LL.	3			
Alabama:			4.									
12 establishments	{1912 1913	77 75	65.9 65.8								5 5	72 70
Arkansas:	(1912	205	60.4								190	
18 establishments	1912	197	59.7					5		16	176	15
California:	(1912	36	60.0								36	
9 establishments	(1913	45	60.0								45	
11 establishments	ſ1912	45	63.5								19	26
Georgia:	1913	45	63.6								18	27
16 establishments	(1912	60	64.1								20 25	40
Louisiana:	(1913	68	63.9									43
22 establishments	\[\begin{align*} 1912 \\ 1913 \end{align*}	169 193	60.9							14	142 146	27 33

MACHINE FEEDERS, PLANING MILL-Concluded.

		Num-	Aver-	Nun	nber of	emplo	yees w	hose fi	ıll-tim	e hours	per	week
State, and number of establishments.	Year.	ber of em- ploy- ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
Maine:	(1912	34	63.0								12	2
15 establishments Michigan:	(1913	34	63.0								12	2
10 establishments Minnesota:	{1912 1913	117 83	60.0								117 83	
5 establishments	{1912 1913	59 47	60.0								59 47	
Mississippi: 16 establishments North Carolina:	{1912 1913	92 104	64. 4 60. 0								24 104	6
19 establishments Oregon:	{1912 1913	120 120	61. 2 61. 5							1 1	92 86	2 3
6 establishments Pennsylvania:	${1912 \atop 1913}$	53 66	59.9 60.0							7	46° 66°	
9 establishments	{1912 1913	16 16	63. 4 62. 3							2 2	47	1
7 establishments	{1912 1913	35 40	63.3 62.7								11 14	2 2
6 establishments Texas:	{1912 1913	17 15	62.5 64.5						····i		10 2	1
12 establishments Virginia:	${1912 \atop 1913}$	99 93	60.1							4	90 81	
13 establishments Washington:	{1912 1913	52 47	63.8 63.6							$\begin{vmatrix} 1\\2 \end{vmatrix}$	16 15	3
23 establishments West Virginia:	${1912 \atop 1913}$	160 133	60.0 60.0								160 133	
13 establishments Wisconsin:	${1912 \atop 1913}$	36 34	61.9 62.5							2	24 17	1
11 establishments	${1912 \atop 1913}$	66 76	60.0 60.0								66 76	
			SAW	YERS	5, BA	ND.		,				
Alabama:	(1912	7	65.1								1	
6 establishments Arkansas:	\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\)\(\	7 7 33	65.1								28	
17 establishments California:	(1913	33	60. 1							2	30	
11 establishments Florida:	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	26	60.0								26	
6 establishments Georgia:	(1913	12	63.0								6	
11 establishments Louisiana:	{1912 1913	16 17	62. 9 63. 1								8 8	
17 establishments Maine:	{1912 1913	35 36	60.8							3	30 28	
13 establishments	${1912 \atop 1913}$	27 28	61.5							i	19 20	

SAWYERS, BAND-Concluded.

		Num-	Aver-	Nur	nber o	f emplo		were—	ull-tim	e hour	s per y	7eek
State, and number of establishments.	Year.	ber of em- ploy- ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
Michigan:												
28 establishments	${1912 \atop 1913}$	62 59	60.0								62 59	
Minnesota: 7 establishments	{1912 1913	45 45	60. 0 60. 0								45 45	
Mississippi: 9 establishments	{1912 1913	18 18	64. 0 60. 0								6 18	12
North Carolina: 17 establishments	{1912 {1913	27 27	62. 9 62. 9							2 2	11 11	14
Oregon: 5 establishments	ſ1912	8	59.9							1	7	14
Pennsylvania:	(1913	8 23	60.0			·3····				2	8	
16 establishments South Carolina:	(1913	23	61.6							2	14	7
8 establishments Tennessee:	1913	17	61. 9								-10	
29 establishments Texas:	${1912 \atop 1913}$	35 35	60. 4 60. 6						1	3 3	28 26	Ę
10 establishments	${1912 \atop 1913}$	21 20	60. 1 59. 9							2	19 16	2
Virginia: 22 establishments	{1912 1913	35 35	63. 0 63. 0							3 3	12 12	20 20
Washington: 17 establishments	{1912 1913	33 30	60.0								33 30	
West Virginia: 20 establishments	{1912 {1913	31 31	62. 1 62. 2								20 18	11
Wisconsin: 19 establishments	(1912	50	60.0								50	
	11913	47	60.0								47	
	,	SA	WYE	RS, (CIRCU	ULAR	•					
Alabama: 10 establishments Arkansas:	{1912 1913	14 14	65. 1 65. 1								3 3	11 11
2 establishments	{1912 1913	2 2	60. 0 59. 3							i	2 1	
California: 3 establishments	{1912 1913	3 3	62. 0 62. 0								2 2	
Florida: 6 establishments	{1912 1913	9 9	64. 0 64. 0								3 3	(
Georgia: 11 establishments	{1912 {1913	13 14	66. 0 66. 3								2 2	11 15
Louisiana: 9 establishments	(1912	9	61.2								7 7	2
Maine: 6 establishments	1913	10	61.0									
Michigan: 6 establishments	(1913	6 17	64. 3								17	
Mississippi:	(1913	16	60.0								16	
7 establishments	1912	10	60.0			l					10	

SAWYERS, CIRCULAR—Concluded.

		Num-	A ver-	Nun	nber o	f emplo		hose f		e hours	per v	veek
State, and number of establishments.	Year.	ber of employ-ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
North Carolina:												
7 establishments	(1912	8	60.0								8	
Oregon:	(1913	8	60.0								8	
2 establishments	£1912	2 3	59.8							1	1	
Pennsylvania:	1913	3	60.0								3	
4 establishments	ſ1912	5	60.6							2	2 2	1
Texas:	1913	5	60.6							2	2	1
4 establishments	(1912	5	60.0								5	
	(1913	5	60.0								5	
Washington:	(1912	12	60.0								12	
11 establishments	1913	13	60.0								13	
Wisconsin:	(1010	0	00.0						137			
2 establishments	${1912 \atop 1913}$	2 2	60.0								2 2	

SAWYERS, GANG.

Alabama:	(1912	8	66.1						
6 establishments	1912	8	66. 1	 		 	 		8 8
Arkansas:	(1912	8	60.0					0	50
8 establishments	1913	8	59.6	 		 	 2	8	
California:									
2 establishments	\[\frac{1912}{1913} \right	2 2	60.0	 		 	 	2 2	
Florida:				 					
5 establishments	{1912 1913	5	64. 8 65. 0	 		 	 	1	5
Georgia:				 		 	 	1	
4 establishments	{1912 1913	4 4	64.5	 		 	 	1	3
Louisiana:	`			 		 	 		0
9 establishments	{1912 1913	9	60.6	 		 	 1	8 7	-1
Michigan:		9	00.4	 		 	 1		1
3 establishments	(1912	3	60.0	 		 	 	3	
Minnesota:	1913	3	00.0	 		 	 	3	
3 establishments	1912	5	60.0	 		 	 	5	
Mississippi:	11913	5	60.0	 		 	 	5	
6 establishments	§1912	6	63.0	 		 	 	3	3
Oregon:	(1913	6	60.0	 		 	 	6	
4 establishments	ſ1912	4	60.0	 		 	 	4	
Pennsylvania:	1913	4	60.0	 		 	 	4	
2 establishments	£1912	2	62. 5	 		 	 1		1
Texas:	1913	2	59.5	 		 	 1	1	
3 establishments	£1912	3	60.3	 		 	 	2	1
Virginia:	(1913	3	60.3	 		 	 	2	-1
2 establishments	1912	2	66.0	 		 	 		2
Washington:	1913	2	66.0	 		 	 		2
2 establishments	(1912	2	60.0	 		 	 	2	
Wisconsin:	(1913	2	60.0	 	,	 	 	2	
	(1912	11	60.0	 		 	 ·	11	
8 establishments	1913	11	60.0	 		 	 	11	

TABLE VI.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913—Continued.

SAWYERS, RESAW.

		Num-	Aver-	Num	ber of	emple	oyees v	whose were-	full-tir	ne hou	ırs pei	weel
State, and number of establishments.	Year.	ber of em- ploy- ees.	of time hours	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
Arkansas: 3 establishments	ſ1912	. 4	61.5								3	
California:	(1913	13	60.0								13	
7 establishments Florida:	(1913	14	60.0								14	
2 establishments Georgia:	${1912 \atop 1913}$	2 2	60.0								2 2	
2 establishments	${1912 \atop 1913}$	2 2	62. 8 62. 8								1 1	
Louisiana: 4 establishments	{1912 1913	4 4	63. 0 63. 0								2 2	
Maine: 5 establishments	{1912 {1913	6 7	60. 8 60. 6							i	5 5	
Michigan: 20 establishments	ſ1912	30	60.0								30	
Minnesota:	(1913	25	60.0								25 13	
5 establishments Mississippi:	(1913	13	60.0								13	
2 establishments North Carolina:	(1913	2	60.0								2	
11 establishments	${1912} {1913}$	11 11	62. 6 62. 6								6	
Oregon: 6 establishments	{1912 1913	10 11	60. 0 60. 0							1	9 11	
Pennsylvania: 5 establishments	{1912 1913	9 8	63. 0 62. 8								4 4	
South Carolina: 6 establishments	{1912 {1913	7 7	61. 1 61. 1								5 5	
Fennessee: 5 establishments	(1912	6	60.0								6	
Virginia:	(1913	6	60.0							1	5	
11 establishments Washington:	(1913	14	62.6							2	5	
23 establishments West Virginia:	{1912 1913	32 31	60.0								32 31	
7 establishments	{1912 1913	7 7	61. 7 61. 6							····i	5 4	
Wisconsin: 13 establishments	{1912 1913	26 23	60.0								26 23	

TABLE VI.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913—Continued.

SETTERS.

		Num-	Aver-	Num	ber of	emplo		whose were—	full-tir	ne hou	rs per	week
State, and number of establishments.	Year. o en plo	ber of em- ploy- ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
Alabama:	(1010	01	27.4									
14 establishments	\(\) \(\)	21 21	65. 1 65. 1								4 4	17
Arkansas:	(1912	35	60.9			O. A.					30	
19 establishments	1913	35	60.0							3	31	1
California:	(1912	29	60, 2			1			334		28	1
14 establishments	1913	29	60.2								28	Î
Florida:	(1912	21	63.4								9	12
12 establishments	(1913	21	63.4								9	12
Georgia:	(1912	31	64.5								10	21
22 establishments Louisiana:	(1913	31	64.5								10	21
23 establishments	ſ1912	55	61.1								44	11
Maine:	1913	54	61.0							4	39	11
19 establishments	ſ1912	42	61.6								28	14
Michigan:	1913	44	61.4							1	30	13
30 establishments	£1912	81	60.0								81	
Minnesota:	11913	77	60.0								77	
7 establishments	£1912	78	60.0								78	
Mississippi:	1913	88	60.0								88	
16 establishments	(1912	33	64.4								9	24
North Carolina:	1913	32	60.0								32	
23 establishments	(1912	42	62.1							2	24 24	16
Oregon:	1913	41	62.0							2		16
6 establishments	{1912 1913	10 12	59. 9 60. 0							2	8 12	
Pennsylvania:												
19 establishments	{1912 {1913	32 32	61.6							4 4	18 20	10
South Carolina:	100									4		
9 establishments	{1912 1913	19 19	62. 2 62. 2								10 10	9
Tennessee:	, A.		1									
29 establishments	{1912 1913	36 38	60.6						····i	3 3	29 27	4
Texas:									1			1
12 establishments	{1912 1913	32 28	60.1 59.9							3	30 23	1
Virginia:												146
23 establishments	{1912 1913	37 37	62. 9 62. 9							3 3	14 14	20
Washington:	(1912	51	60.0									
25 establishments	1912	48	60.0								51 48	
West Virginia:	(1912	35	62, 0								23	12
20 establishments	1912	35	62. 1							i	23	13
Wisconsin:	ſ1912	60	60.0	12/16							60	
19 establishments	1912	60	60.0								60	

TABLE VI.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913—Concluded.

TRIMMER OPERATORS.

		Num-	Aver-		iber of	f empl		whose were—	full-tir	ne hou	rs per	week
State, and number of establishments.	Year. ber of employ-ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60	
Alabama: 14 establishments	{1912 1913	17 17	64.8 64.5								4 4	13 13
Arkansas: 19 establishments	${1912 \atop 1913}$	26 27	60. 7 59. 9							4	23 22	3
California: 14 establishments Florida:	${ 1912 \atop 1913 }$	27 26	60. 2 60. 2								26 25	1
12 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	16 16	64.1 64.1								5 5	11 11
Georgia: 20 establishments Louisiana:	$ \left\{ \begin{array}{l} 1912 \\ 1913 \end{array} \right. $	21 21	64.0 64.0								8 8	13 13
23 establishments Maine:	${1912 \atop 1913}$	31 30	61.1 61.0							2	25 22	6
8 establishments Michigan:	$ \left\{ \begin{array}{l} 1912 \\ 1913 \end{array} \right. $	20 23	60.5 60.0								17 22	3
30 establishments Minnesota:	${1912 \atop 1913}$	61 58	60.0 60.0								61 58	
7 establishments Mississippi:	${1912 \atop 1913}$	26 49	60.0 60.0								26 49	
16 establishments North Carolina:	${1912 \atop 1913}$	21 21	64.3 60.0								6 21	15
23 establishments Oregon:	${1912 \atop 1913}$	28 28	62. 2 62. 2							1 1	16 16	11 11
6 establishments Pennsylvania:	$ \left\{ \begin{array}{l} 1912 \\ 1913 \end{array} \right. $	12 13	60.0 60.0							1	11 13	
19 establishments	${1912 \atop 1913}$	26 26	61.5 61.3							4 4	14 15	- 8
9 establishments Tennessee:	{1912 1913	13 13	61.7 61.7								8 8	5
29 establishments Texas:	$ \left\{ \begin{array}{l} 1912 \\ 1913 \end{array} \right. $	29 31	60.3 60.6						····i	3 3	24 22	5
12 establishments Virginia:	{1912 1913	18 17	60.1 60.0							1	16 14	2 2
23 establishments Washington:	$ \left\{ \begin{array}{l} 1912 \\ 1913 \end{array} \right. $	25 26	62. 5 62. 6							2 2	11 11	12 13
23 establishments West Virginia:	$\begin{cases} 1912 \\ 1913 \end{cases}$	36 37	60. 0 60. 0								36 37	
20 establishments Wisconsin:	$ \left\{ \begin{array}{l} 1912 \\ 1913 \end{array} \right. $	21 22	62. 2 62. 6							1	13 11	8 10
19 establishments	${1912 \atop 1913}$	37 37	60.0 60.0								37 37	

TABLE VII.—AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND 1913. DOGGERS.

		DOGG	ERS.				
			1912			1913	
State.	Number of establish- ments.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly earnings.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly earnings.
Alabama	14	42	65. 2	\$8.81	43	65. 1	\$9.17
Arkansas	19	74	60. 8	10.34	72	60. 0	10.42
California	13	33	60. 2	13.63	33	60. 2	13.77
Florida	12	49	63. 3	9.62	49	63. 3	9.76
Georgia	18	43	63. 5	8.85	45	63. 6	9.21
Louisiana Maine Michigan Minnesota Mississippi	23 14 30 4 16	93 25 91 30 59	60. 5 62. 8 60. 0 60. 0 64. 0	11. 24 13. 45 12. 31 13. 88 9. 36	95 27 88 12 60	60. 3 62. 8 60. 0 60. 0	11. 42 13. 16 12. 74 14. 78 9. 22
North Carolina	20	47	62. 2	8.57	46	62. 4	8. 99
Oregon	6	20	59. 9	14.77	20	60. 0	15. 30
Pennsylvania	14	19	62. 3	11.96	19	61. 6	12. 12
South Carolina	8	34	61. 8	8.29	34	61. 8	8. 34
Tennessee	28	43	60. 5	9.96	45	60. 8	9. 97
Texas	12	44	60.1	11. 02	42	60. 0	11. 23
Virginia	23	59	63.3	9. 00	62	63. 1	9. 21
Washington	25	79	60.0	13. 78	67	60. 0	14. 71
West Virginia	18	28	61.9	12. 60	28	62. 0	13. 00
Wisconsin	17	61	60.0	12. 69	52	60. 0	13. 10
Total	334	973	61.4	11.06	939	61.2	11.22
	1	EDGEI	RMEN.				
Alabama	14	21	65. 1	\$12.42	22	65.1	\$12.52
Arkansas	19	52	60. 6	15.56	53	59.9	15.31
California	14	32	60. 2	20.43	33	60.2	20.48
Florida	12	19	63. 5	14.85	18	63.3	15.06
Georgia	22	26	64. 1	13.27	25	64.0	13.35
Louisiana	23	62	61. 0	16.35	65	60. 8	17. 12
Maine	19	33	62. 0	17.46	35	61. 7	17. 90
Michigan	30	75	60. 0	15.64	77	60. 0	16. 05
Minnesota	7	60	60. 0	19.14	60	60. 0	19. 70
Mississippi	16	36	64. 0	14.00	37	60. 0	13. 53
North Carolina	23	35	62. 2	10. 87	35	62. 2	11. 09
Oregon	6	12	59. 9	22. 25	10	60. 0	23. 10
Pennsylvania	19	25	61. 9	15. 89	25	61. 4	16. 30
South Carolina	9	20	61. 8	13. 35	19	61. 9	13. 26
Tennessee	29	34	60. 6	13. 42	36	60. 9	14. 15
Texas	12	33	60.1	15. 78	30	60. 0	16. 19
Virginia	23	35	63.0	12. 32	39	62. 9	12. 74
Washington	25	33	60.0	21. 59	32	60. 0	22. 63
West Virginia	20	31	61.9	17. 32	31	62. 0	17. 76
Wisconsin	19	77	60.0	16. 35	72	60. 0	16. 72
Total	361	751	61.2	15.97	754	61.0	16. 28
		LABO	RERS.				
Alabama	14	1,574	65. 4	\$7.84	1,038	65. 2	\$8.09
Arkansas	19	2,141	60. 6	9.35	2,205	60. 0	9.33
California	14	1,311	60. 1	12.12	1,389	60. 1	12.45
Florida	12	1,208	63. 5	8.44	1,072	63. 3	8.59
Georgia	22	1,529	64. 0	8.06	1,379	63. 9	8.33
Louisiana		2,519	61. 0	9. 84	2,368	60. 9	9. 92
Maine		865	61. 9	11. 41	1,000	61. 8	11. 44
Michigan		2,001	60. 0	10. 55	2,080	60. 0	10. 76
Minnesota		1,337	60. 0	13. 22	1,418	60. 0	14. 24
Mississippi		1,730	64. 6	8. 41	1,587	60. 2	8. 39

TABLE VII.—AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND 1913—Continued.

LABORERS-Concluded.

			1912			1913	
State.	Number of establish- ments.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly- earnings.	Number of em- ployees.	A verage full-time hours per week.	Average full-time weekly earnings.
North Carolina	23	1,732	61. 7	\$7.56	1,868	61. 7	\$7.8
Oregon.	6	767	59. 9	13.52	842	60. 0	14.1
Pennsylvania.	19	834	61. 8	11.67	751	61. 5	12.1
South Carolina	9	1,037	61. 4	7.09	957	61. 3	7.0
Tennessee	29	992	60. 7	8.88	1,002	61. 1	9.1
Texas.	12	1,380	60. 1	9. 97	1,362	60. 1	10.3
Virginia	23	1,289	63. 0	8. 47	1,434	63. 2	8.6
Washington	25	2,594	60. 0	12. 74	2,211	60. 0	13.7
West Virginia	20	907	62. 2	11. 97	882	62. 2	12.1
Wisconsin	19	1,618	60. 0	11. 11	1,990	60. 0	11.4
Total	361	29, 365	61.5	10.03	28, 835	61.1	10.4
M	ACHINE	FEEDE	RS, PLAI	NING MI	ILL.		
Alabama	12	77	65. 9	\$8. 64	75	65. 8	\$8.72
Arkansas	18	205	60. 4	10. 24	197	59. 7	10.13
California	9	36	60. 0	13. 67	45	60. 0	13.73
Florida	11	45	63. 5	10. 36	45	63. 6	9.88
Georgia.	16	60	64. 1	8. 98	68	63. 9	9.33
Louisiana	22	169	60. 9	10.75	193	60. 8	10. 9
Maine	15	34	63. 0	13.42	34	63. 0	13. 4
Michigan	10	117	60. 0	11.38	83	60. 0	11. 5
Minnesota	5	59	60. 0	13.54	47	60. 0	14. 5
Mississippi	16	92	64. 4	9.24	104	60. 0	9. 2
North Carolina	19	120	61. 2	8.73	120	61. 5	9. 09
Oregon	6	53	59. 9	16.33	66	60. 0	16. 8
Pennsylvania	9	16	63. 4	14.18	16	62. 3	14. 4
South Carolina	7	35	63. 3	8.56	40	62. 7	8. 5
Tennessee	6	17	62. 5	9.90	15	64. 5	12. 0
Texas	12	99	60. 1	10. 54	93	60. 0	11. 03
Virginia	13	52	63. 8	9. 38	47	63. 6	9. 78
Washington	23	160	60. 0	14. 06	133	60. 0	15. 44
West Virginia	13	36	61. 9	13. 13	34	62. 5	12. 93
Wisconsin	11	66	60. 0	11. 59	76	60. 0	12. 08
Total	253	1,548	61.4	11.07	1,531	61.1	11.34
	S	AWYERS	s, BAND.				
Alabama.	6	7	65. 1	\$35. 27	7	65. 1	\$37.00
Arkansas.	17	33	60. 9	39. 44	33	60. 1	39.79
California.	11	26	60. 0	31. 87	26	60. 0	32.21
Florida.	6	12	63. 0	38. 50	12	63. 0	39.00
Georgia.	11	16	62. 9	35. 83	17	63. 1	36.22
Louisiana	17	35	60. 8	40. 34	36	60. 6	41. 67
Maine	13	27	61. 5	31. 50	28	61. 2	31. 64
Michigan	28	62	60. 0	30. 29	59	60. 0	30. 59
Minnesota	7	45	60. 0	43. 60	45	60. 0	43. 87
Mississippi	9	18	64. 0	36. 50	18	60. 0	35. 67
North Carolina	17	27	62. 9	30. 49	27	62. 9	30. 66
Oregon	5	8	59. 9	36. 75	8	60. 0	38. 44
Pennsylvania	16	23	62. 1	23. 78	23	61. 6	24. 18
South Carolina	8	17	61. 9	36. 18	17	61. 9	36. 35
Tennessee	29	35	60. 4	25. 74	35	60. 6	25. 95
Texas	10	21	60. 1	36. 49	20	59. 9	36. 89
Virginia	22	35	63. 0	29. 49	35	63. 0	29. 48
Washington	17	33	60. 0	33. 81	30	60. 0	34. 90
West Virginia	20	31	62. 1	27. 77	31	62. 2	27. 56
Wisconsin	19	50	60. 0	31. 03	47	60. 0	33. 53
Total	288	561	61.1	33.47	554	60.9	33.90

TABLE VII.—AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND 1913—Continued. SAWYERS, CIRCULAR.

	SAV	VYERS,	CIRCULA	AR.			
			1912			1913	
State.	Number of establish- ments.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly earnings.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly earnings.
Alabama. Arkansas. California. Florida. Georgia.	10 2 3 6 11	14 2 3 9 13	65. 1 60. 0 62. 0 64. 0 66. 0	\$32.57 32.60 33.42 34.22 26.77	14 2 3 9 14	65. 1 59. 3 62. 0 64. 0 66. 3	\$31.66 32.65 32.42 34.05 29.84
Louisiana Maine Michigan Missisippi North Carolina	9 6 6 7 7	9 6 17 10 8	61. 2 64. 3 60. 0 64. 8 60. 0	36. 17 27. 56 31. 24 33. 60 19. 50	10 6 16 10 8	61. 0 64. 3 60. 0 60. 0 60. 0	36. 33 27. 31 32. 19 33. 30 21. 30
Oregon Pennsylvania. Texas Washington Wisconsin	2 4 4 11 2	2 5 5 12 2	59. 8 60. 6 60. 0 60. 0 60. 0	48. 00 20. 70 33. 00 34. 50 32. 25	3 5 5 13 2	60. 0 60. 6 60. 0 60. 0 60. 0	44.00 21.00 33.60 35.77 32.25
Other States	2	2	61.5	29. 25	3	61.0	30.00
Total	92	119	62.4	31.03	123	62.0	31.71
		AWYERS	s, gang	1			
Alabama Arkansas California Florida Georgia.	6 8 2 5 4	8 8 2 5 4	66. 1 60. 0 60. 0 64. 8 64. 5	\$14.44 19.84 17.25 17.70 16.13	8 8 2 6 4	66. 1 59. 6 60. 0 65. 0 64. 5	\$15.19 19.46 17.25 17.85 15.95
Louisiana Michigan Minnesota Mississippi Oregon	9 3 3 6 4	9 3 5 6 4	60.6 60.0 60.0 63.0 60.0	22. 22 15. 50 22. 02 16. 20 21. 00	9 3 5 6 4	60. 4 60. 0 60. 0 60. 0 60. 0	22.38 16.00 22.02 16.10 21.38
Pennsylvania. Texas Virginia Washington Wisconsin.	2 3 2 2 8	2 3 2 2 11	62. 5 60. 3 66. 0 60. 0 60. 0	17.70 26.63 21.75 20.25 18.14	2 3 2 2 2 11	59. 5 60. 3 66. 0 60. 0 60. 0	17.70 26.63 21.75 19.50 18.63
Other States	4	5	60.0	18.30	5	61.2	18.90
Total	71	79	61.7	18.86	80	61.4	19.02
	SA	WYERS	, RESAW	V.			
Arkansas. California. Florida Georgia. Louisiana	3 7 2 2 2 4	13 2 2 4	61. 5 60. 0 60. 0 62. 8 63. 0	\$14.70 14.31 12.00 13.52 13.87	4 14 2 2 2 4	60. 0 60. 0 60. 0 62. 8 63. 0	\$14.70 14.89 13.50 13.50 13.12
Maine	5 20 5 2 11	6 30 13 2 11	60. 8 60. 0 60. 0 66. 0 62. 6	14. 25 14. 75 16. 50 12. 75 11. 15	7 25 13 2 11	60. 6 60. 0 60. 0 60. 0 62. 6	14. 53 15. 26 16. 96 13. 05 11. 73
Oregon Pennsylvania South Carolina Tennessee Virginia	6 5 6 5 11	10 9 7 6 12	60. 0 63. 0 61. 1 60. 0 62. 6	19.50 14.83 12.43 13.25 11.60	11 8 7 6 14	60.0 62.8 61.1 60.0 62.6	18.82 14.44 13.07 14.00 12.06

TABLE VII.—AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND 1913—Concluded.

SAWVEDS DESAW Concluded

			1912			1913	
State.	Number of establish- ments.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly earnings.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly earnings.
Washington	23	32	60. 0	\$19.43	31	60. 0	\$20.33
West Virginia	7	7	61. 7	17.57	7	61. 6	16.50
Wisconsin	13	26	60. 0	15.39	23	60. 0	15.99
Other States	1	1	60. 0	15.00	1	60. 0	15.00
Total	138	197	60.7	15.41	192	60.7	15.7
		SETT	TERS.				
Alabama	14	21	65.1	\$12.04	21	65. 1	\$12.66
Arkansas	19	35	60.9	15.19	35	60. 0	15.13
California	14	29	60.2	16.02	29	60. 2	16.39
Florida	12	21	63.4	13.70	21	63. 4	13.52
Georgia.	22	31	64.5	12.52	31	64. 5	12.50
Louisiana	23	55	61.1	15. 89	54	61.0	15. 66
Maine	19	42	61.6	16. 88	44	61.4	17. 17
Michigan	30	81	60.0	16. 12	77	60.0	16. 69
Minnesota	7	78	60.0	19. 70	88	60.0	20. 78
Mississippi	16	33	64.4	13. 49	32	60.0	13. 31
North Carolina.	23	42	62.1	10.94	41	62.0	11. 49
Oregon	6	10	59.9	17.10	12	60.0	17. 89
Pennsylvania.	19	32	61.6	14.97	32	61.2	15. 81
South Carolina	9	19	62.2	11.92	19	62.2	12. 39
Tennessee.	29	36	60.6	12.44	38	60.8	12. 69
Texas	12	32	60.1	15.06	28	59.9	15. 34
Virginia	23	37	62.9	12.35	37	62.9	12. 76
Washington	25	51	60.0	16.85	48	60.0	17. 41
West Virginia	20	35	62.0	15.92	35	62.1	16. 19
Wisconsin	19	60	60.0	16.59	60	60.0	16. 48
Total	361	780	61.3	15. 29	782	61.0	15.7
	TRIM	IMER O	PERATO	RS.			
Alabama	14	17	64. 8	\$9.32	17	64. 5	\$9.44
Arkansas	19	26	60. 7	10.92	27	59. 9	11.23
Salifornia	14	27	60. 2	16.02	26	60. 2	16.07
Florida	12	16	64. 1	9.85	16	64. 1	9.79
Georgia	20	21	64. 0	9.77	21	64. 0	9.98
Louisiana	23	31	61.1	13. 05	30	61. 0	13. 33
Maine	8	20	60.5	11. 44	23	60. 0	11. 28
Michigan	30	61	60.0	12. 75	58	60. 0	13. 19
Minnesota	7	26	60.0	15. 87	49	60. 0	15. 64
Mississippi	16	21	64.3	10. 27	21	60. 0	10. 29
North Carolina Dregon Pennsylvania South Carolina Fennessee	23	28	62. 2	9. 26	28	62. 2	9.58
	6	12	60. 0	18. 75	13	60. 0	19.18
	19	26	61. 5	13. 24	26	61. 3	14.08
	9	13	61. 7	10. 81	13	61. 7	11.31
	29	29	60. 3	10. 81	31	60. 6	11.18
Pexas.	12	18	60. 1	11. 60	17	60. 0	12.96
Virginia	23	25	62. 5	11. 27	26	62. 6	11.42
Washington	23	36	60. 0	18. 49	37	60. 0	19.35
West Virginia.	20	21	62. 2	14. 87	22	62. 6	15.14
Wisconsin	19	37	60. 0	12. 94	37	60. 0	13.71
Total	346	511	61.2	12.73	538	61.0	13.20

MILLWORK (SASH, DOORS, BLINDS, FRAMES, FIXTURES, AND TRIM).

SUMMARY.

This report, based on information obtained from representative establishments, shows the full-time weekly earnings, the full-time hours of labor per week, and the rates of wages per hour in the principal occupations of the millwork industry of the United States. Figures relating to full-time hours of labor per week, and rates of wages per hour are presented for the years 1907 to 1913, inclusive, and for full-time weekly earnings for the years 1910 to 1913, inclusive.

Earlier reports 1 of this Bureau have presented wages and hours

of labor in the industry from 1890 to 1912.

Full-time hours of labor per week in this industry in 1913 were 0.4 per cent lower than in 1912 and 0.9 per cent lower than in each of the years 1910 and 1911. Rates of wages per hour in 1913 were 2.4 per cent higher than in 1912, 4.9 per cent higher than in 1911, and 6.2 per cent higher than in 1910, while the full-time weekly earnings were 2 per cent higher in 1913 than in 1912, 4 per cent higher than in 1911, and 5.4 per cent higher than in 1910. The slight reduction in full-time hours of labor makes the changes in rates of wages per hour somewhat different from the changes in full-time weekly earnings.

The most significant facts concerning the several occupations covered by this report are summarized in the table below. The data for the years 1907 to 1911 were secured in 1911. Owing to the difficulty of finding establishments having records extending back for a period of years and also owing to the amount of work involved, data for 1907 to 1909 were secured from a smaller number of establishments, some of them perhaps less representative than those that have furnished data for the later years.

According to the plan of the table, direct comparisons, which are indicated by the grouping of the years within braces, can be made properly only between two or more successive years where the data are for identical establishments.

¹ Previous reports of wages and hours of labor in the millwork (sash, doors, blinds, frames, fixtures, and trim) industry have been published by the Bureau, as follows: Nineteenth Annual Report, covering 1890 to 1903; Bulletin No. 59 (July, 1905), covering 1903 and 1904; Bulletin No. 65 (July, 1906), covering 1904 and 1905; Bulletin No. 71 (July, 1907), covering 1905 and 1906; Bulletin No. 77 (July, 1908), covering 1906 and 1907; and Bulletin 129 (August, 1913), covering 1907 to 1912.

AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN EACH OF THE PRINCIPAL OCCUPATIONS IN THE MILL-WORK INDUSTRY, 1907 TO 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]

		Num-	Aver-	W	cent hose f	ull-ti	me h		Average	ee	cent o s earn assifie ages p	ning d rat	each e of	Aver-		
Occupation, and number of establishments.	Year. em- ploy- ees.	Year. ber of employees.		ber of full- em- ploy- ees. per week.		48 and under.	Over 48 and un- der 54	54	Over 54 and under 60	60	rate of wages per hour.	Un- der 14 cts.	14 and un- der 16 cts.	16 and un- der 18 ets.	18 ets. and over.	full- time week- ly earn- ings.
Laborers: 60 establishments.	1907 1908 1909 1910	1,578 1,300 1,451 1,522		3.6 5.2 5.5 4.2	3.9 3.5 3.3 4.8	9.4	16.1	70.6 66.1 64.9 66.1	\$0.1555 .1550 .1589 .1613	29.2 33.7 31.4 29.1	24.1	31.4 26.3 29.4 32.3	16.0 18.8	(1) (1) (1) (1) (1)		
223 establishments	${1910 \atop 1911}$	4,885 4,762	57.6 57.6	4.4 5.0	6.1 4.7	12.6 12.5		55.5 56.4	.1705 .1712	16.4 16.0	20.2 19.7	32.8 33.0		\$9.73 9.79		
253 establishments	{1911 1912	4,456 4,121	57.6 57.4	4.5 4.4	3.8 6.8	14.4 17.1	20.8 17.2	² 56.5 54.5	.1722 .1781	14.1 10.1	20.2 17.0	33.5 36.3		9.86 10.15		
319 establishments	${1912 \atop 1913}$	4,641 5,144	57.0 56.7	5.7 6.3	7.9 10.9		20.8 19.9		.1793 .1859	7.9 5.6	17.2 10.8	36.7 35.5	38.3 48.2	10.15 10.47		
										Un- der 20 cts.	20 and un- der 30 cts.	30 and un- der 40 cts.	40 ets. and over.			
Bench hands: 62 establishments.	1907 1908 1909 1910	1,076 945 1,041 1,083	55.6 55.7		7.2 6.2 7.2 10.6	28.1 28.6	10.1	$\frac{41.6}{41.6}$.2976 .2945 .2944 .3047	9.0 9.4 8.5 7.6	49.4 48.9 50.6 44.3	27.3 27.7 27.5 33.9	14.0 13.6	(1) (1) (1) (1)		
226 establishments	{1910 1911	3,695 3,553	55.1 55.2	12.4 13.8	10.1 8.6	28.6 28.0		27.8 28.9	.3072	5.5 5.3	44.0 42.1	39.0 41.1				
267 establishments	${1911 \atop 1912}$	4, 131 4, 148	55.1 54.8	13.6 14.8	10.7 16.2	29.4 23.5		³ 27.9 28.3	.3096	5.8 6.7	40.1 38.0	42.9 43.6				
343 establishments Machine hands:	${1912 \atop 1913}$	4,947 5,033	54.6 54.5		14.7 17.0	24.0 22.4		24.4 23.1	.3108 .3153	6.2 5.1	36.9 37.2	44.9 37.3				
62 establishments.	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	1,508 1,372 1,488 1,580	56.9 57.1 57.2 57.3	10.8	2.5 2.4 2.5 2.5	19.9 18.5			. 2527 . 2494 . 2514 . 2570	27.1 30.0 27.9 25.3	50.4 48.4 49.8 49.3	14.8 13.9 14.8 17.7	7.7 7.7 7.4 7.9	(1) (1) (1) (1)		
232 establishments	${ 1910 \atop 1911 }$	5,438 5,363	57.0 56.8	6.4 9.5	6.8	18.3 15.8		49.9 49.4	. 2551 . 2605	27.5 24.7	44.5 44.8	22.1 23.7	5.9 6.8			
268 establishments	${1911 \atop 1912}$	5,615 5,054	56.7 56.2	9.6 11.6	6.2 9.7	16.6 16.4		4 48.2 43.1	.2625 .2698	24.9 20.8	43.3 42.8	24.8 28.5	7.0 8.0	14.63 14.88		
342 establishments	{1912 1913	5,970 6,074	55.8 55.5					37.2 33.0	. 2731 . 2856	18.8 15.0	41.7 42.2	31.8 30.9	7.8 11.9	14.97 15.57		

Not computed.

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² Including 0.1 per cent working over 60 hours.
3 Including 0.9 per cent working over 60 hours.
4 Including 0.2 per cent working over 60 hours.

The data are for one pay-roll period in each year, the period ending nearest May 15 being selected, except in a very few establishments in which conditions in May were abnormal.

The figures for the years from 1907 to the first presentation for 1912 are reproduced from Bulletin No. 129, except the average full-time weekly earnings for 1910 to 1912, which figures have been computed for this Bulletin from data gathered for those years. The average full-time weekly earnings have not been computed for the period 1907 to 1910, owing to the lack of funds. It will be observed that the average full-time weekly earnings generally are not exactly the same as the product of the average rate of wages per hour and the average full-time hours per week. This difference is explained and illustrated on page 16.

In 1913 the average full-time weekly earnings in the three occupations were: Laborers, \$10.47; bench hands, \$16.90; and machine hands, \$15.57. The full-time hours of labor per week in 1913 varied in the several establishments from less than 48 to 60, the average being for laborers, 56.7; for bench hands, 54.5; and for machine hands, 55.5 hours per week.

All of the employees for whom figures are given in this report are males.

Wages and hours of labor vary materially in different establishments, hence the inclusion or exclusion of an establishment in a group. if it differs greatly from the average, may raise or lower the average for the group. Thus, referring to the table on page 81, it is seen that the average full-time weekly earnings of bench hands in 267 establishments decreased from \$16.76 in 1911 to \$16.74 in 1912. In 343 establishments there was an increase from \$16.68 in 1912 to \$16.90 in 1913. The inclusion of 76 more establishments, therefore, changed the average weekly earnings for 1912 from \$16.74 to \$16.68. Consequently it would not be a correct comparison to state that the increase was only from \$16.76 in 1911 to \$16.90 in 1913. The movement from one year to another is indicated with a greater degree of certainty by the figures for identical establishments. The difference between \$16.76 and \$16.74 represents the change between 1911 and 1912 and the difference between \$16.68 and \$16.90 represents the increase from 1912 to 1913, as nearly as can be determined from the data available. In the table the comparable data for identical establishments are bracketed together.

Owing to the change in the number of establishments from year to year, it is difficult to make a comparison of the actual data over a period of several years, or to get an exact measure of the changes. To aid in the making of such a comparison, relative (or index) numbers have been computed from the averages in the preceding table, for fultime hours per week, rates of wages per hour, and full-time weekly earnings for each occupation for the years 1910 to 1913, inclusive. These relative or index numbers are simply percentages in which the figures for 1913 are taken as the base, or 100 per cent. The relative for

each year is the per cent that the average in that year is of the average for 1913, as determined by the method explained on page 18. Thus in the table below the full-time weekly earnings of bench hands in 1910 were 97.5 per cent of the full-time weekly earnings in 1913.

It will be observed that the general tendency of each occupation is toward a reduction of working hours and an increase in rates of wages per hour and of earnings per full week. No data are available to show the amount of work afforded employees each year or the variation from year to year. The relative full-time hours per week indicate the change in the hours of labor of employees working full time, but do not reflect in any way the greater or less amount of full-time work afforded. This point is further discussed on page 15.

RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS IN THE MILLWORK INDUSTRY, 1910 TO 1913.

	Bench hands.				Laborers.		Machine hands.			
Year.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative full-time weekly earnings.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative full-time weekly earnings.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative full-time weekly earnings.	
1910 1911 1912 1913	100. 6 100. 7 100. 2 100. 0	97. 8 98. 2 98. 6 100. 0	97. 5 98. 8 98. 7 100. 0	100. 9 100. 9 100. 5 100. 0	92. 9 93. 3 96. 5 100. 0	93. 6 94. 2 96. 9 100. 0	101. 8 101. 4 100. 5 100. 0	91. 1 93. 0 95. 6 100. 0	92. 8 94. 5 96. 2 100. 0	

(1913=100.0.)

A like table of relative numbers is next shown for the industry as a whole, as determined by a combination of the data for the several occupations. Data were obtained for the principal occupations of the industry but not for all occupations. The method of computing this table is explained on page 19.

RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS IN THE MILLWORK INDUSTRY, 1910 TO 1913.

(1913=100.0.)

Year.	Relative	Relative	Relative
	full-time	rates of	full-time
	hours per	wages	weekly
	week.	per hour.	earnings.
1910.	100. 9	94. 2	94. 9
1911.	100. 9	95. 3	96. 2
1912.	100. 4	97. 7	98. 0
1913.	100. 0	100. 0	100. 0

From the table it is seen that the relative or index number for full-time hours per week decreased from 100.9 in 1910 to 100 in 1913, or, in other words, full-time hours per week in 1910 were 100.9 per cent of what they were in 1913. The relative or index

number for rates of wages per hour increased from 94.2 in 1910 to 100 in 1913. Owing to the reduction of hours, the increase in full-time weekly earnings was slightly less than the increase in wages per hour, the increase being from an index of 94.9 in 1910 to 100 in 1913.

In examining the relative or index numbers for the several occupations, and for the industry as a whole in the two tables above, it will be observed that they have been computed with 1913 taken as the base, or 100 per cent. In the preceding reports of the Bureau relating to this industry, relative numbers for rates of wages per hour and for hours of labor per week were presented back to 1890 and the base, or 100 per cent, was not the average rate of wages per hour or the average full-time hours per week in any one year, but the average rate of wages per hour and the average full-time hours per week for the 10-year period 1890–1899. The table of such relative numbers for the years 1890 to 1912 appears on page 156.

The reasons for changing the base of the relative numbers to the most recent year are stated on pages 11 and 16. The relative numbers for the occupations shown in the new series here presented differ from those of the old series shown in preceding reports because of the change of the base, but the ratio existing between any two years is the same in both series. The relative numbers for the industry as a whole have likewise been recomputed with 1913 as the base.

In addition to making a change of the base year, a change has also been made in the method of computing the industry relatives, and because of this change the relatives here presented not only differ from the relatives computed by the old method, but shows a slightly different ratio of change from year to year. In Bulletin No. 129, the relative numbers for the industry were averages of the relative numbers of the several occupations. For each year, for example, the relative rate of wages per hour of each occupation was multiplied (weighted) by the number of employees in that occupation, the products thus computed for the several occupations were added, and the sum of the products for all occupations divided by the total employees in all occupations.

In computing the relative numbers from 1910 to 1913 for the industry as a whole as presented in this Bulletin, a combination was made, not of the relative numbers for the several occupations, but of the actual hours and wages of the several occupations. For each year the average hours and wages were computed for all employees in all ocupations, and the average for each preceding year was compared with the average for 1913 to determine the index. It was deemed necessary to make this change in method because a change

in the industry is not always reflected by the relative computed by averaging the occupation relatives. This reason is more fully explained on page 19.

In addition to the relative numbers shown for the several occupations and for the industry, three tables are here presented showing the per cent of increase or decrease in the full-time hours of labor per week, rates of wages per hour, and full-time weekly earnings in 1913 as compared with each preceding year back to 1910. The figures of these tables are computed from the relative numbers shown on page 83, and simply reverse the method of comparison. Each of these tables also shows the per cent of increase or decrease in 1912 as compared with 1911, and in 1911 as compared with 1910. Referring to the first line of the first table, it is seen that the fulltime hours of bench hands in 1913 were 0.2 per cent lower than in 1912, 0.7 per cent lower than in 1911, and 0.6 per cent lower than in 1910. Further, it is seen that the full-time hours of labor in this occupation were 0.5 per cent lower in 1912 than in 1911, and 0.1 per cent higher in 1911 than in 1910. The figures of the several tables are read in like manner.

PER CENT OF INCREASE OR DECREASE IN FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL TIME WEEKLY EARNINGS, 1913 COMPARED WITH EACH OF THE THREE YEARS PRECEDING, 1912 COMPARED WITH 1911, AND 1911 COMPARED WITH 1910.

FULL-TIME HOURS PER WEEK.

	Per cent high	ner (+) or lo	wer (–) in	Per cent higher (+) or lower (-) in—		
Occupation.	1910	1911	1912	1912 than in 1911	1911 than in 1910	
Bench hands. Laborers. Machine hands	-0.6 9 -1.8	$ \begin{array}{c c} -0.7 \\9 \\ -1.4 \end{array} $	-0.2 5 5	-0.5 4 9	+0.1 (1) 4	
The industry	9	9	4	5	(1)	
Bench hands. Laborers Machine hands.	+2. 2 +7. 6 +9. 8	+1.8 +7.2 +7.5	$+1.4 \\ +3.6 \\ +4.6$	$+0.4 \\ +3.4 \\ +2.8$	+0.4 + .4 +2.1	
Laborers	+7.6	+7.2	+3.6	+3.4	+ .4	
The industry.	+6.2	+4.9	+2.4	+2.5	+1.2	
FULL-TIM	E WEEKL	Y EARNIN	IGS.			
Name and the same		+1.2	+1.3	-0.1	+1.3	
Bench hands. Laborers Machine hands.	+2.6 +6.8 +7.8	+6. 2 +5. 8	+3.2 +4.0	$+2.9 \\ +1.8$	+ .6	

1 No change.

EXPLANATION OF SCOPE AND METHOD.

This report on millwork includes establishments engaged in the manufacture of sash, doors, blinds, frames, fixtures, and building trim. The information was secured from pay rolls of the various establishments by the agents of the Bureau. The number of establishments from which data were secured has varied considerably during the period included in this report, as follows:

1907 to 1910	62	identical	establishments.
1910 and 1911	232	identical	establishments.
1911 and 1912	269	identical	establishments.
1912 and 1913	344	identical	establishments.

The data for 1907 to 1911 were secured in 1911 and the number of establishments included in the full period from 1907 to 1910, inclusive, was limited owing to the difficulty of finding establishments that had preserved records for those years, and also to the large amount of work involved. The establishments vary from year to year, as establishments go out of business or cease to be representative, and new establishments must be substituted in the wage study. Occasionally occupations are dispensed with in a mill, or new occupations are introduced, and sometimes data are not available for all occupations desired from a mill.

Data for a group of establishments in any year will not be precisely the same as for a different group of establishments in the same year, even though most of the establishments may be identical in both groups. In using the actual figures in this report, comparison from year to year should be made only between data coming from identical establishments. In the tables the data from identical establishments are bracketed together. Data from an establishment are not included in the report unless the information covers at least two years.

In selecting establishments from which to secure data, the Bureau undertook to represent all States in which millwork is of material importance, the measure of importance being the number of employees as reported by the United States Census of Manufactures. The table which follows shows by States the number of employees in this industry as reported by the United States Census Office for 1910; the total number on the pay roll in the establishments from which the Bureau secured data for 1913; and the number in the selected occupations for whom data for 1913 are shown.

TOTAL NUMBER OF EMPLOYEES IN THE MILLWORK INDUSTRY AND NUMBER OF EMPLOYEES IN ESTABLISHMENTS FOR WHICH DATA ARE SHOWN FOR 1913.

	Number of employees		ents for why the Burea for 1913.	
State	reported by United States	Number of	Number of	employees—
	census of 1910. ¹	establish- ments.	On pay roll.	For whom data are shown.
New York Pennsylvania Illinois.	15, 126 9, 267 8, 710 5, 846	62 86 36 38	4, 167 3, 112 2, 443 2, 005	2, 913 1, 977 1, 718 1, 388
Michigan California Wisconsin Georgia	6,793 6,341 6,673 3,410	33 19 15 12	1, 803 1, 996 4, 173 1, 110	1, 130 1, 242 2, 702 666
Massachusetts Minnesota Iowa Other States²	3, 296 3, 154 3, 440 40, 336	21 9 13	1,015 981 1,811	724 684 1, 107
Total	112,392	344	24, 616	16, 251

¹ The designation used by the United States census is "Lumber, planing mill products," including sash, doors, and blinds.

² Including States having less than 3,000 each.

According to the census of 1910, more than 64 per cent of the total number of employees in the industry are found in the States in which the establishments furnishing information to the Bureau of Labor Statistics are located. The number of employees in the establishments from which the Bureau secured 1913 data was equal to 21.9 per cent of the total in the industry in 1910, and the number for which the Bureau presents detailed information for 1913 was equal to 14.5 per cent of the total in the industry in 1910. The pay rolls copied were for one week, half month, or a month, according to the custom of the establishment, and for the pay-roll period nearest May 15, except in a few establishments where abnormal conditions made it necessary to take a pay roll for some other time of the year.

The full-time hours of labor per week shown in the tables of the report are the regular hours of work of the occupations under normal conditions in the establishments. The working time is the hours on duty, including intervals of waiting for work. The full-time hours per week and the relatives based thereon do not in any way indicate the extent of unemployment. Employees may work overtime, broken time, or be laid off, or a temporary reduction may be made in working hours without such change affecting the full-time hours per week as presented in this Bulletin.

The rates of wages per hour appearing in the tables are the wages of time workers; no pieceworkers were found in the establishments visited. The time rates by the day or week have been reduced to rates per hour in order to place all rates on a uniform basis.

The full-time weekly earnings are the earnings per week of employees working full time, or they are the earnings of broken time converted into assumed earnings for a full week. In considering changes in full-time earnings per week notice should also be taken of full-time hours of labor per week.

The averages of full-time hours per week, rates of wages per hour, and full-time weekly earnings are computed by adding the data for each individual employee and dividing the total by the number of employees.

In studying the tables, it will be observed that the average fulltime weekly earnings are not exactly the same as the result that would be obtained by multiplying the average rate per hour by the average hours per week, owing to the change in the relative weight of the items. This point is illustrated on page 16.

The change in the basis of comparison in computing the relative numbers from the average of 1890–1899 to 1913 is referred to on page 11. A more extended explanation is also given on pages 16 to 18. The relative rates of wages per hour and the relative full-time hours per week from 1890 to 1912 on the basis of 1890–1899 equals 100, published in Bulletin No. 129, are reproduced in this Bulletin on page 156.

The method used in computing the relative or index numbers for the several occupations can best be explained by an illustration. Such an illustration is given on page 18.

A word of caution is given as to the use of relative numbers. The per cent of increase or decrease from one year to another is not the difference between the relative numbers for the years. Thus, as shown in the table on page 83, the relative full-time weekly earnings in the millwork industry increased from 94.9 in 1910 to 98 in 1912, an increase of 3.1 in the relative for 1912 over the relative for 1910, which number (3.1) is 3.3 per cent of 94.9, thus making the increase in full-time earnings per week of 3.3 per cent in 1912 over 1910.

The base for the computation of the relative numbers of the several occupations, as stated above, has been changed from the average of 1890–1899 to 1913. The same change of base has been made in computing the relative numbers for the industry as a whole. In addition to the change of base in computing the relative numbers for the industry, a change has been made in the method of computation. The relative numbers for the industry here presented, covering 1910 to 1913, are computed directly from the average hours of labor, rates of wages per hour, and weekly earnings of all employees in all occupations combined. In other words, the relatives for the industry as a whole have been computed for this report in the same manner as the

relatives for each occupation. This change of method is explained and illustrated on pages 18 to 23.

In addition to the text tables presented in the summary, seven general tables are given, namely:

Table I.—Average and classified rates of wages per hour in the United States, by years, 1907 to 1913.

Table II.—Average and classified rates of wages per hour in each year, by States, 1912 and 1913.

Table III.—Average and classified rates of wages per hour in each State, by years, 1912 and 1913.

Table IV.—Average and classified full-time hours of work per week in the United States, by years, 1907 to 1913.

Table V.—Average and classified full-time hours of work per week in each year, by States, 1912 and 1913.

Table VI.—Average and classified full-time hours of work per week in each State, by years, 1912 and 1913.

Table VII.—Average full-time hours of work per week and average full-time weekly earnings, by States, 1912 and 1913.

In Tables I and IV, in addition to actual data, percentages computed therefrom are given. The data from these two tables are summarized in the text table on page 81.

Tables III and VI repeat the data for the several States given in Tables II and V, rearranged for the convenience of the reader.

DESCRIPTION OF PRINCIPAL PRODUCTIVE OCCUPATIONS.

This industry as used in this report includes establishments engaged in the manufacture of sash, doors, blinds, window frames, doorframes, moldings, stair material, newels, mantels, store fixtures, and all kinds of builders' trim or finish.

A large number of the establishments are comparatively small and confine their operations wholly to custom work. Many of them are operated in connection with a retail lumber business. Some are run by contractors who carry on large building operations, and manufacture trim mostly for their own use. Some custom mills in the larger cities are quite extensive and employ a large number of workmen.

A few establishments manufacture for the general market. Such establishments, as a rule, employ a larger number of workmen than the custom mills or factories, have their work better systematized, and pay somewhat lower wages. The latter fact may be accounted for by the greater division of labor whereby an employee, while being expert in the operation of a particular machine or in perform-

ing certain work, is not a skilled workman generally, and so can not command as high wages as an all-round skilled mechanic.

There is hardly such a thing as a typical factory in this industry in the sense that there is a typical sawmill or cotton factory. The work may be done in a part of a building, the power being rented with the room; or the factory may consist of one or more large buildings with so much machinery that a considerable force of machinists will be regularly employed to keep the machines in order. Neither is there any regular or established ratio between the number of employees in different occupations. One establishment may have an approximately equal number of benchmen, machine woodworkers. and laborers; another will have three or four times as many benchmen as machine men; and in another the proportion will be reversed. depending on the particular class of work the factory turns out. The arrangement of the factory and machines will depend upon the class of work done, the space at the disposal of the management, and the latter's ideas as to convenience and economy. The differences that are found are between establishments rather than between different sections of the country or different localities.

The work in these factories resolves itself into three general classes, bench work, common labor, and machine work, and the occupational terms used in this report are bench hands, laborers, and machine hands. The work is practically all done by males. A few females are employed in a limited number of establishments, but the extent of their work is so insignificant that data relating to females are omitted from this report. A brief description of the terms used follows.

BENCH HANDS.

The men engaged in this occupation are known also as benchmen, bench carpenters, shop carpenters, inside carpenters, and cabinet-makers. Most of the work is done at a bench, as distinguished from building or outside carpentering work. These employees make doors, sash, blinds, window frames, cabinets, etc., fitting and putting together the parts that have previously been prepared by machine hands. They also shape and form such articles as can not be made by machines. In some shops work is done by hand that in other establishments is done by machinery. In some establishments men are employed who are able to work interchangeably at the bench and at the machines. Carpenters or bench hands differ greatly in ability, some being able to do all kinds of difficult work, while others can do only the simpler kinds of work or, perhaps, only one or, at most, a few kinds. As a rule, the more skilled mechanics who can do all kinds of work are found in the smaller establishments.

LABORERS.

The work of those engaged in this occupation about the factory is of a miscellaneous character, such as handling lumber, material, and the finished product, and assisting other workmen, particularly machine hands. They bring material to the machines and take it away after it has been worked, assemble parts that are to be put together, pack goods in storehouse or load on wagons or in cars for shipment, and do any other common or unskilled work about the factory or yard. The number of laborers as compared with the other employees is usually larger in establishments employing a large number of machine hands.

MACHINE HANDS.

By the use of various machines, employees in this occupation plane the lumber, saw it into lengths, widths, and shapes, mortise and tenon the parts of doors, sash, blinds, etc., make moldings, turn spindles, posts, and balusters, sandpaper or smooth material or finished product, etc. A first-class machine hand is able to operate any of the machines usually found in a factory, and is supposed also to be able to keep his machines in order. In the smaller establishments, and in the shops doing a high grade of work, the machine hands often, if not generally, actually use different machines, as the character of their work may require, one man doing all the machine work on a given piece of work. In larger establishments, when there is a greater division of labor, a man will be employed continuously on one machine and may know nothing about the operation of any other. It has been found impracticable to separate these two classes of machine hands.

Table I.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]

NUMBER.

			Aver-	Aver-	En	ploy	rees e	earni	ng ead	eh el	assifie	d rate	e of w	ages	per	hour.
Occupation, and number of establishments.	Year.	ber of em- ploy- ees.	age full- time hours per week.	age rate of wages per hour.	9 and un- der 10 cts.	un-	and un- der 14 cts.	and un- der 16 cts.	and under 18 ets.	and un- der 20 cts.	20 and un- der 25 ets.	25 and un- der 30 ets.	30 and un- der 40 ets.	40 and the der £0 ets.	un- der 60	60 cts. and over
Bench hands:	(1907	1,076	EE 6	\$0, 2976				14	64	19	196	336	294	42	108	
62 establishments.	1908 1909 1910	1,076 945 1,041 1,083	55. 6 55. 7 55. 5	. 2945 . 2944 . 3047				10 7 5	54 50 42	25 31 35	185 212 188	277 314 291	262 286 367	42 46 63 74	108 86 78 79	2
226 establish- ments.	${1910 \atop 1911}$	3,695 3,553	55. 1 55. 2	.3072 .3085				15 12	118 115	72 65	718 653		1,440 1,461	233 262	162 119	29 24
267 establish- ments.	${1911 \atop 1912}$	4,131 4,148	55.1 54.8	.3096 .3107		3	2	15 26	149 159	74 92	730 710		1,772 1,808	297 304	146 175	24
343 establishments.	${1912 \atop 1913}$	4, 947 5, 033	54.6 54.5	.3108 .3153		3	5 2	29 17	176 140	96 97	828 872		2, 219 1, 875	395 782	195 242	
60 establishments.	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	1,578 1,300 1,451 1,522	58. 5 58. 2 58. 0 58. 3	.1555 .1550 .1589 .1613		158 173 163 129	265 293	416 313 296 259	495 342 427 491	67 70 110 136	99 84 94 140	20 28 29 25	20 25 39 29			
223 establish- ments.	${1910 \atop 1911}$	4, 885 4, 762	57.6 57.6	.1705		281 221	520 542		1,604 1,571	476 467	721 739	231 231	64 55			
253 establish- ments.	${1911 \atop 1912}$	4, 456 4, 121	57.6 57.4	.1722	3	201 115	429 302		1, 493 1, 494	492 510	675 663	201 257	67 69	8		
319 establish- ments. Machine hands:	{1912 1913	4, 641 5, 144	57. 0 56. 7	. 1793 . 1859	3	106 88	256 198		1,701 1,824	642 719	790 1,342	266 318	72 83	8 15		
62 esta blish- ments.	1907 1908 1909 1910	1,508 1,372 1,488 1,580	57.2	. 2527 . 2494 . 2514 . 2570			6 6 9 8	101 98 81 69	235 218 210 197	66 90 116 125	382 320 377 397	378 344 364 382	223 191 220 279	38 41 45 53	71 55 57 61	6
232 establishments.	{1910 1911	5, 438 5, 363		. 2551 . 2605		5 6	28 29	230 229	839 755		1, 259 1, 264			199 242	89 98	2:
268 establishments.	${1911 \atop 1912}$	5, 615 5, 054		. 2625		6 3	28 21	240 199	808 559		1, 282 1, 116		1,394 1,438	253 257	$\frac{108}{112}$	36
342 establish- ments.	{1912 1913	5, 970 6, 074				3	26 22	214 125	592 426		1, 279 1, 243			306 553		3

Bench hands:							7									
00 1 7 7 7 1	[1907	1,076		\$0.2976				1.3			18.2				10.0	0.3
62 esta blish- ments.]1908 1909	945	55. 6 55. 7	. 2945		• • • •		1.1		3.0	19.6 20.4		27.7 27.5		$9.1 \\ 7.5$	
	1910	1,083	55.5	.3047				.5	3.9				33.9			
226 establish-	(1910	3,695	55.1	.3072				.4			19.4		39.0			
ments.	(1911	3,553	55.2	. 3085				.3	3.2	1.8	18.4	23.7	41.1	7.4	3.3	.7
267 establish-	£1911	4, 131	55.1	. 3096				.4	3.6		17.7					
ments.	1912	4, 148	54.8	.3107		0.1	(1)	.6	3.8	2.2	17.1	20.9	43.6	7.3	4.2	(1)
343 establish-	ſ1912	4,947	54.6	.3108		.1			3.6							
ments. Laborers:	(1913	5,033	54.5	. 3153		• • • •	(1)	.3	2.8	1.9	17.3	19.8	37.3	15.5	4.8	.1
	(1907	1,578	58.5	.1555				26.4								
60 esta blish- ments.	1908 1909	1,300	58. 2 58. 0	.1550				24.1 20.4								
ments.	1910	1,451 1,522	58.3	. 1613												
				1 Less	than	one	-ten	th of	1 per	cent						

TABLE I.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913—Concluded.

PER CENT—Concluded.

			Aver-		En	aploy	rees	earni	ng ea	ch cl	assifie	ed rate	of w	ages	per	hour
Occupation, and number of establishments.	Year.	Number of employ-ees.	full- time	Average rate of wages per hour.	9 and un- der 10 cts.	un- der 12	un- der 14	16	un- der 18	18 and un- der 20 cts.	un- der 25	25 and un- der 30 cts.	30 and un- der 40 ets.	40 and un- der 50 cts.		60 cts. and over
Laborers—Concld. 223 establish- ments.	{1910 1911	4, 885 4, 762		\$0.1705 .1712				20. 2 19. 7			14.8 15.5		1.3			
253 establishments.	{1911 1912	· 4, 456 4, 121	57. 6 57. 4			4.5		20. 2 17. 0			15.1 16.1	4.5 6.2		0.2		
319 establishments.	{1912 1913	4, 641 5, 144	57.0 56.7			2.3 1.7	5.5	17. 2 10. 8	36. 7 35. 5	13.8 14.0	17.0 26.1	5.7 6.2	1.6 1.6			
Machine hands: 62 establishments.	{1907 1908 1909 1910	1,508 1,372 1,488 1,580	57.1 57.2	. 2494				7.1 5.4	15.6 15.9 14.1 12.5	6.6	25.3	25.1 24.5		3.0	4.0	0.
232 establishments.	{1910 1911	5, 438 5, 363				.1			15. 4 14. 1			21.3 21.2			1.6 1.8	:
268 establish- ments.	{1911 1912	5, 615 5, 054				.1			14. 4 11. 1			20. 5 20. 7	24. 8 28. 5			
342 establishments.	{1912 1913	5, 970 6, 074				.1	.4					20. 2 21. 7	31.8 30.9			

¹ Less than one-tenth of 1 per cent.

TABLE II.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913.

BENCH HANDS.

				BEI	NCH	HA	ND	S.								
				Aver-	Nu	mber	r of e	mplo	oyees		ing ea	ch cla	ssifie	d rat	e of v	wages
Year and State.	Num- ber of estab- lish- ments.	em-	full- time	age rate of wages per hour.	Un- der 10 cts.	and under 12 cts.	and un- der 14 cts.	and un- der 16 cts.	16 and un- der 18 ets.	and un- der 20 cts.	20 and un- der 25 cts.	25 and un- der 30 ets.	30 and un- der 40 ets.	and un-		
1912.		Britis!														N. I
California Georgia Illinois Iowa Massachusetts Michigan	18 12 36 13 21 33	316 160 675 248 256 353	58. 0 54. 1 57. 9 51. 2	.3647 .2650 .3427		3	i	2	6 5 4 8	14 4 6	5 41 16 70 30 42	76	134 34 515 82 101 200	75 68 1 72 22	90	
Minnesota New York Ohio Pennsylvania Wisconsin	9 62 38 86 15	174 1,092 406 846 421	52. 6 55. 1 53. 9	. 3229 . 2893 . 2956			3	3 9 14	3 10 1 28 111	1 3 1 21 46	63 184 56 173 148	69 197 147 160 80		2 89 7 59	95	1
Total	343	4,947	54.6	.3108		3	5	29	176	96	828	999	2,219	395	195	2
1913.						1										
California	18 12 36 13 21 33	350 178 639 283 250 351	57. 7 53. 2 57. 9 51. 0	. 2609				2	7 17 2 6		37 25 87 27 33	7 84 72 72 42 65	99 106	440 1 62 76	2 ₅	
Minnesota New York Ohio Pennsylvania Wisconsin.	9 62 38 86 15	176 1,066 451 824 465	52.7 54.8 54.1	.3154 .2984 .3006			2	2 2 8 3	1 3 26 78	3 19	40 162	145	555 223 377	56 21 86		1
Total	343	5,033	54.5	. 3153			2	17	140	97	872	999	1,875	782	242	7
					LAB	OR	ERS	3.	1					1	-	
1912.	,		1		-	1		1	1	1	1/		1	1	1	1
California. Georgia. Illinois. Iowa. Massachusetts. Michigan.	19 12 33 13 19 32	231 434 284 161	57. 6 56. 3 58. 5 51. 5	. 1860 . 1797 . 1943	3		119 1 10	14 8 39 16 44	19 1 192 137 34 157		142 105 60 40 84	5	 i	8		
Minnesota New York Ohio Pennsylvania Wisconsin.	9 60 38 69 15	697 325 377	55. 5 55. 5 55. 9	. 1798 . 1766 . 1721		 8 1 3	9	21 172 49 89 345	66 229 117 128 621	12 60 94 84 95	66 146 55 52 40	51	i			
Total	319	4,641	57.0	. 1793	3	106	256	797	1,701	642	790	266	72	8		
1913.				1		3 11										
California. Georgia. Illinois Iowa. Massachusetts. Michigan.	19 12 33 13 19 32	541 399 174	57. 1 55. 5 58. 7 51. 0	. 1234 . 1899 . 1803 . 1925		81	134 5 4	34 18 45 24 14	4 2 206 181 31 125	104 78 40 36	148 194 94 61 159	19 1 13	83	15		
Minnesota New York	9 60		54.5		::::	i	10	28 100 13	99 185 85	22 122 60	106 224 197	6 44 7				
Ohio. Pennsylvania Wisconsin	38 69 15	365	55.8	. 1791		2 4	18 21	47 234	768	73 174	84 75	3 2				

TABLE II.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913—Concluded.

MACHINE HANDS.

			Aver-		Nu	mbe	r of e	empl	oyees		ing ea	ch cla	ssifie	d rat	e of	wages
Year and State.	Number of establishments.	ber of em- ploy-		age rate of wages per hour.	Under 10 cts.	and under 12 cts.	and un- der 14 cts.	der 16	and under 18 cts.	18 and un- der 20 cts.	un- der 25	and un- der 30 cts.	30 and un- der 40 ets.	40 and un- der 50 cts.	50 and un- der 60 cts.	60 cts. and over,
1912.																
California Georgia Illinois Iowa Massachusetts Michigan	19 12 36 13 21 33	232	57.7			3	15	31 5 17	5 30 42 2 40	5 2 34 10 34	52	37 61 85 108 53 89	197 25 286 49 120 132	62 83 70 14	74	37
Minnesota New York Ohio Pennsylvania Wisconsin	9 62 38 84 15		59. 6 53. 7 55. 1 54. 6 60. 0	. 2960 . 2835 . 2750			3 7	9 8 17 127	16 26 4 55 372	12 12 9 29 139	93 230 94 183 272	87 244 166 185 93	38 500 215 316 19	43 7 27	42	1
Total	342	5,970	55.8	. 2731		3	26	214	592	286	1,279	1,208	1,897	306	121	38
1913.																
California Georgia Illinois Iowa Massachusetts. Michigan	19 12 36 13 21 33	237 538 425 300		.2274 .3523 .2380 .3271			12	24 6	28 1 42 5 36	6 34 9 24	21 54 57 144 39 85	42 77 78 139 56 89	167 36 110 58 119 148	72 290 2 68 34	86 	34
Minnesota New York Ohio Pennsylvania Wisconsin	9 62 38 84 15	1,161 569 788	59. 8 53. 1 54. 9 54. 6 59. 9	.3037			2 3 4	9 5 11 14 45	13 21 23 46 211	9 16 6 23 213	85 201 83 149 325	91 254 155 207 131	40 583 274 309 30	40 16 31	37 1 6	2
Total	342	6,074	55.5	. 2856			22	125	426	340	1,243	1,319	1,874	553	136	36

TABLE III.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]

BENCH HANDS.

		3.7	Aver-	Aver-	Nu	mber	of e	mple	oyees		ng ea hour.	eh ela	ssified	l rate	e of w	7ages
State, and number of establishments.	Year.	Number of employees.	time	age rate of wages per hour.	Under 10 cts.	un- der	and un- der 14 cts.	un- der 16	and under 18 ets.	18 and un- der 20 cts.	20 and un- der 25 cts.	25 and un- der 30 ets.	30 and un- der 40 cts.	un-	un- der 60	60 ets. and over.
California:																
18 establish- ments. Georgia:	{1912 1913	316 350		\$0.4322 .4660							5	11 7	134 133	75 40		
12 establish-	(1912	160	58.0	. 2493		3	1	2 2	6		41	73	34			
ments.	(1913	178	57.7	. 2623				2	7		- 37	84	48			
36 establish-	£1912	675		.3647							16	75				
ments.	1913	639	53. 2	. 3697							25	72	97	440	2	3
13 establish- ments.	{1912 1913	248 283	57.9 57.9						5 17	14 7	70 87	76 72		1 1		
Massachusetts: 21 establishments.	{1912 1913	256 250							4 2	4 6	30 27	38 42		72 62	7 5	
Michigan: 33 establishments.	{1912 1913	353 351	55. 1 54. 8	.3043				1	8 6		42 33					
Minnesota: 9 establish- ments.	{1912 1913	174 176						2	3	1 1	63 61	69 68				
New York: 62 establish- ments.	{1912 1913	1,092 1,066		.3229			3 2		10			197 169				
Ohio: 38 establish- ments.	{1912 1913	406 451	55.1	. 2893					1	1 3	56 40					
Pennsylvania: 86 establish- ments.	{1912 {1913	846 824					1	9 8			173 162					
Wisconsin: 15 establishments.	{1912 {1913	421 465	60.0	. 2107				14	111	46	148	80	22			

LABORERS.

	1	1		1	1	1	1	- 1		1	1					-
California:										E Y B						
19 establish-	J1912	441		\$0.2513					19		142					
ments.	(1913	470	.52.8	. 2587					4	10	148	210	83	15		
Georgia:											9 12	1			-	
12 establish-	£1912	231	57. 6						1 2							
ments.	1913	251	57.1	. 1234		81	134	34	2							
Illinois:	(1010	101	F0 0	1000	13			0	100	104	105	5				
33 establish-	§1912	434	56.3					18	192			19				-
ments.	1913	541	55. 5	.1899				18	206	104	194	19				•
13 establish-	(1912	284	58. 5	.1797	1 3			39	137	48	60					
ments.	1913	399	58. 7					45	181		94	1				
Massachusetts:	(1313	000	50. 1	. 1009				40	101	. 10	94					-
19 establish-	(1912	161	51. 5	. 1943			1	16	34	50	40	19	- 1			
ments.	1913	174	51.0				1 5	24	31	40	61	13	-			
Michigan:	(1010	111	01.0	. 1020					OI	10	01	10				
32 establish-	(1912	359	57. 6	.1775			10	44	157	59	84	5				
ments.	11913	351	57.4				4	14	125		159	13				
Minnesota:							N.									
9 establish-	(1912	166	59.6	. 1818			1	21	66	12	66					
ments.	11913	261	59.7	.1868				28	99	22	106	6				
New York:	1													19-3		
60 establish-	J1912	697	55. 5			8			229		146		1			
ments.	1913	686	54. 5	. 1879		1	10	100	185	122	224	44				
Ohio:			100				-	- 3							100	
38 establish-	J1912	325	55.5			1	9		117		55					
ments.	11913	368	54.8	. 1957			6	13	85	60	197	7				

TABLE III.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913—Concluded.

				LABOI	RER	S-0	Conc	lude	d.							
		Name	Aver-	A verage	Nu	mbe	rofe	mplo	yees		ng ea	c h cla	ssified	l rate	of	wages
State, and number of establishments.	Year.	Num- ber of em- ploy- ees.	full- time	rate of wages per hour.	Under 10 cts.	un- der	der 14	un- der 16	16 and un- der 18 ets.	18 and un- der 20 cts.	20 and un- der 25 cts.	and under 30 ets.	30 and un- der 40 ets.	40 and un- der 50 cts.	50 and un- der 60 cts.	60 cts. and over.
Pennsylvania: 69 establishments. Wisconsin: 15 establish-	(1912 (1913 (1912	377 365 1,166	55.8			3 2	21 18 65	-	128 138 621	84 73 95	52 84 40	3				
ments.	1913	1,278				4	21	234	768		75	2				
				MAC	HIN	TE I	IAN	DS.								
California: 19 establishments.	{1912 1913	432 422		\$0.3985 .4036					5		20 21	37 42	197 167	62 72	74 86	37 34
Georgia: 12 establish- ments.	{1912 1913	232 237	57.7 57.3	. 2147		3	15 12		30 28	5 6	62 54	61 77	25 36			
Illinois: 36 establish- ments.	{1912 1913	509 538	55.0 54.0						<u>i</u>	2	53 57	85 78	286 110	83 290	2	
Iowa: 13 establishments. Massachusetts:	{1912 1913	363 425	58.7 58.6	. 2359				5 6	42 42	34 34	125 144	108 139	49 58	2		
21 establish- ments. Michigan:	{1912 1913	309 300							2 5	10 9	52 39	53 56	120 119	70 68	2 4	
33 establish- ments. Minnesota:	{1912 1913	422 428					1 1	17 11	40 36	34 24	95 85	89 89	132 148	14 34		
9 establish- ments. New York:	${1912 \atop 1913}$	255 247	59.6 59.8					9	16 13	12 9	93 85	87 91	38 40			
62 establishments.	{1912 1913	1,109 1,161	53.7 53.1	. 2960			3 2	8 5	26 21	-12 16	230 201	244 254	500 583	43 40	42 37	1 2
38 establishments. Pennsylvania:	${1912 \atop 1913}$	495 569	55.1 54.9	. 2835 . 3051				··ii	23	9 6	94 83	166 155	215 274	7 16	i	
84 establish- ments. Wisconsin:	{1912 1913	822 788					7 3	17 14	55 46	29 23	183 149	185 207	316 309	27 31	3 6	
15 establishments.	{1912 1913	1,022 959					4	127 45	372 211	139 213	272 325	93 131	19 30			

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TABLE IV .- AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913.

[The figures set opposite each bracketed group of years are for identical establishments.] NUMBER.

		NT.	Aver-	En	nploye	es who	se full	-time	hours p	er wee	ek wer	е—
Occupation, and number of establishments.	Year.	Number of employ-ees.	age full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
Bench hands:	4 400	1 070	FF 0		01			000	01	115	400	
62 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	1,076 945 1,041 1,083	55.6 55.6 55.7 55.5	82 72 69 75	61 60 62 54	78 59 75 104	11	283 266 298 278	21	115 95 104 99	436 393 433 446	
226 establishments	{ 1910 1911	3,695 3,553	55.1 55.2	164 127	294 363	289 192	86 113	1,056 996	339 292	441 443	1,026 1,027	
267 establishments	$\left\{ \begin{array}{c} 1911 \\ 1912 \end{array} \right.$	4, 131 4, 148	55.1 54.8	123 153	438 459	332 254	113 419	1, 215 975	285 333	471 382	1, 115 1, 173	39
343 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	4, 947 5, 033	54.6 54.5	168 104	670 743	324 344	405 512	1, 185 1, 127	475 438	515 603	1,205 1,162	
Laborers:	(1907	1,578	58.5	3	53	48	14	118		228	1, 114	
60 establishments	1908 1909 1910	1,300 1,451 1,522	58. 2 58. 0 58. 3	3 5 7	65 76 57	32 31 38	13 18 35	122 147 140		206 233 239	859 941 1,006	
223 establishments	$\left\{ \begin{array}{c} 1910 \\ 1911 \end{array} \right.$	4, 885 4, 762	57.6 57.6	10 10	206 230	236 164	64 59	615 593	376 388	667 632	2,711 2,686	
253 establishments	{ 1911 1912	4, 456 4, 121	57.6 57.4	4 5	197 176	80 93	88 186	642 704	371 323	557 388	2,514 2,246	3
319 establishments	{ 1912 1913	4, 641 5, 144	57.0 56.7		265 325	126 210	240 353	842 881	377 392	590 631	2,201 2,352	
Machine hands:	(1907	1 500	56.9	51	124	38		297	15	157	826	
62 establishments	1907 1908 1909 1910	1,508 1,372 1,488 1,580	57. 1 57. 2 57. 3	40 40 42	108 113 110	33 37 33	7	273 275 294	15	136 156 153	782 867 941	
232 establishments	{ 1910 1911	5,438 5,363	57. 0 56. 8	52 39	296 472	289 229	79 100	993 850	392 384	621 639	2,716 2,650	
268 establishments	$\left\{ \begin{array}{l} 1911 \\ 1912 \end{array} \right.$	5,615 5,054	56.7 56.2	39 57	502 531	249 193	99 298	934 831	459 462	626 502	2,693 2,180	14
342 establishments	$\left\{\begin{array}{c} 1912 \\ 1913 \end{array}\right.$	5,970 6,074	55.8 55.5	48 48	798 824	315 339	284 400	1,028 1,088	546 581	732 791	2,219 2,003	
			P	ER C	ENT.							
Bench hands:	4 1007	1 070		7.0		-		00.0	0.0	10 7	40.5	
62 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	1,076 945 1,041 1,083	55. 6 55. 6 55. 7 55. 5	7.6 7.6 6.6 6.9	5.7 6.3 6.0 5.0	7.2 6.2 7.2 9.6	1.0	26. 3 28. 1 28. 6 25. 7	1.5	10.7 10.1 10.0 9.1	40.5 41.6 41.6 41.2	
226 establishments	{ 1910 1911	3, 695 3, 553	55. 1 55. 2	4. 4 3. 6	8.0 10.2	7.8 5.4	2.3 3.2	28. 6 28. 0	9. 2 8. 2	11.9 12.5	27. 8 28. 9	
267 establishments	{ 1911 1912	4, 131 4, 148	55.1 54.8	3.0 3.7	10.6 11.1	8.0 6.1	2.7	29. 4 23. 5	6. 9 8. 0	11. 4 9. 2	27. 0 28. 3	0.9
343 establishments	{ 1912 1913	4, 947 5, 033	54.6 54.5	3.4 2.1	13.5 14.8	6.5	8. 2 10. 2	24. 0 22. 4	9.6 8.7	10. 4 12. 0	24. 4 23. 1	
Laborers:	(1007	1 579	EO E	0	9.4	2.0		7 17 11		14.4	70.0	138
60 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	1,578 1,300 1,451 1,522	58. 5 58. 2 58. 0 58. 3	.2 .2 .3 .5	3.4 5.0 5.2 3.7	3.0 2.5 2.1 2.5	1.0 1.2 2.3	7.5 9.4 10.1 9.2		14. 4 15. 8 16. 1 15. 7	70.6 66.1 64.9 66.1	

TABLE IV.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913—Concluded.

PER CENT—Concluded.

		27	Aver-	E	nploy	ees wh	ose full	l-time	hours	per we	ek we	re—
Occupation, and number of establishments.	Year.	Number of employ-ees.	age full- time hours per week.	Under 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
Laborers—Concluded.												
223 establishments	$\left\{ \begin{array}{c} 1910 \\ 1911 \end{array} \right.$	4, 885 4, 762	57.6 57.6	0.2	4.2 4.8	4.8	1.3 1.2	$12.6 \\ 12.5$	7.7 8.1	13.7 13.3	55. 5 56. 4	
253 establishments	{ 1911 1912	4, 456 4, 121	57.6 57.4	.1	4.4 4.3	1.8 2.3	2.0 4.5	14. 4 17. 1	8.3 7.8	12.5 9.4	56. 4 54. 5	0.1
319 establishments	{ 1912 1913	4, 641 5, 144	57.0 56.7		5.7 6.3	2.7 4.1	5.2 6.9	18. 1 17. 1	8. 1 7. 6	12.7 12.3	47. 4 45. 7	
Machine hands:									2559			
62 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	1,508 1,372 1,488 1,580	56.9 57.1 57.2 57.3	3. 4 2. 9 2. 7 2. 7	8.2 7.9 7.6 7.0	2.5 2.4 2.5 2.1	4	19.7 19.9 18.5 18.6	1.0	10. 4 9. 9 10. 5 9. 7	54.8 57.0 58.3 59.6	
232 establishments	{ 1910 1911	5, 438 5, 363	57.0 56.8	1.0	5. 4 8. 8	5.3	1.5 1.9	18.3 15.8	7.2 7.2	11. 4 11. 9	49. 9 49. 4	
268 establishments	{ 1911 1912	5,615 5,054	56.7 56.2	.7 1.1	8.9 10.5	4.4 3.8	1.8 5.9	16. 6 16. 4	8. 2 9. 1	11. 1 9. 9	48.0 43.1	.2
342 establishments	{ 1912 1913	5,970 6,074	55.8 55.5	.8	13. 4 13. 6	5.3 5.6	4.8 6.6	17. 2 17. 9	9.1 9.6	12.3 13.0	37. 2 33. 0	

TABLE V.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913.

BENCH HANDS.

	Num-		Aver-	Nur	nber of	employ	ees who	se full-t	ime hou	rs per w	reek we	re—
Year and State.	ber of estab- lish- ments.	Num- ber of em- ploy- ees.	age full- time hours per week.	Under 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
1912.												
California	18 12 36 13 21 33	316 160 675 248 256 353	51. 2 58. 0 54. 1 57. 9 51. 2 55. 1		160	12 27 90 71	327	121 23 206 75 56 83	38 4 43 91	28 71 31	23 99 83 102	
Minnesota New York Ohio Pennsylvania Wisconsin	9 62 38 86 15	174 1,092 406 846 421	59. 2 52. 6 55. 1 53. 9 60. 0	168	328 8 107	41 13 70	24 54	94 204 323	34 54 60 151	251 54 67 13	140 156 43 74 408	
Total	343	4,947	54.6	168	670	324	405	1,185	475	515	1,205	
1913.			3974									
CaliforniaGeorgiaIllinoisIowaMassachusettsMichigan	18 12 36 13 21 33	350 178 639 283 250 351	50.7 57.7 53.2 57.9 51.0 54.8		195	29 37 81 80	363	105 31 130 80 81 73	45	81 86 34	21 102 28 117 	
Minnesota New York Ohio Pennsylvania Wisconsin	9 62 38 86 15	176 1,066 451 824 465	59. 8 52. 7 54. 8 54. 1 59. 8	104	373 110	40 26 51	71 55	109 206 312	64 57 149 16	33 247 38 71 13	143 129 53 76 436	
Total	343	5,033	54.5	104	743	344	512	1,127	438	603	1,162	

LABORERS.

1912.												
California	19	441	53.6		98	16		248			79	
Georgia	12	231	57.6					17	89		125	
Illinois	33	434	56.3			12	113	89	1	116	103	
Iowa	13	284	58.5					53		94	137	
Massachusetts	19	161	51.5		43	37	4	61	16			
Michigan	32	359	57.6			8		52	64	100	135	
Minnesota	9	166	59.6						16		150	
New York	60	697	55.5		105	4	89	99	64	186	150	
Ohio	38	325	55.5		14	22	26	109	40	53	61	
Pennsylvania	69	377	55.9		5	27	8	114	87	33	103	
Wisconsin	15	1,166	60.0							8	1,158	
Total	319	4,641	57.0		265	126	240	842	377	590	2,201	
1913.				7								
California	19	470	52.8		148	17		237			68	138.6.
Georgia	12	251	57.1					40	96		115	
Illinois	33	541	55.5			31	183	69		151	107	
lowa	13	399	58.7					73		87	239	
Massachusetts	19	174	51.0		44	61	5	64				
Michigan	32	351	57.4			7		47	86	99	112	
Minnesota	9	261	59.7							62	199	
New York	60	686	54.5		131	26	100	112	57	149	111	
Ohio	. 38	368	54.8			43	56	120	53	42	54	
Pennsylvania	69	365	55.8		2	25	9	119	86	35	89	1
Wisconsin	15	1,278	59.9						14	6	1,258	
Total	319	5,144	56.7		325	210	353	881	392	631	2,352	

$\begin{array}{c} {\rm Table} \ \ {\rm V}.{\rm -AVERAGE} \ \ {\rm AND} \ \ {\rm CLASSIFIED} \ \ {\rm FULL}\text{-TIME} \ \ {\rm HOURS} \ \ {\rm OF} \ \ {\rm WORK} \\ {\rm PER} \ \ {\rm WEEK-IN} \ \ {\rm EACH} \ \ {\rm YEAR}, \ \ {\rm BY} \ \ {\rm STATES}, \ 1912 \ \ {\rm AND} \ \ 1913\text{--Concluded}. \end{array}$

MACHINE HANDS.

	Num-	27	Aver-	Nui	nber of	employ	ees who	se full-t	ime hou	ars per v	week w	ere—
Year and State.	ber of estab- lish- ments.	Num- ber of em- ploy- ees.	age full- time hours per week.	Under 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
1912.												
California	19 12 36 13 21 33	432 232 509 363 309 422	51. 6 57. 7 55. 0 58. 7 51. 2 56. 9		221	32 13 110 38	175	110 33 170 64 44 60	68 6 72 90	74 104 91	69 131 71 195	
Minnesota New York Ohio Pennsylvania Wisconsin	9 62 38 84 15	255 1,109 495 822 1,022	59. 6 53. 7 55. 1 54. 6 60. 0	48	404 18 72	26 40 56	63 46	82 170 295	24 64 50 172	275 82 95 11	231 210 72 86 1,011	
Total	342	5,970	55.8	48	798	315	284	1,028	546	732	2,219	
1913.											17.0	9
California Georgia Illinois Iowa Massachusetts Michigan	19 12 36 13 21 33	422 237 538 425 300 428	51. 5 57. 3 54. 0 58. 6 50. 6 56. 6		222	19 20 111 41	255 21	124 51 125 72 79 56	69	102 138	57 117 36 215	
Minnesota New York Ohio Pennsylvania Wisconsin	9 62 38 84 15	247 1,161 569 788 959	59. 8 53. 1 54. 9 54. 6 59. 9	48	448	45 58 45	11 71 42	103 184 294	91 116 172 18	45 257 61 88 11	202 158 79 82 930	
Total	342	6,074	55.5	48	824	339	400	1,088	581	791	2,003	

TABLE VI.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]

BENCH HANDS.

		Num-	Aver-	Num	ber of	emplo	yees v	whose i		ne hou	rs per	week
State, and number of establishments.	Year.	ber of em- ploy- ees.	full- time hours per week.	Under 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
California:	(1010	316	51.2		160	10		101			00	
18 establishments	${1912 \atop 1913}$	350	50.7		195	12 29		121 105			23 21	
Georgia: 12 establishments	{1912 1913	160 178	58.0 57.7					23 31	38 45		99 102	
Illinois: 36 establishments	{1912 1913	675 639	54.1 53.2			27 37	327 363	206 130	4	28 81	83 28	
Iowa: 13 establishments	{1912 1913	248 283	57.9 57.9					75 80		71 86	102 117	
Massachusetts: 21 establishments	{1912 1913	256 250	51.2 51.0		67 65	90 81	23	56 81	43			
Michigan: 33 establishments	{1912 1913	353 351	55.1 54.8			71 80		83 73	91 107	31 34	77 57	
Minnesota: 9 establishments	{1912 1913	174 176	59. 2 59. 8						34	33	140 143	
New York: 62 establishments	${1912 \atop 1913}$	1,092 1,066	52.6 52.7	168 104	328 373	41 40		94 109	54 64	251 247	156 129	
Ohio: 38 establishments	{1912 1913	406 451	55.1 54.8		8	13 26	24 71	204 206	60 57	54 38	43 53	
Pennsylvania: 86 establishments	{1912 1913	846 824	53.9 54.1		107 110	70 51	54 55	323 312	151 149	67 71	74 76	
Wisconsin: 15 establishments	{1912 1913	421 465	60. 0 59. 8						16	13 13	408 436	

LABORERS.

	1		1				-	1			1
California: 19 establishments	{1912 (1913	441 470	53.6 52.8	 98 148	16 17		248 237			79 68	
Georgia: 12 establishments	{1912 1913	231 251	57.6 57.1	 			17 40	89 96		125 115	
Illinois: 33 establishments	{1912 1913	434 541	56.3 55.5	 	12 31	113 183	89 69	1	116 151	103 107	
Iowa: 13 establishments	{1912 1913	284 399	58. 5 58. 7	 			53 73		94 87	137 239	
Massachusetts: 19 establishments	{1912 1913	161 174	51.5 51.0	 43 44	37 61	4 5	61 64	16			
Michigan: 32 establishments	{1912 (1913	359 351	57, 6 57. 4	 	8 7		52 47	64 86	100 99	135 112	
Minnesota: 9 establishments	{1912 1913	166 261	59.6 59.7	 				16	62	150 199	
New York: 60 establishments	{1912 (1913	697 686	55. 5 54 5	 105 131	4 26	89 100	99 112	64 57	186 149	150 111	
Ohio: 38 establishments	{1912 1913	325 368	55. 5 54. 8	 14	22 43	26 56	109 120	40 53	53 42	61 54	

Table VI.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913—Concluded.

LABORERS—Concluded.

	*	L	ABUI	LLINS-	-00110	iuueu.						
		Num-	Aver-		aber o	f emp	loyees	whose were-		me hou	rs per	week
State, and number of establishments.	Year.	ber of employ-ees.	full- time hours per week.	der	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
Pennsylvania: 69 establishments	{1912 1913	377 365	55. 9 55. 8		5 2	27 25	8 9	114 119	87 86	33 35	103 89	
Wisconsin: 15 establishments	{1912 1913	1.166 1,278	60. 0 59. 9						14	8 6	1,158 1,258	
			MAG	CHIN	Е НА	NDS.						74-115-
California: 19 establishments	{1912 1913	432 422	51.6 51.5		221 222	32 19		110 124			69 57	
Georgia: 12 establishments	{1912 1913	232 237	57.7 57.3					33 51	68 69		131 117	
Illinois: 36 establishments	{1912 1913	509 538	55. 0 54. 0			13 20	175 255	170 125	6	74 102	71 36	
Iowa: 13 establishments	{1912 1913	363 425	58.7 58.6					64 72		104 138	195 215	
Massachusetts: 21 establishments	{1912 1913	309	51.2 50.6		83 89	110 111	21	44 79	72			
Michigan: 33 establishments	{1912 1913	422 428	56.9 56.6			38 41		60 56	90 115	91 89	143 127	
Minnesota: 9 establishments	{1912 1913	255 247	59.6 59.8						24	45	231 202	
New York: 62 establishments	{1912 1913	1,109 1,161	53. 7 53. 1	48 48	404 448	26 45	11	82 103	64 91	275 257	210 158	
Ohio: 38 establishments	{1912 1913	495 569	55.1 54.9		18	40 58	63 71	170 184	50 116	82 61	72 79	
Pennsylvania: 84 establishments	{1912 1913	822 788	54.6 54.6		72 65	56 45	46 42	295 294	172 172	95 88	86 82	
W isconsin: 15 establishments	{1912 1913	1,022 959	60. 0 59. 9						18	11 11	1,011 930	

TABLE VII.—AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND

		w					
			1912			1913	
State.	Number of estab- lish- ments.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly earnings.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly earnings.
California.	18	316	51. 2	\$21. 88	350	50.7	\$23. 33
Georgia	12	160	58. 0	14. 44	178	57.7	15. 13
Illinois	36	675	54. 1	19. 61	639	53.2	19. 53
Iowa	13	248	57. 9	15. 26	283	57.9	15. 03
Massachusetts	21	256	51. 2	17. 39	250	51.0	17. 22
Michigan	33	353	55. 1	16. 63	351	54.8	17. 44
Minnesota	9	174	59. 2	15. 29	176	59. 8	15. 68
New York	62	1,092	52. 6	16. 57	1,066	52. 7	16. 33
Ohio	38	406	55. 1	15. 90	451	54. 8	16. 3
Pennsylvania	86	846	53. 9	15. 85	824	54. 1	16. 14
Wisconsin	15	421	60. 0	12. 63	465	59. 8	13. 38
Total.	343	4,947	54.6	16.68	5,033	54.5	16.90
California.	19	441	53. 6	\$13.36	470	52.8	\$13. 5
Georgia.	12	231	57. 6	6.91	251	57.1	7. 0
Illinois	33	434	56. 3	10.46	541	55.5	10. 5
Iowa.	13	284	58. 5	10.50	399	58.7	10. 5
Massachusetts.	19	161	51. 5	9.97	174	51.0	9. 7
Michigan	32	359	57.6	10. 14	351	57. 4	10.8
	9	166	59.6	10. 84	261	59. 7	11.1
	60	697	55.5	9. 95	686	54. 5	10.1
	38	325	55.5	9. 77	368	54. 8	10.7
	69	377	55.9	9. 62	365	55. 8	10.0
	15	1,166	60.0	9. 73	1,278	59. 9	10.0
Total	319	4,641	57.0	10.15	5,144	56.7	10.4
	M	ACHINE	HANDS	•			
California	19	432	51. 6	\$20. 24	422	51. 5	\$20. 4'
Georgia.	12	232	57. 7	12. 41	237	57. 3	13. 0'
Illinois	36	509	55. 0	18. 55	538	54. 0	18. 8
Iowa	13	363	58. 7	13. 79	425	58. 6	13. 8'
Massachusetts	21	309	51. 2	16. 37	300	50. 6	16. 4
Michigan	33	422	56. 9	14. 63	428	56. 6	15. 4
Minnesota	9	255	59.6	14. 38	247	59. 8	14. 7
New York	62	1,109	53.7	15. 60	1,161	53. 1	15. 8
Ohio	38	495	55.1	15. 74	569	54. 9	16. 7
Pennsylvania	84	822	54.6	14. 89	788	54. 6	15. 2
Wisconsin	15	1,022	60.0	10. 83	959	59. 9	12. 1

5,970

55.8

14.97

6,074

55.5

15.57

342

Total.....

FURNITURE MANUFACTURING.

SUMMARY. .

This report, based on information obtained from representative establishments, shows the full-time weekly earnings, the full-time hours of labor per week, and the rate of wages (or earnings) per hour in the principal occupations of the furniture industry of the United States. Figures relating to full-time hours of labor per week, and rates of wages (or earnings) per hour are presented for the years 1907 to 1913, inclusive, and for full-time weekly earnings for the years 1910 to 1913, inclusive.

Earlier reports of this Bureau have presented wages and hours of labor in the industry from 1890 to 1912.

Full-time hours of labor per week in this industry in 1913 were 1.6 per cent lower than in 1912, 2.1 per cent lower than in 1911, and 2.7 per cent lower than in 1910. Rates of wages per hour in 1913 were 3.6 per cent higher than in 1912, 5.8 per cent higher than in 1911, and 7.9 per cent higher than in 1910, while the full-time weekly earnings were 1.8 per cent higher in 1913 than in 1912, 2.8 per cent higher than in 1911, and 4.1 per cent higher than in 1910.

The reduction in full-time hours of labor makes the changes in rates of wages per hour somewhat different from the changes in full-time weekly earnings.

The most significant facts concerning the several occupations covered by this report are summarized in the table below. The data for the years 1907 to 1911 were secured in 1911. Owing to the difficulty of finding establishments having records extending back for a period of years and also owing to the amount of work involved, data for 1907 to 1909 were secured from a smaller number of establishments, some of them perhaps less representative than those that have furnished data for the later years.

According to the plan of the table, direct comparisons, which are indicated by the grouping of the years within braces, can be made properly only between two or more successive years where the data are for identical establishments.

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¹ Previous reports of wages and hours of labor in furniture manufacturing have been published by the Bureau as follows: Nineteenth Annual Report, covering 1890 to 1903; Bulletin No. 59 (July, 1905), covering 1903 and 1904; Bulletin No. 65 (July, 1906), covering 1904 and 1905; Bulletin No. 71 (July, 1907), covering 1905 and 1906; Bulletin No. 77 (July, 1908), covering 1906 and 1907; Bulletin No. 129 (Aug., 1913), covering 1907 to 1912.

The data are for one pay-roll period in each year, the period ending nearest May 15 being selected, except in a very few establishments in which conditions in May were abnormal.

The figures for the years from 1907 to the first presentation for 1912 are reproduced from Bulletin No. 129, except the average full-time weekly earnings for 1910 to 1912, which figures have been computed for this Bulletin from data gathered for those years. The average full-time weekly earnings have not been computed for the period 1907 to 1910, owing to the lack of funds. It will be observed that the average full-time weekly earnings are not exactly the same as the product of the average rate of wages per hour and the average full-time hours per week. This difference is explained and illustrated on page 16.

In 1913 the average full-time weekly earnings in the seven principal occupations were: Cabinetmakers, \$13.30; carvers, \$17.41; chair assemblers, \$11.32; finishers, \$11.81; machine hands, \$12.50; upholsterers, \$16.42; veneerers, \$12.45. The average full-time hours of labor per week in 1913 in the various establishments were: For cabinetmakers, 57.2; for carvers, 55.1; for chair assemblers, 57.3; for finishers, 57.2; for machine hands, 57.6; for upholsterers, 55.8; for veneerers, 57.2.

All employees for whom figures are given in this report are males.

AVERAGE FULL-TIME HOURS OF WORK PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS IN EACH OF THE PRINCIPAL OCCUPATIONS IN FURNITURE MANUFACTURING, 1907 TO 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]

Occupation, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.
Cabinetmakers: 50 establishments	1907 1908 1909 1910	890 632 771 862	56. 7 57. 1 56. 9 56. 7	\$0. 2350 . 2295 . 2279 . 2374	(1) (1) (1) (1)
112 establishments	1910 1910 1911	1,801 1,846	58. 0 57. 7	. 2314	\$13. 28 13. 29
169 establishments	1911 1912	2, 455 2, 427	58.3 58.1	. 2327	13.46 13.43
199 establishments	1912 1913	2,939 3,184	58. 1 57. 2	. 2284	13. 20 13. 30
25 establishments.	1907 1908 1909 1910	169 127 151 148	54. 2 54. 5 53. 0 52. 7	.3111 .3139 .3264 .3380	(1) (1) (1) (1)
65 establishments	1910 1911	315 345	56. 1 55. 5	.3133	17.36 17.57
76 establishments.	1911 1912	367 334	56. 2 56. 3	.3120 .3152	17. 2 17. 5
82 establishments	1912 1913	350 355	56.3 55.1	.3133	17. 4- 17. 4

¹ Not computed.

AVERAGE FULL-TIME HOURS OF WORK PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS IN EACH OF THE PRINCIPAL OCCUPATIONS IN FURNITURE MANUFACTURING, 1907 TO 1913-Concluded.

Occupation, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.
Chair assemblers:	(1910	165	57.7	\$0, 1932	\$11.16
6 establishments	1911	141	58.0	. 2022	11.73
15 establishments	{ 1911 1912 .	227 237	58.3 57.8	. 2023 . 2062	11.77 11.86
23 establishments	$\left\{\begin{array}{c} 1912 \\ 1913 \end{array}\right.$	453 519	57.8 57.3	. 1927 . 1985	11.10 11.32
52 establishments.	$ \left\{ \begin{array}{c} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	1, 217 927 1, 127 1, 164	57.3 57.5 57.3 57.3	. 1966 . 2007 . 1949 . 1989	(1) (1) (1) (1)
128 establishments	$\left\{\begin{array}{c} 1910 \\ 1911 \end{array}\right.$	3,132 3,206	58.5 58.0	. 1955 . 1978	11. 40 11. 43
192 establishments.	$\left\{\begin{array}{c} 1911 \\ 1912 \end{array}\right.$	4, 407 4, 357	58.5 58.1	. 1937 . 1995	11.31 11.55
228 establishments	$\left\{\begin{array}{c} 1912 \\ 1913 \end{array}\right.$	5,290 5,287	58. 2 57. 2	. 1973 . 2073	11. 44 11. 81
51 establishments.	$ \left\{\begin{array}{c} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array}\right. $	1,347 1,047 1,153 1,239	58. 2 58. 1 57. 9 57. 4	. 2114 . 2116 . 2138 . 2189	(1) (1) (1) (1)
121 establishments	{ 1910 1911	3,151 3,107	58.7 58.3	. 2118 . 2161	12.39 12.58
192 establishments.	$\left\{\begin{array}{c} 1911 \\ 1912 \end{array}\right.$	4, 855 4, 797	58. 8 58. 4	. 2108 . 2164	12.35 12.35
226 establishmentsUpholsterers:	$\left\{\begin{array}{c} 1912 \\ 1913 \end{array}\right.$	6,212 6,700	58.5 57.6	. 2111 . 2181	12.30 12.50
19 establishments	$ \left\{ \begin{array}{c} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	383 310 307 325	53. 6 53. 5 53. 8 53. 8	.3004 .2976 .2962 .3110	(1) (1) (1) (1)
38 establishments.	{ 1910 1911	501 518	55.0 54.7	. 2971 . 3123	16. 20 16. 90
49 establishments	$\left\{\begin{array}{c} 1911 \\ 1912 \end{array}\right.$	558 552	55.8 55.5	. 2996 . 3068	16.55 16.85
54 establishments	$\left\{\begin{array}{c} 1912 \\ 1913 \end{array}\right.$	583 635	56. 4 55. 8	. 2913 . 2961	16.33 16.42
53 establishments	$\left\{\begin{array}{c} 1910 \\ 1911 \end{array}\right.$	333 317	58. 8 58. 4	. 1999 . 2024	11.78 11.81
94 establishments.	{ 1911 - 1912 -	430 407	58.7 58.3	. 2063 . 2190	12.10 12.74
123 establishments.	{ 1912 1913	563 698	58.3 57.2	. 2125	12. 36 12. 45

¹ Not computed.

Wages and hours of labor vary materially in different establishments, hence the inclusion or exclusion of an establishment in a group, if it differs greatly from the average, may raise or lower the average for the group. Thus, referring to the table above, it is seen that the average full-time weekly earnings of cabinetmakers in 169 establishments decreased from \$13.46 in 1911 to \$13.43 in 1912. In 199 establishments there was an increase from \$13.20 in 1912 to \$13.30

in 1913. The inclusion of the 30 additional establishments, therefore, changed the average weekly earnings for 1912 from \$13.43 to \$13.20. Consequently it would not be a correct comparison to state that the decrease was from \$13.46 in 1911 to \$13.30 in 1913. The movement from one year to another is indicated with the greatest degree of certainty by the figures for identical establishments. The difference between \$13.46 and \$13.43 represents the decrease from 1911 to 1912, and the difference between \$13.20 and \$13.30 represents the increase from 1912 to 1913, as nearly as can be determined from the data available. In the table the comparable data for identical establishments are bracketed.

Owing to the change in the number of establishments from year to year it is difficult to make a comparison of the actual data over a period of several years, or to get an exact measure of the changes. To aid in the making of such a comparison, relative (or index) numbers have been computed from the averages in the preceding table for full-time hours per week, rates of wages per hour, and full-time weekly earnings for each occupation for the years 1910 to 1913. inclusive. These relative numbers are simply percentages in which the figures for 1913 are taken as the base, or 100 per cent. The relative for each year is the per cent that the average in that year is of the average for 1913, as determined by the method explained on page 18. Thus in the table below the full-time weekly earnings of cabinetmakers in 1910 were 99.4 per cent of the full-time weekly earnings in 1913.

RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS IN FURNITURE MAN-UFACTURING, 1910 TO 1913.

1 -	10.	10	-4	00	0	-

	Cab	oinetmak	ers.	Car	rvers, ha	nd.	Cha	ir asseml	olers.	F	inishers.	
Year.	Relative full-time hours per week.	Relative rates of wages per hour.	Relative full-time weekly earnings.	Relative full-time hours per week.	Relative rates of wages per hour.	Relative full-time weekly earnings.	Relative full-time hours per week.	Relative rates of wages per hour.	Relative fulltime weekly earnings.	Relative full-time hours per week.	Relative rates of wages per hour.	Relative full-time week-ly earnings.
1910 1911 1912 1913	102. 5 101. 9 101. 6 100. 0	97. 2 97. 8 97. 7 100. 0	99. 4 99. 5 99. 3 100. 0	103.1 102.0 102.2 100.0	94. 4 97. 1 98. 1 100. 0	97. 6 98. 8 100. 2 100. 0	101. 2 101. 7 100. 9 100. 0	91. 0 95. 2 97. 1 100. 0	92. 6 97. 3 98. 1 100. 0	103.3 102.5 101.8 100.0	91. 3 92. 4 95. 2 100. 0	94. 6 94. 9 96. 9 100. 0
	Ma	chine ha	nds.	U	pholstere	ers.	1,	Veneerer	S.			
1910 1911 1912 1913	103.0 162.3 101.6 100.0	92. 4 94. 3 96. 8 100. 0	96. 8 98. 1 98. 4 100. 0	102. 2 101. 6 101. 1 100. 0	91.4 96.1 98.4 100.0	93.6 97.7 99.5 100.0	103. 3 102. 6 101. 9 100. 0	90.5 91.7 97.3 100.0	93. 8 94. 3 99. 3 100. 0			

It will be observed that the general tendency of each occupation is toward a reduction of working hours and an increase in rates of wages per hour and of earnings per full week. No data are available to show the amount of work afforded employees each year or the variation from year to year. The relative full-time hours per week indicate the change in the hours of labor of employees working full time, but do not reflect in any way the greater or less amount of full-time work afforded. This point is further discussed on page 15.

A like table of relative numbers is next shown for the industry as a whole, as determined by a combination of the data for the several occupations. Data were obtained for the principal occupations of the industry but not for all occupations. The method of computing this table is explained on page 19.

RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS IN FURNITURE MANUFACTURING, 1910 TO 1913.

Year.	Relative	Relative	Relative
	full-time	rates of	full-time
	hours per	wages	weekly
	week.	per hour.	earnings.
1910	102. 8	92. 7	96. 1
	102. 1	94. 5	97. 3
	101. 6	96. 5	98. 2
	100. 0	100. 0	100. 0

(1913=100.0.)

From the table it is seen that the relative or index number for full-time hours per week decreased from 102.8 in 1910 to 100 in 1913, or, in other words, full-time hours per week in 1910 were 102.8 per cent of what they were in 1913. The relative or index number for rates of wages per hour increased from 92.7 in 1910 to 100 in 1913. Owing to the reduction of hours, the increase in full-time weekly earnings was somewhat less than the increase in wages per hour, the increase being from an index of 96.1 in 1910 to 100 in 1913.

In examining the relative or index numbers for the several occupations, and for the industry as a whole in the two tables above, it will be observed that they have been computed with 1913 taken as the base, or 100 per cent. In the preceding reports of the Bureau relating to this industry, relative numbers for rates of wages per hour and for hours of labor per week were presented back to 1890 and the base, or 100 per cent, was not the average rate of wages per hour or the average full-time hours per week in any one year, but the average rate of wages per hour and the average full-time hours per week for the 10-year period 1890–1899. The table of such relative numbers for the years 1890 to 1912 appears on page 158.

The reasons for changing the base of the relative numbers to the most recent year are stated on pages 11 and 16. The relative num-

bers for the occupations shown in the new series here presented differ from those of the old series shown in preceding reports because of the change of the base, but the ratio existing between any two years is the same in both series. The relative numbers for the industry as a whole have likewise been recomputed with 1913 as the base.

In addition to making a change in the base period, a change has also been made in the method of computing the industry relatives, and because of this change the relatives here presented not only differ from the relatives computed by the old method, but show a slightly different ratio of change from year to year. In Bulletin No. 129, relative numbers for this industry were averages of the relative numbers of the several occupations. For each year, for example, the relative rate of wages per hour for each occupation was multiplied (weighted) by the number of employees in that occupation, the products thus computed for the several occupations were added, and the sum of the products for all occupations divided by the total employees in all occupations.

In computing the relative numbers from 1910 to 1913 for the industry as a whole as presented in this Bulletin, a combination was made, not of the relative numbers for the several occupations, but of the actual hours and wages of the several occupations. For each year the average hours and wages were computed for all employees in all occupations and the average for each preceding year was compared with the average for 1913 to determine the index. It was deemed necessary to make this change in method because a change in the industry is not always reflected by the relative computed by averaging the occupation relatives. This reason is more fully explained on page 19.

In addition to the relative numbers shown for the several occupations and for the industry, three tables are here presented stating the per cent of increase or decrease in the full-time hours of labor per week, rates of wages per hour, and full-time weekly earnings in 1913 as compared with each preceding year back to 1910. The figures of these tables are computed from the relative numbers shown on pages 108 and 109, and simply reverse the method of comparison. Each of these tables also shows the increase or decrease in 1912 as compared with 1911, and in 1911 as compared with 1910. Referring to the first line of the first table, it is seen that the full-time hours of cabinetmakers in 1913 were 1.6 per cent lower than in 1912, 1.9 per cent lower than in 1911, and 2.4 per cent lower than in 1910. Further, it is seen that the full-time hours of labor in this occupation were 0.3 per cent lower in 1912 than in 1911 and 0.6 per cent lower in 1911 than in

The figures of the several tables are read in like manner.

PER CENT OF INCREASE OR DECREASE IN FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1913 COMPARED WITH EACH OF THE 3 YEARS PRECEDING, 1912 COMPARED WITH 1911, AND 1911, COMPARED WITH 1910.

WANTE BY PRINTED AND A	TEATIBE	GRURAL	WWLED BURE
FULL-TIME	HUUKS	LEIL	WW ELECTOR

	Per cent hi	gher (+) or l 1913 than in-	ower (–)	Per cent hi	gher (+) or —) in—
Occupation.	1910	1911	1912	1912 than in 1911	1911 than in 1910
Cabinetmakers Carvers, hand Chair assemblers Finishers	$\begin{array}{c} -2.4 \\ -3.0 \\ -1.2 \\ -3.2 \end{array}$	$ \begin{array}{c} -1.9 \\ -2.0 \\ -1.7 \\ -2.4 \end{array} $	$ \begin{array}{r} -1.6 \\ -2.2 \\9 \\ -1.8 \end{array} $	-0.3 + .2 8 7	$ \begin{array}{c} -0.6 \\ -1.1 \\ + .5 \\8 \end{array} $
Machine handsUpholsterersVeneerers.	$ \begin{array}{c c} -2.9 \\ -2.2 \\ -3.2 \end{array} $	$ \begin{array}{c c} -2.2 \\ -1.6 \\ -2.5 \end{array} $	$ \begin{array}{c} -1.6 \\ -1.1 \\ -1.9 \end{array} $	= :7 = :5 = :7	$\begin{array}{c}7 \\6 \\7 \end{array}$
The industry	- 2.7	-2.1	-1.6	705	. 7
RATES O	F WAGES	PER HOU	JR.	os entifica asia da	
Cabinetmakers Carvers, hand. Chair assemblers. Finishers.	$\begin{array}{c} + 2.9 \\ + 5.9 \\ + 9.9 \\ + 9.5 \end{array}$	+2. 2 +3. 0 +5. 0 +8. 2	$+2.4 \\ +1.9 \\ +3.0 \\ +5.0$	$\begin{array}{c c} -0.2 \\ +1.0 \\ +2.0 \\ +3.0 \end{array}$	+0.7 +2.9 +4.6 +1.2
Machine hands Upholsterers. Veneerers.	+ 8.2 + 9.4 +10.5	+6.0 +4.1 +9.1	+3.3 +1.6 +2.8	+2.7 +2.4 +6.1	+2.1 +5.1 +1.3
The industry	+ 7.9	+5.8	+3.6	+2.1	+1.9
FULL-TIM	E WEEKL	Y EARNIN	IGS.		
Cabinetmakers Carvers, hand Chair assemblers Finishers	+ 0.6 + 2.5 + 5.0 + 8.7	+0.5 +1.2 +2.8 +5.4	+0.7 -0.2 $+1.9$ $+3.2$	$ \begin{array}{r} -0.2 \\ +1.4 \\ +.8 \\ +2.1 \end{array} $	+0.1 +1.2 +5.1 + .8
Machine handsUpholsterersVeneerers.	+ 3.3 + 6.8 + 6.6	+1.9 +2.4 +6.0	+1.6 + .5 + .7	+ .3 +1.8 +5.3	+1.3 +4.4 + .8
The industry	+ 4.1	+2.8	+1.8	+ .9	+1.5

EXPLANATION OF SCOPE AND METHOD.

This report includes establishments engaged in manufacturing household and office furniture. All information was secured from pay rolls of the various establishments by the agents of the Bureau. The number of establishments from which data were secured has varied considerably during the period in this report, as follows:

1907 to 1910	52 identical establishments.
1910 and 1911	128 identical establishments.
1911 and 1912	199 identical establishments.
1912 and 1913	231 identical establishments.

The data for 1907 to 1911 were secured in 1911, and the number of establishments included in the full period from 1907 to 1910, inclusive, was limited, owing to the difficulty of finding establishments

that had preserved records for those years and also to the amount of work involved. The establishments vary from year to year, as establishments go out of business or cease to be representative and new establishments must be substituted in the wage study. Occasionally occupations are dispensed with in a factory or new occupations are introduced, and sometimes data are not available for all occupations in a factory.

Data for a group of establishments in any year will not be precisely the same as for a different group of establishments in the same year, even though nearly all of the establishments may be common to both groups. In using the actual figures in this report, comparison from year to year should be made only between data coming from identical establishments. In the tables the data from identical establishments are bracketed. Data from an establishment are not included in the report unless the information for at least two years is available.

In selecting establishments from which to secure data the Bureau undertook to represent all States in which furniture manufacturing is of material importance, the measure of importance being the number of employees as reported by the United States Census of Manufactures. The table which follows shows by States the number of employees in this industry as reported by the United States Census Office for 1910; the total number on the pay roll in the establishments from which the Bureau secured data for 1913; and the number in selected occupations for whom data for 1913 are shown.

TOTAL NUMBER OF EMPLOYEES IN FURNITURE MANUFACTURING AND NUMBER OF EMPLOYEES IN ESTABLISHMENTS FOR WHICH DATA ARE SHOWN FOR 1913.

	Number of		ents for whi y the Bures for 1913.	
State.	employees reported by United States cen-	Number	Number of	employees—
	sus of 1910.	of estab- lish- ments.	On pay roll.	For whom data are shown.
New York. Michigan Illinois. Indiana. Wisconsin.	19, 619 15, 171 13, 310 10, 745 10, 583	20 23 25 16	4,814 4,818 3,427 3,486 3,089	2, 932 2, 751 2, 169 1, 826 1, 629
Ohio Pennsylvania. Massachusetts. North Carolina. Missouri	8,019 9,733 7,148 5,533 3,368	27 28 12 13 9	1,991 3,287 2,878 1,393 658	1,241 1,838 994 834 439
Tennessee. Maryland Other States ¹ .	2,303 1,856 16,038	6 8	601 803	313 412
Total	123, 426	231	31,245	17,378

¹ Including States having less than 1,700 each in 1910.

According to the census of 1910, more than 87 per cent of the total number of employees in the industry are found in the States in which the establishments furnishing information to the Bureau of Labor Statistics are located. The number of employees in the establishments from which the Bureau secured 1913 data was equal to 25.3 per cent of the total in the industry in 1910, and the number for which the Bureau presents detailed information for 1913 was equal to 14.1 per cent of the total in the industry in 1910. The pay rolls copied were for one week, half month, or a month, according to the custom of the establishment. The pay roll taken each year was that nearest May 15, except in a very few establishments where abnormal conditions made it necessary to take a pay roll for some other time of the year.

The full-time hours of labor per week shown in the tables of the report are the regular hours of work in the occupations under normal conditions in the establishments. The working time is the hours on duty, including intervals of waiting for work. The full-time hours per week and the relatives based thereon do not in any way indicate the extent of unemployment. Employees may work overtime, broken time, or be laid off, or a temporary reduction may be made in working hours without such change affecting the full-time hours per week

as presented in this Bulletin.

The rates of wages per hour appearing in the tables include the wages of time workers and the earnings of pieceworkers. All time rates by the day or week have been reduced to rates per hour, and the earnings of pieceworkers or of persons working at both time and piece rates have been reduced to earnings per hour by dividing the earnings by the hours worked. The time workers and pieceworkers of each occupation are combined as one group. For the majority of the establishments the pay-roll records were in such shape that it was possible to secure data in such detail that classified rates of wages could be shown, but for a part of the establishments included this was not possible.

A change in the earnings per hour of pieceworkers does not of necessity indicate a change in piece rates. Without a change in piece rates a change in methods or of machinery, a speeding up or more steady work resulting from greater volume of business may increase the hourly earnings; or, on the other hand, changes in methods, a slowing down in speed, or a lull in business may reduce hourly earnings. Varying intervals of waiting for work while on duty may also affect hourly earnings.

The full-time weekly earnings are the earnings per week of employees working full time, or the earnings on broken time reduced to equivalent earnings for a full week. In considering changes in full-time earnings per week, notice should also be taken of changes in

full-time hours of labor per week. A reduction in the hours of a pieceworker may reduce his earnings in a week and leave his earnings per hour unchanged, while a reduction of hours for a week worker will, if his weekly rate remains the same, increase his rate per hour.

The averages of full-time hours per week, rates of wages per hour, and full-time weekly earnings are computed by adding the data for the several employees and dividing the total by the number of em-

ployees.

In studying the tables it will be observed that the average fulltime weekly earnings are not exactly the same as the result that would be obtained by multiplying the average rate per hour by the average hours per week, owing to the change in the relative weight of the

items. This point is illustrated on page 16.

The change in the basis of comparison in computing the relative numbers from the average of 1890–1899 to 1913 is referred to on page 11. A more extended explanation is also given on pages 16 to 18. The relative rates of wages per hour and the relative full-time hours per week from 1890 to 1912 on the basis of 1890–1899 equals 100, published in Bulletin No. 129, are reproduced in this Bulletin on page 158.

The method used in computing the relative or index numbers for the several occupations can best be explained by an illustration.

Such an illustration is given on page 18.

A word of caution is given as to the use of relative numbers. The per cent of increase or decrease from one year to another is not the difference between the relative numbers for the year. Thus, as shown in the table on page 109, the relative full-time weekly earnings in the furniture industry increased from 96.1 in 1910 to 98.2 in 1912, an increase of 2.1 in the relative for 1912 over the relative for 1910, which number (2.1) is 2.2 per cent of 96.1, thus making an increase

in 1912 of 2.2 per cent for 1910.

The base for the computation of the relative numbers of the several occupations, as stated above, has been changed from the average of 1890–1899 to 1913. The same change of base has been made in computing the relative numbers for the industry as a whole. In addition to the change of base in computing the relative numbers for the industry, a change has been made in the method of computation. The relative numbers for the industry here presented, covering 1910 to 1913, are computed directly from the average hours of labor, rates of wages per hour, and weekly earnings of all employees in all occupations combined. In other words, the relatives for the industry as a whole have been computed for this report in the same manner as the relatives for each occupation. This change of method is explained and illustrated on pages 18 to 23.

In addition to the text tables presented in the summary, seven general tables are given, namely:

Table I.—Average and classified rates of wages per hour in the United States, by years, 1907 to 1913.

Table II.—Average and classified rates of wages per hour in each vear, by States, 1912 and 1913.

Table III.—Average and classified rates of wages per hour in each State, by years, 1912 and 1913.

Table IV.—Average and classified full-time hours of work per week in the United States, by years, 1907 to 1913.

Table V.—Average and classified full-time hours of work per week in each year, by States, 1912 and 1913.

Table VI.—Average and classified full-time hours of work per week in each State, by years, 1912 and 1913.

Table VII.—Average full-time hours of work per week and average full-time weekly earnings, by States, 1912 and 1913.

In Tables I and IV, in addition to actual data, percentages computed therefrom are given. The data from these two tables are summarized in the text table on page 106.

When sufficient data for a State are available to warrant presentation, such data are presented by States in Tables II. III. V. and VI. Tables III and VI repeat the data for the several States given in Tables II and V. rearranged for the convenience of the reader.

DESCRIPTION OF PRINCIPAL PRODUCTIVE OCCUPATIONS.

This report includes only data from establishments manufacturing household furniture, including bedroom, dining-room, and parlor suites, library and hall pieces, tables, chairs, etc., and in a few instances from those making office desks, tables, and chairs. Establishments manufacturing metallic furniture and those which make a specialty of expensive made-to-order articles have not been included.

Apart from the varying character of the output, which is influenced to some extent by local conditions as to timber and labor supply as well as by local market demands, few differences are found in furniture-manufacturing establishments in different sections of the country. Much the same processes and much the same kinds of machinery are employed everywhere. A workman from a furniture factory in one of the North Atlantic or North Central States would find little difficulty in adapting himself to conditions in a similar establishment located in a South Central or South Atlantic State, and vice versa. The occupation terms and the operations embraced under such terms are practically identical in all sections.

The work of furniture making, as observed everywhere, falls roughly into three principal divisions-machine work, cabinetmaking, and finishing. Upholstering forms another division of work in many establishments, while the increasing amount of veneered furniture being turned out has led to the creation of distinct veneer departments in some of the larger plants.

In the machine department the rough lumber is cut and dressed and the various parts which enter into the completed piece are fashioned. Employees in this department are classed either as machine hands or helpers, in many cases the line of demarcation between the two classes being a very vague one, since it is often the practice gradually to promote helpers to positions as machine operators as they develop sufficient skill for the work. In addition to the helpers on machines there are usually a number of common laborers, whose work consists in handling heavy materials, sweeping floors, and making themselves generally useful. Regarding the pay of machine woodworkers it has been observed that length of service with the establishment and general proficiency are usually more important factors in determining the wages of a workman than is the mere fact that he happens to be operating a particular kind of machine. For this reason a classification of machine hands accord-

ing to machines operated would be of little, if any, value.

In the cabinetmaking department the pieces of furniture are assembled or set up. This is often designated as "bench work." It is necessarily done by hand, though in some cases clamps or other devices are used for forcing joints up tight. In some lines of product, as in the manufacture of extension tables of the cheaper grades, the work of the cabinetmaker is quite simple and requires little skill, consisting merely in fitting together the parts of tops, pedestals, etc. Men engaged in this kind of work, while not cabinetmakers in the strict sense of the term, are generally so designated in the trade. In some localities the term "case fitters" is applied to men doing cabinetwork. In chair factories the duties of the chair assembler correspond in a general way to those of the cabinetmaker in case-goods establishments. This work consists in gluing and fitting together the different parts of the chair, a frame being used to hold the parts in proper shape until the glue is dry. A variety of terms, such as "framers," "stoolers," "chair makers," "drivers up," etc., is used to describe this class of workmen in different establishments. In many factories, particularly those making the heavier and more expensive grades of chairs, as at Grand Rapids, the designation cabinetmakers, instead of chair assemblers, is in common use. It should be emphasized in this connection that few all-round skilled cabinetmakers, as the term was formerly employed, are now found in furniture-manufacturing establishments, the introduction of improved

labor-saving machinery and the modern tendency toward specialization in industry, with the desire to effect a lowering of the cost of production, having caused such to be replaced in large measure by a

cheaper type of labor.

The finishing department, as the term implies, is where the assembled piece of furniture is given its final treatment before being packed for shipment. The finishing process includes staining, filling, sanding, varnishing, and, in furniture of the better grades, rubbing and polishing. In a few establishments there has been noticed a tendency to restrict the term "finisher" to the men doing varnish work only, but in the vast majority of furniture plants it is now used to include all persons in the finishing department except those classed as "common labor." In several factories located in the North Central States women and girls have been found among the workers in the varnishing room, but in other sections this work is usually performed by males exclusively.

The work of the other occupations is practically all done by males. So few females are employed that data relating to females are omitted

from this report.

The Bureau has compiled data as to full-time hours per week, rates of wages per hour, and full-time weekly earnings for seven occupations. Brief descriptions of these occupations and processes follow:

CABINETMAKERS.

These men assemble the parts that have been cut and dressed in the machine department. Their work is necessarily done by hand and often requires considerable skill, though in some establishments, as table factories, the work is simple and admits of much specialization. As has already been stated, few all-round cabinetmakers, in the sense in which the term was formerly used, are found in the modern furniture factory, owing to the extent to which specialization is now carried. In general, the work consists merely in fitting together the parts that form the complete piece of furniture. In a few establishments the term "bench hands," "case fitters," or "carpenters," instead of "cabinetmakers," is used.

CARVERS, HAND.

This occupation is being largely superseded by machine carving, though in establishments producing high-grade furniture many hand carvers are still employed. It requires a high degree of skill and some artistic ability. It consists in carving or fashioning designs in wood for ornamental purposes, as the arms and backs of chairs, the posts and headboards of beds, the feet of cabinets, panels in sideboards, etc. The work is done with highly tempered steel tools or knives. Carved work is often roughed out on the machine and finished by hand. Hand carvers usually command good wages.

CHAIR ASSEMBLERS.

In the manufacture of chairs the work of the chair assembler corresponds in a general way to that of the cabinetmaker in case goods. In many of the factories producing the finer grades of chairs this work is called cabinetmaking, and such employees have been so classified in this report. "Chair assembling," as applied to lower grade chairs, is an appropriate term to indicate the kind of work done, although this term is not in common use. Most of the shaping operations on the different parts of the chair are performed in the machine department. The chair assembler, however, usually does some machine work, as boxing, mortising, etc., the amount of which depends on the extent to which division of labor is carried. Ordinarily chair assembling is done by a group of several men working together. When all parts of the chair have been finally shaped and fitted, the dowel pins are glued in and the different pieces are put together and placed in a press or clamp, which holds them firmly in place until the glue has had time to harden. In the case of flush joints the chair assembler shaves or trims the parts forming the joint until it is quite smooth. Frame makers, who may be included with chair assemblers, fit up and put together the frames for chair seats. Much of their work, as sawing, boring, mortising, etc., is done on machines.

FINISHERS.

The term "finisher," as used in this report, includes all classes of skilled or semiskilled workmen in the finishing department. Ordinarily the first operation in finishing is staining, which is done by dipping the piece in a vat of stain or, if the piece is large, rubbing the stain in with a brush or rag. The piece is next filled to close up the pores. This is done by rubbing in the mineral filling with a rag. Staining and filling are usually regarded as semiskilled occupations, although in many establishments the work is done largely by unskilled help. After filling, the article is sanded to make it smooth. This is generally done by boys or unskilled men. It is next treated with shellac and then sanded again, after which it is ready for the varnisher. Usually from one to three coats of varnish are applied, depending on the degree of "finish" desired. Between coats of varnish it is rubbed with oil or water and rotten stone, or is sandpapered. Polishers or rubbers who do the final finishing are often highly skilled men and are well paid. In some establishments rubbing of flat surfaces is done by machines. The rubbing or polishing device has a rapid back-and-forth movement and may be shifted at will by the operator. It makes the work much easier than when done by hand. Spraying machines for applying varnish by means of compressed air have been found in use in a few fac-

tories. The above operations, with some variations, comprise the finishing work in all furniture establishments. In the treatment of chairs and tables of the cheaper grades the varnish is usually applied by dipping. Enamelers and gilders, found in a few establishments, are classed with varnishers. Grain printing, which may be considered a finishing process, is done by running the piece to be grained, if it is flat, between two rollers, one of which is made of gelatin, with its surface so prepared that it prints an imitation grain upon the part coming in contact with it. Irregular surfaces and edges are grained by being held against the roller. An inking device keeps the gelatin roller constantly inked. Usually the parts that have been grained are shellacked and allowed to dry thoroughly before being put together. Hand sanders and all other unskilled employees have been excluded from finishers in the present report.

MACHINE HANDS.

These men operate various types of power-driven machines and often shift from one machine to another, according to the exigencies of their work. The principal machines used in furniture manufacture are the boring machine, carver, dovetailer, jointer or facer, molding machine, mortiser, planer, router, sander (belt or drum), saw (band, cut-off, jig, miter, rip, etc.), scraper, shaper, sticker, tenoner, and turning lathe. A machine called the "universal woodworker," built on the plan of a planer or jointer, is used in some factories. This machine is adapted to a number of different uses, as grooving, rabbeting, crosscutting, ripping, dadoing, routing, panel raising, etc.

In the collection of data on the wages and hours of labor of machine hands for inclusion in the present report care was taken to confine the information entirely to men engaged in the actual operation of machines; persons classed as helpers, learners, unskilled laborers, etc., being omitted in all cases.

UPHOLSTERERS.

There is much specialization in this occupation at the present time, and few all-round upholsterers are now found. In many establishments the work is divided into processes, all more or less simple, in which much unskilled labor can be employed. Thus, spring setting, pad making, sewing, etc., represent distinct subdivisions of upholstering in many chair and lounge factories. The persons doing this work, usually boys or women, can not be regarded as upholsterers in the strict sense of the term and are not included as such in this report. The all-round upholsterer cuts the materials, puts in the springs and fillings, makes the tufts, and performs all the other operations of upholstering. He is usually assisted by one or more

helpers. Only men of this class rank as regular upholsterers. In many lounge factories a tufting device is now used which enables this work to be done much more quickly and easily than by hand.

VENEERERS.

The work of veneering is that of overlaying or facing wood of a less expensive quality with a thin piece of a finer or more beautiful kind.

The processes in the veneer department include the cutting, matching, and jointing of the veneer, the spreading of the glue either by hand or by machine (usually a roller of gelatin revolving in a glue tank) on the piece, the laying on of the veneer, and the placing of the veneered pieces in a press which forces the veneer down tight against the solid wood, and finally the shifting of the press load to a retainer where it is left until the glue is thoroughly dried. Owing to the growing scarcity of woods and the improvement in methods of veneering, this occupation is becoming a very important one in the furniture industry. Many establishments now have distinct veneering departments, employing a considerable number of men at good wages. Cutting and matching the veneer is considered highly skilled work and is usually done by a man who does nothing else. Common laborers employed solely to handle materials are not regarded as veneerers and have not been included.

Table I.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913.

[The figures set opposite each bracketed group of years are for identical establishments.] NUMBER.

			Aver-	Amor	En	nplo	yees	earni		ach cl r hou		d rate	of w	ages
Occupation, and number of of establishments.	Year.	Number of employees.	age full- time hours per week.	Average rate of wages per hour.	8 and under 12 ets.	un- der 14	and un- der 16 cts.	16 and un- der 18 cts.	18 and un- der 20 cts.	20 and un- der 25 ets.	25 and un- der 30 ets.	30 and un- der 40 ets.	40 and un- der 50 cts.	50 and un- der 70 cts.
CABINETMAKERS.											9.8			
Establishments showing complete data:														
40 establishments	$ \left\{ \begin{array}{l} 1907 \\ 1908 \\ 1909 \\ 1910 \end{array} \right. $	783 542 674 756	56. 3 56. 7 56. 5 56. 4	\$0. 2357 . 2314 . 2297 . 2392	17 14 10 3	31	41	65 64 58 62	60 29 49 48	289 182 253 253	132 83 116 155	119 84 98 98	31 23 18 47	
88 establishments	$\begin{cases} 1910 \\ 1911 \end{cases}$	1,509 1,518	57. 7 57. 3	. 2277	9 12			134 134	97 66	574 598	294 320	152 152	49 53	
120 establishments	${1911 \atop 1912}$	1,804 1,781	57. 8 57. 7	. 2305 . 2291	13 3			194 188	98 98	673 659	372 443	153 157	54 35	
145 establishments	${1912 \atop 1913}$	2, 248 2, 467	57. 8 56. 9	. 2244	3 6		177 205	287 292	167 182	847 814	489 624	179 245	40 26	····i
All establishments reported: 50 establishments	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	890 632 771 862	56. 7 57. 1 56. 9 56. 7	. 2350 . 2295 . 2279 . 2374										
112 establishments	{1910 1911	1,801 1,846	58. 0 57. 7	. 2310										
169 establishments	{1911 1912	2, 455 2, 427	58. 3 58. 1	. 2327										
199 establishments	{1912 1913	2,939 3,184	58. 1 57. 2	. 2284										
CARVERS, HAND.														1
Establishments showing complete data:														
22 establishments	$ \begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases} $	155 113 138 136	53. 7 53. 8 52. 4 52. 1	.3176 .3203 .3311 .3420			2 1 	2 2 2 3	3 2 2	14 10 13 11	33 33 30 25	75 44 60 68	19 13 25 20	7 8 6 9
53 establishments	${ 1910 \atop 1911 }$	277 304	55. 6 54. 9	.3190				3 2	4 6	35 39	46 42	157 162	23 31	9 22
58 establishments	${ 1911 \atop 1912 }$	306 277	55. 8 55. 8	.3207 .3217			2	4 2	2	39 27	51 61	170 156	16 15	22 15
66 establishments	${1912 \atop 1913}$	296 302	55. 9 54. 5	.3190 .3256				2	1	29 25	68 50	167 198	14 20	15 8
All establishments reported: 25 establishments	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	169 127 151 148	54. 2 54. 5 53. 0 52. 7	.3111 .3139 .3264 .3380										
65 establishments	{1910 1911	315 345	56. 1 55. 5	.3133		::::								
76 establishments	${1911 \atop 1912}$	367 334	56. 2 56. 3	.3120 .3152										
82 establishments	{1912 1913	350 355	56.3 55.1	.3133										

TABLE I.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913—Continued.

NUMBER—Continued.

			Aver-		En	ploy	rees e	earnir		ch cla hour.		l rate	of wa	ages
Occupation, and number of establishments.	Year.	Num- ber of em- ploy- ees.	age full- time hours per week.	Average rate of wages per hour.	8 and un- der 12 cts.	and un- der 14 ets.	and un- der 16 ets.	16 and un- der 18 cts.	18 and un- der 20 cts.	20 and un- der 25 cts.	25 and un- der 30 cts.	30 and un- der 40 cts.	40 and un- der 50 cts.	50 and un- der 70 ets.
CHAIR ASSEMBLERS.														-41
Establishments showing complete data:														
5 establishments	${1910 \atop 1911}$	140 125	59. 6 58. 0	\$0. 1826 . 1940	. 1	11 8	33 14	37 32	13 13	29 39	14 17	2 2		
13 establishments	${1911 \atop 1912}$	201 213	58.3 57.8		3 5	20 16	27 23	34 ·30	17 33	61 60	32 31	7 13	2	
20 establishments	${1912 \atop 1913}$	419 480	57. 7 57. 2	.1906 .1955	8 5	29 38	65 65	94 106	60 53	104 138	43 51	15 23	1 1	
All establishments reported: 6 establishments	$\begin{cases} 1910 \\ 1911 \end{cases}$	165 141	57. 7 58. 0											
15 establishments	${1911 \atop 1912}$	227 237	58. 3 57. 8											
23 establishments	{1912 {1913	453 519	57. 8 57. 3				::::							
Establishments showing com-														
plete data: 41 establishments	1907 1908 1909 1910	1,056 786 968 992	57.2	. 1933	24 20 36 52		126 98 134 108	179 139 159 160	143 92 115 133	311 249 282 284	124 106 116 121	49 38 45 69		
102 establishments	{1910 1911	2,598 2,724	58.3	.1901	104	172	335 319	482	478 460	732	214 230	81	2	
150 establishments	{1911 1912	3, 614 3, 521		.1880	139	- 14	566 446	743 679	582	1,061 1,170	229	86	1	
200 establishments	{1912 1913	4, 703 4, 707	58. 1 57. 0		142 73	219 162	644 461	920 783	683	1,517 1,726	431 665	147 177	6	
All establishments reported: 52 establishments	1907 1908 1909 1910	1,217 927 1,127 1,164	57. 5	.2007							::			
128 establishments	{1910 {1911	3, 132 3, 206	58.5	. 1955										
192 establishments	{1911 {1912	4, 407 4, 357	58. 5 58. 1	.1937										
228 establishments	{1912 1913	5, 290 5, 287	58. 2 57. 2				2							
MACHINE HANDS.														
Establishments showing complete data:														
40 establishments	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	1,066 817 912 994	57. 8 57. 7	.2160	19 28 19 14	39 54	69 75	110	92 69 77 75	272 309	147 162	80 96	9	
96 establishments	{1910 1911	2,508 2,467		.2102		150 127	242 239			895 839	453 500			
167 establishments	{1911 1912	4, 196 4, 148	58. 7 58. 3		47 23	219 194	447 384	640 597	331 351	1,463 1,399	797 878		16 23	
225 establishments	${1912 \atop 1913}$	6, 208 6, 694			31 35	270 197		1,013 955	495 494	2,064 2,267	1, 203 1, 491	400		

Table I.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913—Continued.

NUMBER—Concluded.

			Aver-	Aver-	En	nplo	yees	arni	ng ea	ach clar hou	assifie r.	ed rate	of w	ages
Occupation, and number of establishments.	Year.	Number of employ-ees.	age full- time hours per week.	age rate of wages per hour.	8 and under 12 cts.	and un- der 14 ets.	and un- der 16 cts.	16 and un- der 18 cts.	and un- der 20 cts.	20 and un- der 25 ets.	and un- der 30 ets.	30 and un- der 40 ets.	40 and un- der 50 cts.	50 and un- der 70 ets.
All establishments reported: 51 establishments	1907 1908 1909 1910	1,347 1,047 1,153 1,239	58. 2 58. 1 57. 9 57.4	\$0.2114 .2116 .2138 .2189										
121 establishments	{1910 1911	3, 151 3, 107	58.7 58.3	.2118										
192 establishments	{1911 1912	4, 855 4, 797	58. 8 58. 4	.2108										
226 establishments UPHOLSTERERS.	{1912 1913	6, 212 6, 700	58. 5 57. 6	.2111 .2181										
Establishments showing complete data: 15 establishments	$ \begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases} $	336 271 272 279	53. 0 53. 0 53. 2 53. 4	.3082 .3029 .2996 .3172			3 11 1 1	8 7 7 4	7 5 14 8	57 34 27 39	107 75 86 74	119 113 114 108	18 19 16 38	17 7 7
32 establishments	{1910 1911	433 454	55. 0 54. 5	. 2989 . 3157	2	7 3	6	8 7	15 8	65 51	123 131	161 176	39 62	7 10
35 establishments	${1911 \atop 1912}$	384 394	55. 6 54. 7	.3054 .3164		5 2	6 2	4 9	9	49 51	110 101	159 153	32 59	10
37 establishments	{1912 1913 (1907	300 331 383	56. 1 55. 4 53. 6	. 2886 . 2955 . 3004	1	1	3 7	13 13	14 12	51 59	82 78	112 123	23 38	
19 establishments	1908 1909 1910	310 307 325	53. 5 53. 8 53. 8	. 2976 . 2962 . 3110										
38 establishments	{1910 1911	501 518	55. 0 54. 7	.2971										
49 establishments	$\begin{cases} 1911 \\ 1912 \end{cases}$	558 552	55. 8 55. 5	. 2996										
54 establishmentsveneerers.	{1912 1913	583 635	56. 4 55. 8	. 2913					•					
Establishments showing complete data:														
44 establishments	{1910 1911	289 267	58.7 58.2	. 1973 . 2002	2	18 15	26 24	55 52	35 31	124 107	20 30	9 8		
79 establishments	{1911 1912	369 343	58. 5 58. 0	. 2066		13	30 15	61 48	39 32	158 165	56 65	12 18		····
122 establishments All establishments reported:	{1912 1913	551 685	58.3 57.2	. 2123 . 2182		2	56 64	78 90	56 70	241 268	91 149	28 41	1	
58 establishments*	{1910 1911	333 317	58. 8 58. 4	. 1999 . 2024										
94 establishments	{1911 {1912	430 407	58. 7 58. 3	. 2063										
123 establishments	{1912 1913	563 698	58.3 57.2	. 2125 . 2184										

TABLE I.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913—Continued.

PER CENT.1

		Marin	Aver-	Aver-	Em	ploy	rees e	arni		ch cla	assifie	d rate	of w	age
Occupation, and number of establishments.	Year.	Number of employ-ees.	age full- time hours per week.	age rate of wages per hour.	8 and under 12 cts.	and un- der 14 cts.	un- der 16	16 and un- der 18 ets.	and un- der 20 ets.	20 and un- der 25 ets.	25 and un- der 30 ets.	30 and un- der 40 ets.	40 and un- der 50 cts.	50 and un- der 70 cts
Cabinetmakers:														
40 establishments	1907 1908 1909 1910	783 542 674 756	56. 3 56. 7 56. 5 56. 4	\$0. 2357 . 2314 . 2297 . 2392	2.6 1.5	3.6 3.7 4.6 4.2	7.9 6.1	8.3 11.8 8.6 8.2	7.7 5.4 7.3 6.3	36. 9 33. 6 37. 5 33. 5	16. 9 15. 3 17. 2 20. 5	15. 2 15. 5 14. 5 13. 0	4.0 4.2 2.7 6.2	
88 establishments	{1910 1911	1,509 1,518	57.7 57.3	. 2277	.6	6.3 4.1	7. 0 8. 0	8.9 8.8	6. 4 4. 3	38. 0 39. 4	19.5 21.1	10.1 10.0	3.2	
120 establishments	{1911 1912	1,804 1,781	57. 8 57. 7	. 2305	.7	4.1		10.8 10.6	5. 4 5. 5	37. 3 37. 0	20. 6 24. 9	8.5 8.8	3.0	
145 establishments Carvers, hand:	{1912 1913	2,248 2,467	57. 8 56. 9	. 2244	.1	2.6 2.9		12.8 11.8	7.4 7.4	37. 7 33. 0	21. 8 25. 3	8. 0 9. 9		
22 establishments	1907 1908 1909 1910	155 113 138 136	53. 7 53. 8 52. 4 52. 1	.3176 .3203 .3311 .3420			1.3	1.3 1.8 1.4 2.2	1.9 1.8 1.4	9. 0 8. 8 9. 4 8. 1	21.3 29.2 21.7 18.4	48. 4 38. 9 43. 5 50. 0	11.5 18.1	7.
53 establishments	{1910 1911	277 304	55. 6 54. 9	.3190				1.1	1.4 2.0	12.6 12.8	16.6 13.8	56.7 53.3	8.3 10.2	
58 establishments	{1911 1912	306 277	55. 8 55. 8				.7	1.3 .7	.7	12.7 9.7	13.7 22.0	55.6 56.3		
66 establishments Chair assemblers:	{1912 1913	296 302		. 3190 . 3256				.7	.3	9.8 8.3	23.0 16.6	56. 4 65. 6	4.7 6.6	
5 establishments	{1910 1911	140 125						26. 4 25. 6		20. 7 31. 2	10.0 13.6	1.4 1.6		
13 establishments	${1911 \atop 1912}$	201 213	58.3 57.8					16. 9 14. 1		30.3 28.2	15.9 14.6	3.5 6.1	9	
20 establishments Finishers:	{1912 1913	419 480						22. 4 22. 1	14.3 11.0	24. 8 28. 7	10.3 10.6	3.6 4.8	.2	
41 establishments	1907 1908 1909 1910	1,056 786 968 992	57.2	. 1933	3.7	5.6 8.4	12.5 13.8	17. 0 17. 7 16. 4 16. 1	11.7	29. 5 31. 7 29. 1 28. 6	11.7 13.5 12.0 12.2	4.6 4.8 4.6 7.0		
102 establishments	{1910 1911	2,598 2,724			4.0			18. 6 18. 9		28. 2 30. 7	8. 2 8. 4	3. 1 4. 1	i	
150 establishments	${1911 \atop 1912}$	3,614 3,521	58. 4 57. 8			5.7 4.9		20. 6 19. 3		29. 4 33. 2	6.3 8.4	2. 4 3. 0	(2)	
200 establishments Machine hands:	{1912 (1913	4,703 4,707						19. 6 16. 6	14. 5 13. 9	32.3 36.7	9. 2 14. 1	3.1 3.8	i	
40 establishments	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	1,066 817 912 994	57. 8 57. 7	2160 2173	3.4	4.8 5.9	8.4	15. 1 12. 7 12. 1 10. 2	8. 6 8. 4 8. 4 7. 5	33. 4 33. 3 33. 9 32. 7	18.3 18.0 17.8 21.7	8.3 9.8 10.5 11.8	1.1	
96 establishments	{1910 1911	2,508 2,467				6. 0 5. 1		13. 6 13. 7	7.9 7.7	35. 7 34. 0	18. 1 20. 3	7. 1 7. 6	.6	
167 establishments	{1911 1912	4, 196 4, 148						15.3 14.4		34. 9 33. 7	19.0 21.2	5. 6 7. 2	.4	
225 establishments	{1912 1913	6, 208 6, 694	58. 5 57. 6		.5		11.3	16.3 14.3	8.0	33. 2 33. 9	19. 4 22. 3	6. 4 8. 4	.4	

 $^{^1}$ This section of the table includes only those employees whose rates of wages per hour could be classified in the section of this table appearing on pages 121–123. See also explanation on page 113. 2 Less than one-tenth of 1 per cent.

TABLE I.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN THE UNITED STATES, BY YEARS, 1907 TO 1913—Concluded.

PER CENT-Concluded.

		»T	Aver-	Aver-	En	iploy	rees e	arni		hour.		d rate	of w	ages
ccupation, and number of of establishments.	Year.	Number of employees.	age full- time hours per week.	age rate of wages per hour.	8 and un- der 12 ets.	un- der 14	and un- der 16 cts.	and un- der 18 cts.	18 and un- der 20 cts.	un- der 25	25 and un- der 30 cts.	30 and un- der 40 cts.	40 and un- der 50 ets.	un- der 70
Upholsterers:	(1907	336	E9 0	\$0. 3082			0.9	0.4	9.1	17.0	91 0	05.4	- 1	- 1
15 establishments	1908 1909 1910	271 272 279	53. 0 53. 2 53. 4				4.1	2.6	1.8 5.1	17. 0 12. 5 9. 9 14. 0	27.7 31.6	41.7	7.0 5.9	2.6
32 establishments	{1910 1911	433 454	55.0 54.5	. 2989 . 3157	0.5	1.6				15.0 11.2			9.0 13.7	
35 establishments	${1911 \atop 1912}$	384 394	55.6 54.7	.3054 .3164		1.3 .5	1.6	1.0 2.3	2.3 2.3	12.8 12.9		41. 4 38. 8	8.3 15.0	
37 establishments	${1912 \atop 1913}$	300 331	56.1 55.4	. 2886 . 2955		.3				17.0 17.8				
Veneerers: 44 establishments	${1910 \atop 1911}$	289 267	58.7 58.2	.1973 .2002	.7	6. 2 5. 6			12.1 11.6		6.9 11.2	3.1		
79 establishments	{1911 1912	369 343	58. 5 58. 0			3.5			10.6 9.3	42.8 48.1	15. 2 19. 0	3.3 5.2		
122 establishments	{1912 1913	551 685	58.3 57.2							43.7 39.1	16.5 21.8	5.1 6.0		

Table II.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913.

CABINETMAKERS.

		Num-	Aver-		Nu	mbe	r of e	emplo te of v	yees	earni per l	ng ea	ch el	lassi	fied
Year and State.	Number of establishments.	ber of employ-	age full- time hours per week.	age rate of wages per hour.	8 and under 12 cts.	and un- der 14 cts.	and un- der 16 cts.	16 and under 18 cts.	18 and un- der 20 cts.	20 and un- der 25 cts.	25 and un- der 30 cts.	30 and un- der 40 ets.	40 and un- der 50 ets.	50 and un- der 70 ets.
1912.														10
Illinois: Establishments showing	8	125	FC 0	en neen				5	5	0.5	0.77	41		
All establishments re-				\$0.2689				J	J	35	37	41	2	
ported	21	368	58. 4	. 2654										
Indiana: Establishments showing complete data All establishments re-	12	196	59.1	. 2108		2	6	44	27	80	26	10	1	
ported	25	350	59.0	. 2181										
Maryland:														
Establishments showing complete data	4	50	58.3	.1785		3	12	18	2	14	1			
All establishments re- ported	5	61	58.6	. 1860										
Massachusetts	8	152	49.9	.3124				1	12	28	25	53	33	
Michigan	16	475	57.8	. 2423				5	13	235	193	29		
Missouri: Establishments showing complete data	3	38	60.0	. 2241			1	6	6	13	6	6		
All establishments reported	8	83	60.0	. 2264										
New York:														
Establishments showing complete data	30	355	57.2	. 2356			7	26	28	162	107	22	3	
All establishments re-	40	479	57.3	. 2348										
North Carolina	11	114	59.6	.1482	3	28	48	29	5	1				
Ohio:								1460						
Establishments showing complete data. All establishments re-	17	165		. 2194		9	11	12	4	80	42	7		
ported	23	235	59.3	. 2222										
Pennsylvania: Establishments showing complete data All establishments re-	19	300	58.7	. 2002		5	42	75	32	111	27	7	1	
ported	23	327	58.8	. 2019										
Tennessee	6	74	59.7	. 1907		5	13	16	2	33	- 5			
Wisconsin: Establishments showing complete data	11	204	59.8	.1890		7	37	50	31	55	20	4		
All establishments re- ported	13	221	59.7	. 1931				00	0.	00	20			
Total establishments			00.7	. 1001										
showing complete data.	145	2,248	57.8	. 2244	3	59	177	287	167	847	489	179	40	
Total establishments reported	199		58.1	. 2284										
1913.				-17			==							1
Illinois: Establishments showing	0	154	56.9	9507					10	58	20	20	4	
All establishments re-	8 21		56.3					5	10	58	39	38	4	

TABLE II.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

CABINETMAKERS-Concluded.

			1 1/1/2	KERS-	1			emple	******	00 877	ing on	ob o	lossi	======================================
	NT	Num-	Aver-		INI	Imbe		ate of					18881	цеа
Year and State.	Number of establishments.	ber of em-	age full- time hours per week.	per	8 and under 12 cts.	un- der 14	and un- der 16 cts.	un- der 18	18 and un- der 20 cts.	20 and un- der 25 cts.	25 and un- der 30 ets.	30 and un- der 40 cts.	40 and un- der 50 ets.	un- der 70
1913—Concluded.														
Indiana: Establishments showing complete data	12			\$ 0. 2157		1	8	45	19	85	33	12		
ported	25	360	58.3	. 2305										
Maryland: Establishments showing complete data All establishments re-	4		57.0				11	12	6	15	8			
ported	5		56.6	. 2028										
Massachusetts	8		50.4	.3054				1	6	28	36	56		1
Michigan	16	485	54. 2	. 2568				3	20	171	222	68	1	
Missouri: Establishments showing complete data. All establishments re- ported.	3	46 85	60.0	. 2174			7	8	5	9	10	7		
New York:		00	00.0	. 2200										
Establishments showing complete dataAll establishments re-	30		55.8	. 2433			10	23	30	144	161	33	3	
ported	40 11		56. 2 59. 9	. 2395	6		 E7	38	5	8				
Ohio:	11	167	59.9	.1404	0	53	57	00	J	0				
Establishments showing complete data. All establishments reported.	17 23	181 244	59. 1 59. 0	. 2265		11	5	14	7	78	49	17		
Pennsylvania:	20	211	00.0	. 2011										
Establishments showing complete data	19		58.3	. 2199		1	39	75	32	111	41	9		
ported	23	347 87	58.3 59.8	. 2195		5	22	15	3	35	7			
Wisconsin:	0	01	03.0	. 1003			LL	10		50				
Establishments showing complete data	11	234 249	59.8 59.8	. 1911		1	46	53	39	72	18	5		
Total establishments showing complete	10	249	99.0	. 1952		0:0 0:0	0.0							
data Total establishments reported		2,467 3,184	56. 9 57. 2	. 2293	6	72	205	292	182	814	624	245	26	
		C	A ID W/E	RS, H	A NJ	D			1	1			- 1	_
	1		CALL VI	11009 11	28141	1							-	_
1912. Illinois: Establishments showing														
complete data	9		55. 3 57. 0	\$0.3280 .3116						2	7	38	3	
Indiana: Establishments showing complete data	4	5	58.0	. 2865							3	2		
All establishments reported	6	8	58.7	. 2843										

TABLE II.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

CARVERS, HAND-Concluded.

	No	Num-	Aver-		Nu	mbe	r of	emplo ate of	yees	earni es per	ng ea hour.	ch el	assif	ied
Year and State.	Number of establishments.	ber of em- ploy- ees.	age full- time hours per week.	age rate of wages per hour.	8 and under 12 cts.	and un- der 14 cts.	der 16	16 and un- der 18 ets.	and un- der 20 cts.	20 and un- der 25 ets.	25 and un- der 30 ets.	30 and un- der 40 cts.	and under 50 cts.	50 and un- der 70 cts.
1912—Concluded.														
Massachusetts	5	28	45.1	\$0.4581							4	4	5	15
Michigan	14	104	58.0	. 3128					1	5	14	81	3	
New York: Establishments showing	17	66	56, 1	9097						13	20	32	1	
All establishments re-				. 2927						10	20	32	1	
ported	21	82	56. 4	. 2911										
Ohio	4	7	59. 4	. 2452				1		3	2	1		
Pennsylvania: Establishments showing complete data All establishments re-	9	24	57.5	. 2845				1		2	13	7	1	
ported	11	30	56. 9	. 2815										
Wisconsin	3	11	58. 9	. 2879						3	5	2	1	
Other States	- 1	1	59.5	. 2185						1				
Total establishments showing complete														
data Total establishments	66		55. 9	.3190				2	1	. 29	68	167	14	18
reported	82	350	56.3	. 3133										
1913. Illinois:							1000							
Establishments showing complete data	9	59	55. 4	. 3231						5	7	42	5	
portedIndiana:	17	83	56. 7	.3123										
Establishments showing complete data	4	8	56.7	. 2977							1	7		
All establishments reported	6	11	57.6	. 3034										
Massachusetts	5	25	45. 2	. 4308							4	4	9	8
Michigan	14	108	54.0	. 3343						2	3	100	3	
New York: Establishments showing complete data	17	64	55.8	.3058						10	16	36	2	
All establishments reported	21	82	56. 2	. 2997										
Ohio	4	7	59.4	. 2569						4	2	1		
Pennsylvania: Establishments showing		18	E7 9	9770						2	10	6		
complete data	9	- 4		1	-		1			2	10	0		
ported Wisconsin	11		56. 8 58. 9							2	6	2	i	
Other States	1	2	59.5	. 2292				1			1			
Total establishments														
showing complete data Total establishments	66	302	54. 5	. 3256				1		25	50	198	20	8
reported	82	355	55. 1	. 3195										

TABLE II.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

CHAIR ASSEMBLERS.

		Num-	Aver-		Nu	mbe	r of	emple ate of	yees	s earn ges per	ning e r houi	each	class	ifie
Year and State,	Number of establishments.	ber of employ-ees.	age full- time hours per week.	age rate of wages per hour.	8 and under 12 ets.	and un- der 14 ets.	and un- der 16 ets.	16 and under 18 ets.	18 and un- der 20 cts.	20 and un- der 25 cts.	and un- der 30 cts.	30 and un- der 40 cts.	40 and un- der 50 cts.	der 70
1912.				793	15									
Massachusetts	4	138	57.1	\$0.1911		6	11	38	22	49	7	4	1	
Michigan	4	127	57.1	. 2150			6	25	24	39	26	7		
New York	3	.63	58.0	.1879	1	2	22	17	1	7	9	4		
North Carolina	3	28	59.2	. 1356	6	14	2	4	2					
Ohio: Establishments showing complete data. All establishments reported.	2	10	59.7 59.9	.1375	1	4	5							
Wisconsin	3	52	59.3	.1709		3	19	10	11	9				
Other States: Establishments showing complete data All establishments re- ported.	1 3	1 25	54. 0 57. 6	.2685							1			
			37.0	, 2000										
Total establishments showing complete data Total establishments	20	419	57.7	.1906	8	29	65	94	60	104	43	15	1	
reported	23	453	57.8	.1927										
1913.						1								
Massachusetts	4	161	57.1	.1906		5	18	38	19	72	6	3		
¶ichigan	4	126	55. 2	. 2323			2	14	22	39	34	14	1	
New York	3	84	58.3	. 1886		13	17	24	7	8	9	6		
North Carolina	3	36	57.3	. 1406	3	15	11	7						
Ohio: Establishments showing complete data. All establishments reported.	2	10 19	59. 6 59. 8		2	5	3							
Wisconsin	3	62	59.5	. 1839			14	23	5	19	1			
Other States: Establishments showing complete data. All establishments reported.	1 3	1 31	54. 0 57. 7	. 2778							1			
Total establishments showing complete data	20	480	57, 2	. 1955	5	38	65	106	53	138	51	23	1	
Total establishments reported	23	519	57.3	.1985										
		1	FIN	ISHER	RS.									
1912.														
Establishments showing complete data	16 23	1.05		\$0.2256 .2316	1	1	24	41	60	171	134	29		

TABLE II.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

FINISHERS—Continued.

		Num-	Aver-	Aver-	Nu	mber		emplo ate of					class	ified
Year and State.	Number of establishments.	ber of employ-ees.	age full- time hours per week.	age rate of wages per hour.	8 and un- der 12 ets.	and un- der 14 ets.	and un- der 16 cts.	16 and un- der 18 ets.	18 and un- der 20 cts.	20 and un- der 25 ets.	25 and un- der 30 ets.	30 and un- der 40 ets.	40 and un- der 50 cts.	50 and un- der 70 ets.
1912—Concluded.														
Indiana: Establishments showing complete data. All establishments re- ported.	19 25	410 502	58. 7 58. 8	\$0.1998 .2003	1	6	73	88	47	124	54	17		
Maryland	8	139	58.8	.1669	10	10	43	27	19	26	4			
Massachusetts	12	223	54.0	. 2314		9	25	24	21	58	37	49		
Michigan	20	1,064	57.8	.1963			62	221	246	500	35			
Missouri: Establishments showing complete data. All establishments re- ported.	7 9	96 126	60.0	.1929		4	18	20	7	38	8	1		
New York: Establishments showing complete data. All establishments re- ported.	36 44	718 864	56. 8 56. 8				54	130	81	277	110	46		
North Carolina	12	244	59.4	.1275		62	48	15	6	5				
Ohio: Establishments showing complete data All establishments re-	25	292	59.3	. 1821	2		48	65	55	87	12	2		
ported	27	358 545	58.6			31	141	137	71	131	30	3		
ported	26	1	58.6	.1834										
Tennessee.	6	80	59.4	.1489	14	26	13	9	5	10	3			
Wisconsin: Establishments showing complete data	14					31	95	143	65	90	4			
ported	16	447	59.6	.1768						*****				
Total establishments showing complete data Total establishments reported	200	4,703		.1938		219	644	920	683	1,517	431	147		
1913.		5,290	90.2	. 1973										
Illinois: Establishments showing complete data. All establishments reported.	16			33 3 3		1	9	47	61	185	140	49		
Indiana: Establishments showing complete data. All establishments re- ported.	19			1		.11	75	77	45	140	60	26	2	
				1.1			20	94	99	40				
Maryland	8	129	57.1	.1826		4	32	24	23	43	2	1		

TABLE II.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

FINISHERS-Concluded.

					Nu	mbe				s earn			class	ified
Year and State.	Number of establishments.	Number of em- ploy- ees.	Average fulitime hours per week.	Average rate of wages per hour.	un- der 12	and un- der 14 ets.	and un- der 16 cts.	16 and under 18 ets.	18 and under 20 ets.	20	25 and un- der 30 cts.	30 and under 40 ets.	40 and un- der 50 ets.	der 70
1913—Concluded.														
Michigan	20	931	54.2	\$0.2143			6	54	174	562	130	5		
Missouri: Establishments showing complete data. All establishments reported.	7 9						11	18	15	44	12	1		
New York: Establishments showing complete data All establishments re- ported.	36	1 7 7 7	55.6 55.8			6	37	106	115	259	202	58	1	
North Carolina.	12		1000			80	54	32	5	3				
Ohio: Establishments showing complete data. All establishments reported.	25 27		59. 2 59. 1	.1919		14	38	68	58	105	27	4		
Pennsylvania: Establishments showing complete data. All establishments re- ported.	25 26					10	108	159	65	186	46	3	1	
Tennessee	6	91	59.6	. 1564	4	29	20	19	2	15	2			
Wisconsin: Establishments showing complete data. All establishments re- ported.	14		59.6 59.5			7	66	146	75	120	4			
Total establishments showing complete data Total establishments reported	200	4, 707 5, 287	57.0 57.2		73	162	461	783	654	1,726	665	177	6	
		IMI	ACHII	NE HA	ND:	s.					,			
1912.				1					1					
Illinois	21	584	59.0	\$0. 2506			1	28	19	216	222	94	4	
Indiana	25	780	58.8		1	4	48	144	77	365	107	31	1	2
Maryland	. 8	175	59.1	. 1843	1	13	39	53	9	39	17	4		
Massachusetts	, 12	434	56. 5	. 2136	37. 1	9	58	113	32	121	43	43	14	1

1912.				1										
Illinois	21	584	59.0	0. 2506			1	28	19	216	222	94	4	
Indiana	25	780	58.8	. 2097	1	4	48	144	77	365	107	31	1	2
Maryland	8	175	59. 1	. 1843	1	13	39	, 53	9	39	17	4		
Massachusetts	12	434	56. 5	. 2136		9	58	113	32	121	43	43	14	1
Michigan	20	749	57. 4	. 2472			2	27	48	286	273	110	3	
Missouri	9	206	59.6	. 2155			10	37	26	87	37	9		
New York: Establishments showing complete data. All establishments reported.	42	950 954	57. 2 57. 2	. 2210		10	66	132	98	345	255	42	2	
North Carolina	13	329	59. 5	. 1496	26	113	93	47	19	24	6	1		

Table II.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

MACHINE HANDS-Concluded.

		Num-	Aver-		Nu	mbe					ning e r hour		class	ified
Year and State.	Number of establishments.	ber of employ-	age full- time hours per week.	age rate of wages per hour.	8 and under 12 ets.	and un- der 14 cts.	and un- der 16 cts.	16 and un- der 18 cts.	18 and un- der 20 ets.	20 and un- der 25 cts.	and un- der 30 ets.	un- der 40	40 and un- der 50 cts.	un- der 70
1912—Concluded.														
Ohio	26	481	59.6	\$0.1977		31	65	75	28	196	78	. 8		
Pennsylvania	28	685	58.7	. 2082	1	14	83	144	71	215	109	46	2	
Tennessee	6	152	59.6	. 1868	1	16	38	32	7	34	17	7		
Wisconsin	15	683	59.4	. 1758	1	60	200	181	61	136	39	5		
Total establishments showing complete data Total establishments reported	225 226	6, 208 6, 212	58. 5 58. 5	. 2111	31	270	703	1,013		2,064	1, 203	400	26	3
1913.														-
Illinois	21	684	58.7	. 2556			11	24	17	223	267	137	5	
Indiana	25	804	57.7	. 2112		4	61	114	65	410		30		
Maryland	8	206		. 1920	2	-7,1119			9	53		8		
Massachusetts	12	436	56. 3	. 2199		7	43	83	39	147	57	49		
Michigan	20	879	54.3	. 2617			3	21	35	246	376	191	6	
Missouri	9	214	59.6	. 2142			13	36	24	95	39	7		
New York: Establishments showing complete data All establishments re- ported.	42	1,060 1,066		. 2271		4	50	126	117	379	311	70	3	
North Carolina.	13	379	59.3		39	131	95	67	14	34	6			
Ohio	26	503	59.3		1	23	62	69	25	221	90	12		***
Pennsylvania	28	721	58.1	. 2144		2	.34	135	71	251	142	50		
Tennessee	6	117	59.7	. 1931		10	15	28	3	42		3		
Wisconsin	15	691	59. 4	. 1824		6		198	75	166	S 6.7	4		
Total establishments showing complete data Total establishments reported		6,694 6,700	57. 6 57. 6		35	197					1,491		26	
		UP	HOLS	TERE	RS.									
1912.								,						
Illinois: Establishments showing complete data. All establishments re- ported.	6	78 215		\$0.3240 .3083					1	10	16	41	10	
Indiana	4	37	56.9	. 2736										
Massachusetts: Establishments showing complete data. All establishments reported.	4 5	18							••••	•••••		7	11	

TABLE II.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

UPHOLSTERERS—Continued.

		Num-	Aver-		Nu	mbe	r of	emple ate of	oyees f wag	s earn	ing e r hour	ach	class	ified
Year and State.	Number of establishments.	ber of employ-ees.	age full- time hours per week.	age rate of wages per hour.	8 and under 12 cts.	and un- der 14 cts.	and un- der 16 cts.	16 and under 18 cts.	18 and un- der 20 ets.	20 and un- der 25 cts.	25 and un- der 30 ets.	30 and un- der 40 ets.	40 and un- der 50 cts.	50 and un- der 70 ets.
1912—Concluded.														
Michigan: Establishments showing complete data. All establishments reported.	6	35 41	58. 5 57. 8	\$0. 2743 . 3001				2	2	5	13	13		
New York: Establishments showing complete data All establishments re-	5	34	54.7	.3031						5	10	18	1	
ported	10	108	57.0				• • • • • • • • • • • • • • • • • • • •							
Ohio	4	30	58. 5	. 2564										
Pennsylvania: Establishments showing complete data All establishments re-	4	34	57. 2		137		1	1	3	4	11	14		
ported	5	41	57.3											
Wisconsin	8	75	57.9	. 2503		1	2	9	4	19	23	16	1	
Other States: Establishments showing complete data. All establishments reported.	14	26 17	59. 5 59. 2	. 2334	1			1	4	8	9	3		
Total establishments					-	-	-							
showing complete data	37	300	56. 1	. 2886	1	1	3	13	14	51	82	112	23	
reported	54	583	56. 4	. 2913										
1913. Illinois: Establishments showing complete data. All establishments reported	6 8	74 212	53. 5 54. 2		48.3				1	7	16	39	11	
Indiana	4	35	57.4	. 2743										
Massachusetts: Establishments showing complete data. All establishments re- ported.	4 5	25 26	50.0							1		7	17	
Michigan: Establishments showing complete data	6	44	54. 5	. 2941					2	4	15	23		
All establishments re-	7	52	54. 4	.3160										
New York: Establishments showing complete data All establishments reported.	5 10	42	55.0	. 3093				1	1	7	7	20	6	
				1.0										
Ohio	4	32 28	58. 4	. 2598			1	3	1	5	6	9	3	
All establishments re-	5	34	57.2	. 2869	13:31	- 1		10.5	3.	118	BIR	T		2

¹ Including 1 establishment in a State shown above.

${\tt TABLE~II.--AVERAGE~AND~CLASSIFIED~RATES}$ OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

UPHOLSTERERS-Concluded.

				RERS-					16					
	Name	Num-	Aver-	Aver-	Nu	mbe		emplo ate of					class	ified
Year and State.	Number of establishments.	ber of em- ploy- ees.	age full- time hours per week.	age rate of wages per hour.		and un- der 14 cts.	and un- der 16 ets.	16 and un- der 18 cts.	18 and un- der 20 cts.	20 and un- der 25 ets.	25 and un- der 30 cts.	30 and un- der 40 ets.	40 and un- der 50 ets.	50 and un der 70 cts
1913—Concluded.									571					
Wisconsin	8	83	58.0	\$0.2511			4	7	4	24	21	22	1	
Other States: Establishments showing complete data. All establishments reported.	14		2 2			1	2	2	3	11	13	3		
Total establishments showing complete	37	331	EE 4	. 2955		-		. 10	10		70	100		
data Total establishments reported	54		55. 4 55. 8	. 2961		1	7	13	12	59	78	123	38	
			VEN	eerei	RS.									
1912.														
Illinois	17	69	59. 5	\$0. 2279			2	1	7	38	15	6		
Indiana	14	45	59.1	. 2102			5	4	5	19	10	2		
Massachusetts	3	6	51. 4	. 2800						2	1	3		
Michigan	15	158	57.1	. 2259				13	10	97	31	7		
Missouri	3	7	60.0	. 2190				2		3	2			
New York	25	72	56.6	. 2202			2	8	15	26	20	1		
Ohio	13	54	59.5	. 2040			5	10	6	26	6	1		
Pennsylvania	17	62	59.1	. 2054			3	22	6	21	3	6	1	
Tennessee	3	8	60.0	. 1811			1	4	1	1	1			
Wisconsin: Establishments showing complete data. All establishments re- ported.	11	-	-		VAN.		38	14	6	8	2	1		
Other States	1	1	60.0	. 3333								1		
Total establishments showing complete data Total establishments reported	122			14/8/14			56	78	56	241	91	28	1	
1913.														
Illinois	17	103	59.4	. 2342			2	2	2	63	28	6		
Indiana	. 14	60	58.4	. 2117			4	10	6	27	9	4		
Massachusetts	. 3	10	50.8	. 2860						3		7		
Michigan	. 18	170	54.1	. 2368				9	16	76	59	10		

^{89 55.5 .2262} ¹ Including 1 establishment in a State shown above.

7 60.0 .2252 .

2 3 ...

24 5

19 30

3

25

Missouri....

New York.....

Table II.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH YEAR, BY STATES, 1912 AND 1913—Concluded.

VENEERERS—Concluded.

	3.7	Num-		Aver-	Nu	mbe					ing ea		lassi	fied
Year and State.	Number of establishments.	ber of em-	age full- time hours per week.	per		and un- der 14 cts.	un- der 16	16 and un- der 18 cts.	and un- der 20 cts.	20 and un- der 25 ets.	25 and un- der 30 cts.	30 and un- der 40 ets.	der 50	50 and un- der 70 ets.
1913—Concluded.														
Ohio	13	56	58.8	\$0.2170			2	7	8	26	11	2		
Pennsylvania	17	91	58. 4	. 2025			11	25	11	29	9	6		
Tennessee	3	14	60.0	.1850		2	2	4	1	3	2			
Wisconsin: Establishments showing complete data. All establishments re- ported.	11 12						40	24	6	8	4	1		
Other States	. 1	2	55.0	.3091						1			1	
Total establishments showing complete data	122 123					2	64	90	70	268	149	41	1	

TABLE III.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]

CABINETMAKERS.

		27	Aver-	Aver-	Nu	ımbe					ng ea		assifi	ed
State, and number of establishments.	Year.	Number of employ-ees.	age full- time hours per week.	age rate of wages per hour.	8 and under 12 cts.	and un- der 14 cts.	and un- der 16 cts.	16 and un- der 18 ets.	18 and un- der 20 cts.	20 and un- der 25 cts.	25 and un- der 30 ets.	30 and un- der 40 cts.	40 and un- der 50 cts.	50 and un- der 70 cts
llinois: 8 establishments showing complete data	{1912 {1913	125 154	56.0 56.3	\$0.2689 .2587				5 5	5 10	35 58	37 39	41 38	2 4	
21 establishments reported.	{1912 1913	368 384	58. 4 58. 2	. 2654 . 2680										
Indiana: 12 establishments showing complete data	{1912 1913	196 203	59. 1 59. 0	. 2108		2	6 8	44 45	27 19	80 85	26 33	10 12	1	
25 establishments reported. Maryland:	${1912 \atop 1913}$	350 360	59. 0 58. 3	. 2181										
4 establishments showing complete data	{1912 1913	50 52	58.3 57.0	. 1785 . 1939		3	12 11	18 12	6	14 15	1 8			
5 establishments reported Massachusetts:	{1912 1913	61 64	58. 6 56. 6	.1860 .2028										
8 establishments	{1912 1913	152 146	49. 9 50. 4	.3124 .3054				1	12 6	28 28	25 36	53 56	33 18	
16 establishments Missouri:	{1912 1913	475 485	57.8 54.2	. 2423 . 2568				5 3	13 20	235 171	193 222	29 68	···i	
3 establishments showing complete data	{1912 1913	38 46	60. 0 60. 0				7	6 8	6 5	13 9	6 10	6 7		
8 establishments reported New York:	{1912 1913	83 85	60. 0 60. 0											
30 establishments showing complete data	{1912 1913	355 404	57. 2 55. 8				7 10	26 23	28 30	162 144	107 161	22 33	3	
40 establishments reported. North Carolina:	\(\frac{1912}{1913}\)	479 566	57.3 56.2											
11 establishments	{1912 1913	114 167	59. 6 59. 9	. 1484	3 6		48 57	29 38	5 5	1 8				
17 establishments showing complete data	{1912 1913	165 181	59. 1 59. 1	. 2194		9	11 5	12 14	7	80 78	42	7 17		
23 establishments reported. Pennsylvania:	{1912 1913	235 244	59. 3 59. 0	. 2314										
19 establishments showing complete data	{1912 1913	300	58.3			5		75 75	32 32	111 111	27 41	7 9	1	
23 establishments reported. Tennessee:	{1912 1913	327 347		. 2195										
6 establishments	{1912 1913	74 87	59.8	. 1859		5 5	22	16 15	3	33 35	5 7			
11 establishments showing complete data	{1912 1913	204 234	59.8	. 1911		7 1		50	31 39	55 72	20 18	5		
13 establishments reported.	{1912 1913	221 249	59.7 59.8											

Table III.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913—Continued.

CARVERS, HAND.

		0.	ALO VI	1105, 11	12141					24.01				
		Nar	Aver-	Aver-	Nu	ımbe	er of	emplo ate of	yees	earni es per	ing ea	ch el	assif	ied
State, and number of establishments.	Year.	Number of employ-ees.	age full- time hours per week.	age rate of wages per hour.	8 and under 12 cts.	and un- der 14 cts.	and un- der 16 cts.	16 and un- der 18 cts.	and un- der 20 cts.	20 and un- der 25 cts.	25 and un- der 30 ets.	30 and un- der 40 ets.	40 and un- der 50 cts.	50 and un de: 70 cts
Illinois:									4					
9 establishments showing complete data	{1912 1913	50 59		\$0.3280 .3231						5	7	38 42	3 5	
17 establishments reported.	(1912 (1913	79 83												
Indiana: 4 establishments showing complete data	1912 1913	5 8	58.0	. 2865							3	2 7		
6 establishments reported.,	{1912 1913	8 11		. 2843										
Massachusetts: 5 establishments Michigan:	{1912 1913	28 25	45. 1 45. 2	. 4581 . 4308							4	4 4	5 9	1
14 establishments	{1912 1913	104	58.0 54.0						1	5 2	14	81 100	3 3	
New York: 17 establishments showing complete data	{1912 1913	66 64	56. 1 55. 8	.2927 .3058						13 10	20 16	32 36	1 2	
21 establishments reported. Ohio:	${ \begin{cases} 1912 \\ 1913 \end{cases} }$	82 82	56. 4 56. 2											
4 establishments	{1912 1913	7	59. 4 59. 4					1		3 4	2 2	1 1		
Pennsylvania: 9 establishments showing complete data	{1912 1913	24 18	57. 5 57. 3					1		2 2	13 10	7 6		
11 establishments reported. Wisconsin:	{1912 1913	30 26												
3 establishments	${1912 \atop 1913}$	11 11	58. 9 58. 9							3 2	5 6	2 2	1	
		СНА	AIR A	SSEM	BLE	ers.								
Massachusetts: 4 establishments	{1912 1913	138 161		\$0. 1911 . 1906		6 5				49 72	7 6	4 3	1	
Michigan: 4 establishments	${1912 \atop 1913}$	127 126		.2150			6 2			39		7 14	····i	
New York: 3 establishments	{1912 1913	63 84				2 13		17 24		7 8	9			
North Carolina: 3 establishments	{1912 1913	28 36							2					
Ohio: 2 establishments showing complete data	{1912 1913	10	59.7	. 1375	1	4	5							
3 establishments reported Wisconsin:	$\begin{cases} 1912 \\ 1913 \end{cases}$	20 19												
3 establishments	{1912 1913	52 62				3	19 14			9				
	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Table III.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913—Continued.

FINISHERS.

			Aver-	A	Nu	mbe	r of	emplo ate of	yees	earni es per	ing ear hour	ch c	lassi	fied
State, and number of establishments.	Year.	Number of employ-ees.	age full- time hours per week.	Average rate of wages per hour.	8 and under 12 ets.	and un- der 14 ets.	and un- der 16 ets.	16 and under 18 ets.	18 and un- der 20 cts.	20 and un- der 25 ets.	25 and un- der 30 cts.	30 and un- der 40 ets.	40 and un- der 50 ets.	50 and under 70 cts.
Illinois: 16 establishments showing complete data	${1912 \atop 1913}$	461 492	57.8 57.6	\$0. 2256 . 2328	1	1 1	24	41 47	60 61	171 185	134 140	29 49		
23 establishments reported.	${1912 \atop 1913}$	672 702	58. 5 58. 3											
Indiana: 19 establishments showing complete data	${1912}\atop{1913}$	410 436	58.7 57.8	.1998	1	6 11	73 75	88 77	47 45	124 140	54	17 26	2	
25 establishments reported.	${1912 \atop 1913}$	502 535	58. 8 57. 8											
Maryland: 8 establishments Massachusetts:	${ 1912 \atop 1913 }$	139 129	58.8 57.1		10	10 4	43 32	27 24	19 23	26 43	4 2	···i		
12 establishments Michigan:	${ 1912 \atop 1913 }$	223 190	54. 0 54. 5			9	25 5	24 33	21 16	58 64	37 40	49 30	2	
20 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	1,064 931	57.8 54.2				62 6	221 54	246 174	500 562	35 130			
7 establishments showing complete data	${ 1912 \atop 1913 }$	96 103	60. 0 60. 0		···· 2	4	18 11	20 18	7 15	38 44	8 12			
9 establishments reported New York:	${ 1912 \atop 1913 }$	126 133	60. 0 60. 0											
36 establishments showing complete data	$ \begin{cases} 1912 \\ 1913 \end{cases} $	718 784	56. 8 55. 6		2	18 6	54 37	130 106	81 115	277 259	110 202		···i	
44 establishments reported. North Carolina:	${ 1912 \atop 1913 }$	864 909	56. 8 55. 8											
12 establishments	${1912 \atop 1913}$	244 240	59. 4 59. 0		108 66	62 80	48 54	15 32	6 5	5 3				
25 establishments showing complete data	${1912 \atop 1913}$	292 314		. 1821	2	21 14	48 38	65 68	55 58	87 105	12 27			
27 establishments reported. Pennsylvania:	${ 1912 \atop 1913 }$	358 380	59. 5 59. 1	. 1857										
25 establishments showing complete data	${ 1912 \atop 1913 }$	545 579			1	31 10	141 108	137 159	71 65	131 186	30 46			
26 establishments reported. Tennessee:	${1912 \atop 1913}$	571 610	58. 6 58. 2											
6 establishments	${1912 \atop 1913}$	80 91				26 29		9	5 2	10 15				
Wisconsin: 14 establishments showing complete data	${1912 \atop 1913}$	431 418	59. 6 59. 6			31 7	95 66	143 146	65 75					
16 establishments reported.	$\begin{cases} 1912 \\ 1913 \end{cases}$	447 437	59. 6 59. 5											
		M	ACHI	NE HA	ND	s.								
Illinois:	(1912	584	50 (\$0. 2506			1	28	19	216	222	94	4	
21 establishments Indiana:	(1913	684	58.7	. 2556			11	24	17	223	267	137	5	
25 establishments	$ \begin{vmatrix} 1912 \\ 1913 \end{vmatrix} $	780 804				4			65				1	

TABLE III.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913—Continued.

MACHINE HANDS—Concluded.

		Num-	Aver-	Aver-	Nu	mbe	r of	emplo ate of	Number of employees earning each classified rate of wages per hour.											
State, and number of establishments.	Year.	ber of em- ploy- ees.	age full- time hours per week.	age rate of wages per hour.	8 and un- der 12 cts.	and un- der 14 cts.	and un- der 16 cts.	16 and un- der 18 cts.	18 and un- der 20 cts.	20 and un- der 25 cts.	25 and un- der 30 cts.	30 and un- der 40 ets.	40 and un- der 50 ets.	50 and under 70 cts.						
Maryland: 8 establishments	{1912 1913	175 206	59. 1 58. 1	\$0. 1843 . 1920	1 2	13 10	39 49	53 54	9 9	39 53	17 20	4 8	₁							
Massachusetts: 12 establishments	{1912 1913	434 436	56. 5 56. 3	. 2136 . 2199		9 7	58 43	113 83	32 39	121 147	43 57	43 49	14 11	1						
Michigan: 20 establishments	{1912 1913	749 879	57. 4 54. 3	. 2472 . 2617			2 3	27 21	48 35	286 246	273 376	110 191	3 6							
Missouri: 9 establishments	{1912 1913	206 214	59. 6 59. 6	. 2155 . 2142			10 13	37 36	26 24	87 95	37 39	9 7								
New York: 42 establishments showing complete data	${1912 \atop 1913}$	950 1,060	57. 2 56. 4	. 2210 . 2271		10 4	66 50	132 126	98 117	345 379	255 311	42 70	2 3							
43 establishments reported. North Carolina:	$\begin{cases} 1912 \\ 1913 \end{cases}$	954 1,066	57. 2 56. 4	. 2211 . 2273																
13 establishments	${1912 \atop 1913}$	329 379	59. 5 59. 3	.1496	26 32	113 131	93 95	47 67	19 14	24 34	6	1								
26 establishments Pennsylvania:	${1912 \atop 1913}$	481 503	59. 6 59. 3	. 1977 . 2051	···i	31 23	65 62	75 69	28 25	196 221	78 90	8 12	::::							
28 establishments	${1912 \atop 1913}$	685 721	58. 7 58. 1	. 2082		14 2	83 70	144 135	71 71	215 251	109 142	46 50	2							
6 establishments	{1912 1913	152 117	59. 6 59. 7	.1868		16 10	38 15	32 28	7 3	34 42	17 16	7 3								
15 establishments	{1912 (1913	683 691	59.4 59.4	.1758 .1824		60	200 195	181 198	61 75	136 166	39 47	5 4								
		U	рног	STER	ERS	5.														
Illinois: 6 establishments showing complete data	{1912 {1913	78 74	53. 6 53. 5	\$0.3240 .3332					1 1	10 7	16 16	41 39	10 11							
8 establishments reported. Indiana:	${ 1912 \atop 1913 }$	215 212	55. 1 54. 2	.3083																
4 establishments Massachusetts:	{1912 (1913	37 35	56.9 57.4	. 2736 . 2743																
4 establishments showing complete data	${1912 \atop 1913}$	18 25	50. 0 50. 0	.3961						i		7 7	11 17							
5 establishments reported Michigan:	{1912 {1913	19 26	50. 5 50. 3	.3874 .3946																
6 establishments showing complete data	{1912 1913	35 44	58. 5 54. 5	. 2743 . 2941		::::		2	2 2	5 4	13 15	13 23								
7 establishments reported. New York:	${ 1912 \atop 1913 }$	41 52	57.8 54.4	.3001 .3160																
5 establishments showing complete data	$ \begin{cases} 1912 \\ 1913 \end{cases} $	34 42	54. 7 55. 0	.3031				i	. 1	5 7	10 7	18 20	1 6							
10 establishments reported Ohio:	$ \begin{cases} 1912 \\ 1913 \end{cases} $	108 136	57. 0 56. 8	. 2980 . 3033																
4 establishments	${1912 \atop 1913}$	30 32	58. 5 58. 4	. 2564 . 2598																

Table III.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN EACH STATE, BY YEARS, 1912 AND 1913—Concluded.

UPHOLSTERERS—Concluded.

		Manage	Aver-	Aver-	Number of employees earning each classified rate of wages per hour.										
State, and number of establishments.	Year.	Number of em- ploy- ees.	age full- time hours per week.	age rate of wages per hour.	8 and un- der 12 cts.	and un- der 14 cts.	and un- der 16 cts.	16 and un- der 18 ets.	18 and un- der 20 cts.	20 and un- der 25 cts.	25 and un- der 30 cts.	30 and un- der 40 cts.	40 and un- der 50 cts.	50 and un der 70 cts	
Pennsylvania: 4 establishments showing complete data	{1912 1913	34 28		\$0. 2774 . 2897			1 1	1 3	3	4 5	11	14 9	3		
5 establishments reported Wisconsin:	{1912 1913	- 41 - 34	57.3 57.2	. 2740 . 2869											
8 establishments	{1912 1913	75 83	57. 9 58. 0			1	. 4	9 7	4 4	19 24	23 21	16 22	1		
			VE	NEERI	ERS	•									
Illinois:							1					= 31/			
17 establishments	{1912 1913	69 103		\$0. 2279 . 2342			2 2	$\frac{1}{2}$	7 2	38 63	15 28	6			
14 establishments Massachusetts:	${1912 \atop 1913}$	45 60		.2102			5 4	4 10	5 6	19 27		2 4			
3 establishments	{1912 1913	6								2 3		3 7			
Michigan: 15 establishments	(1912 (1913	158 170		. 2259				13		97 76		7			
Missouri: 3 establishments New York:	${1912 \atop 1913}$	7 7						2 1	1	3 2	2				
25 establishments	${1912 \atop 1913}$	72 89					2 3	8		26 30		1 5			
13 establishments Pennsylvania:	{1912 1913	54 56					5 2	10	6 8	26 26		1 2			
17 establishments	{1912 1913	62 91					3 11	22 25		21 29	3 9				
Tennessee: 3 establishments	{1912 1913	8 14				2	1 2	4 4		1 3	1 2				
Wisconsin: 11 establishments showing complete data	{1912 1913	69 83					38 40			8		1 1			
12 establishments reported	{1912 1913	81 96													

Table IV.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]

NUMBER.

			Aver-	Е	mploye	ees wh	ose ful	l-time	hours	per we	ek wer	e—
Occupation, and number of establishments.	Year.	Num- ber of em- ploy- ees.	age full- time hours per week.	Un- der 48	48	Over 48 and un- der 51	51 and un- der 54	54	Over 54 and under 57	57 and un- der 60	60	Over 60
Cabinetmakers:	(1007	000	F0 F	***		70	0.17	150	100			
50 establishments	1907 1908 1909 1910	890 632 771 862	56.7 57.1 56.9 56.7	58 30 25 43		53 42 75 42	27 11 5 7	156 99 121 154	102 45 85 140	77 130 138 155	417 275 322 321	
112 establishments	{1910 1911	1,801 1,846	58.0 57.7	43 45		74 68	7 30	161 114	209 302	271 381	1,019 882	17 24
169 establishments	{1911 1912	2, 455 2, 427	58.3 58.1	45 26		80 72	19 36	108 106	296 481	478 331	1,405 1,352	24 23
199 establishments	{1912 1913	2,939 3,184	58.1 57.2	26 14		125 127	36 58	106 801	537 272	489 588	1,597 1,304	23 20
Carvers, hand: 25 establishments	1907 1908 1909 1910	169 127 151 148	54. 2 54. 5 53. 0 52. 7	22 14 31 25		26 20 21 31	2 2 1 2	49 33 48 48	4 4 3 4	26 32 30 22	40 22 17 16	
65 establishments	{1910 1911	315 345	56.1 55.5	25 38		31 34	2 5	52 45	27 45	61 62	116 115	1
76 establishments	{1911 1912	367 334	56. 2 56. 3	38 25		5 6	5 29	64 40	45 64	69 38	140 131	1
82 establishments	{1912 1913	350 355	56.3 55.1	25 22		6 5	30 19	40 180	65 10	55 64	129 55	
Chair assemblers: 6 establishments	{1910 1911	165 141	57.7 58.0						85 64	40 31	40 46	
15 establishments	${1911 \atop 1912}$	227 237	58.3 57.8			5 5	11		71 81	41 41	110 99	
23 establishments Finishers:	{1912 1913	453 519	57.8 57.3			22 20	11	1 73	91 76	201 293	127 57	
52 establishments	1907 1908 1909 1910	1,217 927 1,127 1,164	57.3 57.5 57.3 57.3	21 19 16 19		21 14 27 22	6 3	256 164 200 210	201 159 220 210	223 200 230 284	489 368 434 419	
128 establishments	{1910 1911	3, 132 3, 206	58.5 58.0	19 17		45 51	23	214 224	442 662	584 718	1,787 1,473	41 38
192 establishments	{1911 1912	4, 407 4, 357	58.5 58.1	17 17		48 49	19 94	202 207	647 1,054	884 646	2,552 2,253	38 37
228 establishments	{1912 1913	5,290 5,287	58. 2 57. 2	17 6		83 68	97 49	193 1,536	1,088 554	1, 164 1, 273	2,611 1,772	37 29
Machine hands: 51 establishments	1907 1908 1909 1910	1,347 1,047 1,153 1,239	58. 2 58. 1 57. 9 57. 4	10 9 10 9		34 36 38 38	7 8 3 3	135 97 117 127	192 116 149 214	246 273 299 369	723 508 537 479	
121 establishments	{1910 1911	3, 151 3, 107	58.7 58.3	9		49 49	3 35	135 109	422 525	648 788	1,817 1,515	68 77
192 establishments	{1911 1912	4, 855 4, 797	58. 8 58. 4	9 7		67 49	19 63	107 155	634 987	995 761	2,947 2,694	77 81
226 establishments		6, 212 6, 700	58.5 57.6	7 8		93 82	63	168 1,401		1,589 1,844	3, 149 2, 542	81 58

TABLE IV.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913—Continued.

NUMBER—Concluded.

		NT	Aver-	Employees whose full-time hours per week were											
Occupation, and number of establishments.	Year.	Number of em- ploy- ees.	age full- time hours per week.	Un- der 48	48	Over 48 and un- der 51	51 and un- der 54	54	Over 54 and un- der 57	57 and un- der 60	60	Over 60			
Upholsterers:											143				
19 establishments	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	383 310 307 325	53.6 53.5 53.8 53.8	17 7 7 7	16 21 4 2	49 37 52 52	19 19 18 14	204 163 161 174	18 16 16 28	28 37 39 33	32 10 10 15				
38 establishments	{1910 1911	501 518	55.0 54.7	7 9	2 3	52 49	14 48	216 231	79 43	33 56	98 79				
49 establishments	{1911 1912	558 552	55.8 55.5	9 8	3 29	16 15	20 24	233 192	68 87	98 97	111 100				
54 establishments	{1912 1913	583 635	56. 4 55. 8			18 25	24 18	184 279	88 71	182 183	87 59				
Veneerers: 58 establishments	{1910 1911	333 317	58. 8 58. 4					1 1	67 84	68 76	186 140	11 16			
94 establishments	{1911 1912	430 407	58.7 58.3			1 1	3	1 2	89 133	98 49	225 210	16			
123 establishments	{1912 1913	563 698	58.3 57.2			5 9	6 11	6 218	155 62	94 111	288 274	13			

PER CENT.

Cabinetmakers:	(1907	890	EC 7	0 =		6.0	2.0	17 5	11 5	0 7	40.0	
50 establishments	1907 1908 1909 1910	632 771 862	56. 7 57. 1 56. 9 56. 7	6.5 4.7 3.2 5.0		6.0 6.6 9.7 4.9	3.0 1.7 .6 .8	17. 5 15. 7 15. 7 17. 9	11.5 7.1 11.0 16.2	8.7 20.6 17.9 18.0	46.9 43.5 41.8 37.2	
115 establishments	${1910 \atop 1911}$	1,801 1,846	58.0 57.7	2.4 2.4		4.1 3.7	1.6	8.9 6.2	11.6 16.4	15.0 20.6	56.6 47.8	0.9 1.3
169 establishments	${1911 \atop 1912}$	2,455 2,427	58.3 58.1	1.8		3.3 3.0	1.5	4. 4 4. 4	12.1 19.8	19.5 13.6	57.2 55.7	1.0
199 establishments Carvers, hand:	${1912 \atop 1913}$	2,939 3,184	58.1 57.2	.9		4.3 4.0	1.2 1.8	$\frac{3.6}{25.2}$	18.3 8.5	16.6 18.5	54.3 41.0	.8
25 establishments	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	169 127 151 148	54. 2 54. 5 53. 0 52. 7	13.0 11.0 20.5 16.9		15.4 15.7 13.9 20.9	1.2 1.6 .7 1.4	29. 0 26. 0 31. 8 32. 4	2.4 3.1 2.0 2.7	15.4 25.2 19.9 14.9	23.7 17.3 11.3 10.8	
65 establishments	{1910 1911	315 345	55.7 55.5	7.9 11.0		9.8 9.9	.6 1.4	16.5 13.0	8. 6 13. 0	19.4 18.0	36.8 33.3	.3
76 establishments	{1911 (1912	367 334	56. 2 56. 3	10.4 7.5		1.4 1.8	1.4 8.7	17.4 12.0	12.3 19.2	18.8 11.4	38.1 39.2	.3
82 establishments Chair assemblers:	${1912 \atop 1913}$	350 355	56.3 55.1	7.1 6.2		1.7 1.4	8.6 5.4	11.4 50.7	18.6 2.8	15.7 18.0	36.9 15.5	
6 establishments	{1910 1911	165 141	57.7 58.0						51.5 45.4	24. 2 22. 0	24. 2 32. 6	
15 establishments	{1911 1912	227 237	58.3 57.8			2.2 2.1	4.6		31.3 34.2	18.1 17.3	48.5 41.8	
23 establishments	${1912 \atop 1913}$	453 519	57.8 57.3		l	4.9	2.4	14.1	20.1 14.6	44. 4 56. 5	28.0 11.0	

TABLE IV.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN THE UNITED STATES, BY YEARS, 1907 TO 1913—Concluded.

PER CENT—Concluded.

		Num-	Aver-	Е	mploy	ees wh	ose full	-time	hours 1	per wee	ek wer	e—
Occupation, and number of establishments.	Year.	ber	age full- time hours per week.	Un- der 48	48	Over 48 and un- der 51	51 and un- der 54	54	Over 54 and under 57.	57 and un- der 60	60	Over 60
Finishers: 52 establishments	\$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}\$	1,217 927 1,127 1,164	57.3 57.5 57.3 57.3	1.7 2.0 1.4 1.6		1.7 1.5 2.4 1.9	0.5	21.0 17.7 17.7 18.0	16.5 17.2 19.5 18.0	18.3 21.6 20.4 24.4	40. 2 39. 7 38. 5 36. 0	
128 establishments	{1910 1911	3.132 3,206	58. 5 58. 0	.6		1.4 1.6	7	6.8	14.1 20.6	18.6 22.4	57. 1 45. 9	1. 1.
192 establishments	${1911 \atop 1912}$	4,407 4,357	58. 5 58. 1	.4		1.1	2.2	4.6 4.8	14.7 24.2	20.1 14.8	57.9 51.7	:
228 establishments Machine hands:	{1912 1913	5,290 5,287	58. 2 57. 2	.3		1.6 1.3	1.8	$\frac{3.6}{29.1}$	20.6 10.5	22.0 24.1	49. 4 33. 5	:
51 establishments	1907 1908 1909 1910	1,347 1,047 1,153 1,239	58. 2 58. 1 57. 9 57. 4	.7 .9 .9		2.5 3.4 3.3 3.1	.5 .8 .3 .2	10.0 9.3 10.1 10.3	14.3 11.1 12.9 17.3	18.3 26.1 25.9 29.8	53. 7 48. 5 46. 6 38. 7	
121 establishments	{1910 1911	3,151 3,107	58. 7 58. 3	.3		1.6 1.6	1.1	4.3	13.4 16.9	20.6 25.4	57. 7 48. 8	2. 2.
192 establishments	${ 1911 \atop 1912 }$	4,855 4,797	58. 8 58. 4	.2		1.4 1.0	1.3	2.2 3.2	13.1 20.6	20. 5 15. 9	60. 7 56. 2	1. 1.
226 establishments Jpholsterers:	${1912 \atop 1913}$	6,212 6,700	58. 5 57. 6	.1		1.5 1.2	1.0 1.5	$\frac{2.7}{20.9}$	17.1 9.9	25.6 27.5	50. 7 37. 9	1.
15 establishments	$\begin{cases} 1907 \\ 1908 \\ 1909 \\ 1910 \end{cases}$	383 310 307 325	53. 6 53. 5 53. 8 53. 8	4. 4 2. 3 2. 3 2. 2	4.2 6.8 1.3 .6	12.8 11.9 16.9 16.0	5. 0 6. 1 5. 9 4. 3	53. 3 52. 6 52. 4 53. 5	4.7 5.2 5.2 8.6	7.3 11.9 12.7 10.2	8. 4 3. 2 3. 3 4. 6	
38 establishments	{1910 1911	501 518	55. 0 54. 7	1.4	.4	10.4 9.5	2.8 9.3	43.1 44.6	15.8 8.3	6.6 10.8	19.6 15.3	
49 establishments	{1911 1912	558 552	55. 8 55. 5	1.6 1.4	5.3	2.9 2.7	3.6 4.3	41.8 34.8	12.2 15.8	17.6 17.6	19.9 18.1	
54 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	583 635	56.4 55.8			3.1 3.9	4.1 2.8	31.6 43.9	15.1 11.2	31. 2 28. 8	14.9 9.3	
58 establishments	{1910 1911	333 317	58. 8 58. 4					.3	20.1 26.5	20. 4 24. 0	55.9 44.2	3. 5.
94 establishments	{1911 1912	430 407	58. 7 58. 3			:2	7	.2	20.7 32.7	22.8 12.0	52.3 51.6	3. 2.
123 establishments	{1912 1913	563 698	58.3 57.2			.9 1.3	1.1 1.6	1.1 31.2	27. 5 8. 9	16.7 15.9	51. 2 39. 3	1. 1.

Ohio Pennsylvania Wisconsin Other States

Total....

Table V.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913.

CABINETMAKERS.

	Num-	Num-	Aver-	Nur	nber o	f emple		whose i	ull-tim	e hou	rs per v	week
Year and State.		ber of em- ploy- ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
1912.	F. A.	3.5						33/8				
IllinoisIndiana	21 25 5 8	368 350 61 152	58. 4 59. 0 58. 6 49. 9	26		12 113	8	61	39 21	49 112 4 5	246 176 36	23
Michigan Missouri New York North Carolina	16 8 40 11	475 83 479 114	57. 8 60. 0 57. 3 59. 6				28	45	209	85 33	258 83 135 81	
Ohio. Pennsylvania. Tennessee. Wisconsin.	23 23 6 13	235 327 74 221	59.3 58.8 59.7 59.7						23 55 4	26 122 45	186 150 70 176	
Total	199	2,939	58. 1	26		125	36	106	537	489	1,597	23
1913.												100
Illinois Indiana Maryland Massachusetts	21 25 5 8	384 360 64 146	58. 2 58. 3 56. 6 50. 4	14		14 113	12 13	70 6 24	73 15	74 78 3 6	226 171 22	20
Michigan	16 8 40 11	485 85 566 167	54. 2 60. 0 56. 2 59. 9				33	290	74	170 15	85 73 152	
Ohio Pennsylvania Tennessee. Wisconsin	23 23 6 13	244 347 87 249	59. 0 58. 3 59. 8 59. 8						25 81 4	65 136 	154 130 83 208	
Total	199	3,184	57.2	14		127	58	801	272	588	1,304	20
			CAI	EVER	S, HA	ND.						
	1	1		1.	1	I	1	1			1	
1912. Illinois. Indiana. Massachusetts. Michigan. New York.	17 6 5 14 21	79 8 28 104 82	57. 0 58. 7 45. 1 58. 0 56. 4	25		5	1 29	31	1 41 10	3 3 1 6 24	40 4 57 15	
Ohio Pennsylvania Wisconsin Other States	4 11 3 1	7 30 11 1	59. 4 56. 9 58. 9 59. 5					5	13	4 6 7 1	3 6 4	
Total	82	350	56.3	25		6	30	40	65	55	129	
1913. Illinois. Indiana. Massachusetts. Michigan. New York.		83 11 25 108 82	56. 7 57. 6 45. 2 54. 0 56. 2	22		4	3 1 15	38 108 29		4 3 1 34	37 5	

59. 4 56. 8 58. 9

26 11

59.5

55.1 3 2 4

TABLE V.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913—Continued.

CHAIR ASSEMBLERS.

	Num-	Num-	Aver-		mber o	f empl	oyees v	whose were-		ne hou	rs per	week
Year and State.	ber of estab- lish- ments. ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60	
1912.					193							
Massachusetts Michigan New York North Carolina	4 4 3 3	138 127 63 28	57.1 57.1 58.0 59.2			22	11		91	94 	22 36 8 15	
Ohio	3 3 3	20 52 25	59.9 59.3 57.6					<u>i</u>		3 23 24	17 29	
Total	23	453	57.8			22	11	1	91	201	127	
1913.				- 7/1								
Massachusetts Michigan New York North Carolina	4 4 3 3	161 126 84 36	57. 1 55. 2 58. 3 57. 3			20		61 11	65	141 73 25		
Ohio	3 3 3	19 62 31	59.8 59.5 57.7					i		4 20 30	15 42	
Total	23	519	57.3			20		73	76	293	57	

FINISHERS.

		1 9	150		18 700		The same	-			1	
1912.			1. bull 1	. 7							190 m	
Illinois	23	672	58.5				28	92		152	400	
Indiana	25	502	58.8						58	189	218	3
Maryland	8	139	58.8						40	9	90	
Massachusetts	12	223	54.0	17		83	20			87	16	
Michigan	20	1,064	57.8						483	6	575	
Missouri	9	126	60.0								126	
New York	44	864	56.8				49	101	394	129	191	
North Carolina	12	244	59.4							92	152	
Ohio	27	358	59.5						20	78	260	
Pennsylvania	26	571	58.6						83	287	201	
Γennessee	6	80	59.4						10		70	
Wisconsin	16	447	59.6							135	312	
Total	228	5, 290	58. 2	17		83	97	193	1,088	1,164	2,611	3
1913.												
Illinois	23	702	58.3			199	100	154		175	373	7-53
Indiana	25	535	57.8				19	23	138	133	193	
Maryland	8	129	57.1				10	30	40	13	46	1
Massachusetts	12	190	54.5	6		68	17	30	10	99	10	
J. Casis de Citation de Citati	12	100	01.0			00	1			00		
Michigan	20	931	54. 2					765	166			
Missouri	9	133	60.0								133	
New York	44	909	55.8				13	564	36	183	113	
North Carolina	12	240	59.0						18	88	134	
Ohio	27	380	59.1		100				29	132	219	
Pennsylvania	26	610	58. 2						119	311	180	
Cennessee	6	91	59.6						8		83	
Wisconsin	16	437	59.5							139	298	
Total	228	5, 287	57. 2	6		-68	49	1,536	554	1,273	1,772	

$\begin{array}{c} {\rm T_{ABLE}}\, \mathbf{V.-\!AVERAGE}\, {\rm AND}\, {\rm CLASSIFIED}\, {\rm FULL\text{-}TIME}\, {\rm HOURS}\, {\rm OF}\, {\rm WORK}\, {\rm PER}\, \\ {\rm WEEK}\, \, {\rm IN}\, \, \, {\rm EACH}\, \, {\rm YEAR},\, \, {\rm BY}\, \, {\rm STATES},\, \, 1912\, \, {\rm AND}\, \, 1913\text{--}Continued. \end{array}$

MACHINE HANDS.

	Num-	Num-	Aver-	Nur	nber o	f emplo		whose f were—		ne hour	s per v	veek
Year and State.		lish- ploy-		Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
1912.			7									
Illinois Indiana Maryland Massachusetts	21 25 8 12	584 780 175 434	59. 0 58. 8 59. 1 56. 5	7		85	16	66	92 37	71 283 11 267	439 324 127 59	81
Michigan	20 9 43 13	749 206 954 329	57. 4 59. 6 57. 2 59. 5				47	14 88	406 384	11 190 125	332 192 245 204	
Ohio	26 28 6 15	481 685 152 683	59. 6 58. 7 59. 6 59. 4						19 112 12	81 280 270	381 293 140 413	
Total	226	6, 212	58.5	7		93	63	168	1,062	1,589	3,149	8.
1913. Illinois	21 25 8 12	684 804 206 436	58. 7 57. 7 58. 1 56. 3	8		775	45	96 25 33	205 38	139 194 16 329	442 277 119	58
Michigan Missouri New York North Carolina	20 9 43 13	879 214 1,066 379	54. 3 59. 6 56. 4 59. 3				31	699 14 534	180 	309 69	200 173 272	
Ohio Pennsylvania Tennessee Wisconsin	26 28 6 15	503 721 117 691	59.3 58.1 59.7 59.4						13 164 8	160 344 284	330 213 109 407	
Total	226	6,700	57.6	8		82	100	1,401	665	1,844	2,542	5

UPHOLSTERERS.

1912.											
Illinois	8	215	55.1	 		16	143		53	3	
Indiana	4	37	56. 9	 				14	. 23		
Massachusetts	5	19	50.5	 	18				1		
Michigan	7	41	57.8	 			6	12	7	16	
New York	10	108	57.0	 		8	17	27	48	8	
Ohio	4	30	58.5	 				9		21	
Pennsylvania	5	41	57.3	 				25	13	3	
Wisconsin	8	75	57.9	 			18		32	25	
Other States	3	17	59. 2	 				1	5	11	
Total	54	583	56. 4	 	18	24	184	88	182	87	
1913.							Bain				
Illinois	8	212	54. 2			18	169		22	3	
Indiana	4	35	57. 4	 		-	200	7	28		
Massachusetts	5	26	50.3		25				1		
Michigan	7	52	54, 4				42	10			
New York	10	136	56.8	 			49	13	70	4	
Ohio	4	32	58. 4					10		22	
Pennsylvania	5	34	57. 2					18	16		
Wisconsin.	8	83	58. 0				19	1	34	30	
Other States	3	25	56.6	 				13	12		
Total	54	635	55. 8	 	25	18	279	71	183	59	

Table V.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH YEAR, BY STATES, 1912 AND 1913—Concluded.

VENEERERS.

	Num-	Num-	Aver-	Nur	mber o	f empl		whose i		ne hou	rs per	week
Year and State.	ber of estab- lish- ments.		full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
1912.		7401	44.5									
Illinois	17	69	59.5					5		6	58	
Indianá Massachusetts	14	45	59. 1 51. 4			5			4	14	. 18	(
Michigan	15	158	57.1			9			96	2	60	
Missouri	3	7	60.0								7	
New York	25	72	56.6				6	1	44	13	8	
Ohio	13	54	59.5						4	4	46	
Pennsylvania	17	62	59.1						7	23	32 8	
Tennessee	3 12	81	59.3							31	50	
Other States	1	1	60.0								1	
Total	123	563	58.3			5	6	6	155	94	288	(
1913.												
Illinois	17	103	59.4					8		11	84	
Indiana Massachusetts	14	60	58. 4 50. 8			9	6	3	2	18	18	13
Massachusetts Michigan	3 15	10 170	54.1			9		152	18	1		
Missouri	3	7	60.0								7	
New York	25	89	55. 5				5	55	7	5	17	
Ohio	13	56	58.8						8	17	31	
Pennsylvania	17	91	58. 4						25	23	43	
Tennessee	3 12	14 96	60. 0 59. 4							36	14 60	
Other States	12	2	55. 0						2	50		
Total	123	698	57. 2			9	11	218	62	111	274	13

TABLE VI.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913.

[The figures set opposite each bracketed group of years are for identical establishments.]

CABINETMAKERS.

		Num-	Aver-	Nun	aber of	emplo	yees w	whose fr		ie hour	s per v	week
State, and number of establishments.	Year.	ber of em- ploy- ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	O ver
Illinois:												
21 establishments	f 1912	368	58.4			12		61		49	246	
Indiana:	1913	384	58.2			14		70		74	226	
25 establishments	(1912	350	59.0						39	112	176	23
	1913	360	58.3				12	6	73	78	171	20
Maryland:	(1912	61	58.6						21	4	36	
5 establishments	1913	64	56.6					24	15	3	22	
Massachusetts:	(1912	152	49.9	26		113	8			5		
8 establishments	1913	146	50.4	14		113	13			6		
Michigan:	(1912	475	57.8						209	8	258	
16 establishments	1913	485	54.2					411	74		200	
Missouri:		000	20.0									14118
8 establishments	{ 1912 1913	83 85	60.0								83 85	
New York:												
40 establishments	{ 1912 1913	479 566	57.3 56.2				28 33	45 290	186	85 170	135 73	
North Carolina:	1	000					00	200				
11 establishments	§ 1912	114	59.6 59.9							33 15	81 152	
Ohio:	1913	167	59.9							10	102	
23 establishments	§ 1912	235	59.3						23	26	186	
Pennsylvania:	1913	244	59.0						25	65	154	
23 establishments	1912	327	58.8						55	122	150	
Tennessee:	1913	347	58.3						81	136	130	
	(1912	74	59.7						4		70	
6 establishments	1913	87	59.8						4		83	
Wisconsin:	(1912	221	59.7							45	176	
13 establishments	1913	249	59.8							41	208	

CARVERS, HAND.

Illinois:										nia.	
17 establishments	{ 1912 1913	79 83	57.0 56.7		 5 4		31 38		3 4	40 37	
Indiana:	1										1,00
6 establishments	{ 1912 1913	8	58.7 57.6		 	3		1	3	4 5	
Massachusetts:	1				 						
5 establishments	{ 1912 1913	28 25	45. 1 45. 2	25 22	 1	1			1		
Michigan:	(1919	20	40.2	24	 1	1			1		
14 establishments	§ 1912	104	58.0		 			41	6	57	
New York:	1913	108	54.0		 		108				
21 establishments	1912	82	56.4		 	29	4	10	24	15	
Ohio:	1913	82	56.2		 	15	29		34	4	
4 establishments	1912	7	59.4		 				4	3	
Pennsylvania:	1913	7	59.4		 				4	3	
11 establishments	(1912	30	56.9		 		5 5	13	6	6	
	1913	26	56.8		 		5	10	9	2	
Wisconsin:	(1912	11	58.9						7	4	
3 establishments	1913	11	58.9		 				7	4	

TABLE VI.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913—Continued

CHAIR ASSEMBLERS.

		Num-	Aver-		nber of	empl	oyees	whose were		ne hou	rs per	week
State, and number of establishments.	Year.	ber of em- ploy- ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
Massachusetts: 4 establishments Michigan:	$\begin{cases} 1912 \\ 1913 \end{cases}$	138 161	57.1 57.1			22 20				94 141	22	
4 autobliohmenta	$\begin{cases} 1912 \\ 1913 \end{cases}$	127 126	57.1 55.2					61	91 65		36	
3 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	63 84	58.0 58.3				11	···ii		44 73	8	
3 establishments	$\begin{cases} 1912 \\ 1913 \end{cases}$	28 36	59.2 57.3						···ii	13 25	15	
3 establishments	{ 1912 1913	20 19	59.9 59.8							3 4	17 15	
	{ 1912 1913	52 62	59.3 59.5							23 20	29 42	
			FI	NISH	ERS.							
Πlinois: 23 establishments	1912	672	58.5				28	92		152	400	
Indiana: 25 establishments	1913	702 502	58.3 58.8					154	58	175 189	373 218	3
Maryland: 8 establishments	1913	535 139	57.8 58.8				19	23	138	133	193	2
Massachusetts: 12 establishments	1913	129 223	57.1 54.0 54.5	17 6		83 68	20 17	30	40	87	46 16	
Michigan: 20 establishments	1913 1912 1913	1,064 931	57.8 54.2					765	483 166	99	575	
Missouri: 9 establishments	1912	126 133	60.0								126 133	
New York: 44 establishments	1912	864 909	56.8 55.8				49 13	101 564	394 36	129 183	191 113	
North Carolina: 12 establishments	1912	244 240	59.4 59.0						18	92 88	152 134	
Ohio: 27 establishments	{1912 1913	358 380	59.5 59.1						20 29	78 132	260 219	
Pennsylvania: 26 establishments	{1912 (1913	571 610	58.6 58.2						83 119	287 311	201 180	
Fennessee: 6 establishments	{1912 1913	80 91	59.4 59.6						10 8		70 83	
Wisconsin: 16 establishments	{1912 1913	447 437	59.6 59.5							135 139	312 298	

Table VI.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER WEEK IN EACH STATE, BY YEARS, 1912 AND 1913—Continued.

MACHINE HANDS.

		Num-	Aver-	Num	ber of	emplo		vhose i	ull-tin	ne hou	rs per	week
State, and number of establishments.	Year.	ber of em- ploy- ees.	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
Illinois:	(1010	584	59.0			0		00		-	400	
21 establishments	${1912 \atop 1913}$	684	58.7			8 7		66 96		71 139	439 442	
Indiana:	(1912	780	58.8						92	283	324	81
25 establishments Maryland:	(1913	804	57.7				45	25	205	194	277	58
8 establishments	(1912	175 206	59.1 58.1					33	37	11 16	127	
Massachusetts:	11913							33	38		119	
12 establishments	{1912 1913	434 436	56.5 56.3	7 8		85 75	16 24			267 329	59	
Michigan:	(1912	749	57.4						406	11	332	
20 establishments	1913	879	54.3					699	180			
Missouri: 9 establishments	ſ1912	206	59.6					14			192	
New York:	1913	214	59.6					14			200	•••••
43 establishments	\frac{1912}{1913}	954 1,066	57. 2 56. 4				47 31	88 534	384 19	190 309	245 173	
North Carolina:	(1912	329	59.5				01	001	10	125	204	
13 establishments	1912	379	59.3						38	69	272	
Ohio:	(1912	481	59.6						19	81	381	
26 establishments Pennsylvania:	(1913	503	59.3						13	160	330	
28 establishments	(1912	685	58.7						112	280	293	
Tennessee:	11913	721	58.1						164	344	213	
6 establishments	{1912 1913	152	59.6 59.7						12 8		140 109	
Wisconsin:	(1912	683	59.4							270	413	
15 establishments	1913	691	59.4							284	407	
			UP	HOLS	STER	ERS.						
Illinois:												
8 establishments	{1912 {1913	215 212	55.1 54.2				16 18	143 169		53 22	3 3	
Indiana:			1				10	103	14			
4 establishments	${1912 \atop 1913}$	37 35	56.9 57.4						14	23 28		
Massachusetts:	(1912	19	50.5			18				1		
5 establishments Michigan:	11913	26	50.3			25				1		
7 establishments	(1912	41	57.8					6	12	7	16	
New York:	11913	52	54.4					42	10			
10 establishments	{1912 1913	108 136	57. 0 56. 8				8	17 49	27 13	48 70	8 4	
Ohio: 4 establishments	∫1912	30	58.5						9		21	
	(1913	32	58.4						10		22	
Pennsylvania:						1 .	100	1		1000	13 3	
Pennsylvania: 5 establishments	(1912	41	57.3						25	13	3	
	${1912 \atop 1913}$	41 34 75	57.3 57.2 57.9					18	25 18	13 16 32	25	

Table VI.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF WORK PER-WEEK IN EACH STATE, BY YEARS, 1912 AND 1913—Concluded.

VENEERERS.

		Num-	Aver-	Nun	iber of	emplo		hose fr were		e hour	s per	week
State, and number of establishments.	Year.	ber of	full- time hours per week.	Un- der 48	48	Over 48 and under 51	51 and under 54	54	Over 54 and under 57	57 and under 60	60	Over 60
Illinois: 17 establishments Indiana:	$ \begin{cases} 1912 \\ 1913 \end{cases} $	69 103	59.5 59.4					5 8		6 11	58 84	
14 establishments Massachusetts:	${ 1912 \atop 1913 }$	45 60	59.1 58.4				6	3	4 2	14 18	18 18	13
3 establishments Michigan:	${ 1912 \atop 1913 }$	6 10	51. 4 50. 8			5 9				1 1		
15 establishments Missouri:	${1912 \atop 1913}$	158 170	57.1 54.1					152	96 18	2	60	
3 establishments	${1912 \atop 1913}$	7 7	60. 0 60. 0								7 7	
25 establishments	${1912 \atop 1913}$	72 89	56.6 55.5				6 5	1 55	44 7	13 5	8 17	
13 establishments Pennsylvania:	${1912 \atop 1913}$	54 56	59.5 58.8						8	4 17	46 31	
17 establishments Tennessee:	${1912 \atop 1913}$	62 91	59.1 58.4						7 25	23 23	32 43	
3 establishments Wisconsin:	${1912 \atop 1913}$	8 14	60.0 60.0								8 14	
wisconsm: 12 establishments	${1912} {1913}$	81 96	59.3 59.4							31 36	50 60	

TABLE VII.—AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND 1913.

CABINETMAKERS.

						-	
	271		1912			1913	
State.	Number of estab- lish- ments.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly earnings.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly earnings.
Illinois	21	368	58. 4	\$15.47	384	58. 2	\$15.56
Indiana	25	350	59. 0	12.84	360	58. 3	13.38
Maryland	5	61	58. 6	10.88	64	56. 6	11.41
Massachusetts	8	152	49. 9	15.49	146	50. 4	15.30
Michigan	16	475	57. 8	14.00	485	54. 2	13. 91
Missouri	8	83	60. 0	13.59	85	60. 0	13. 79
New York	40	479	57. 3	13.42	566	56. 2	13. 44
North Carolina	11	114	59. 6	8.84	167	59. 9	8. 89
Ohio	23	235	59. 3	13.17	244	59. 0	13. 64
Pennsylvania	23	327	58. 8	11.87	347	58. 3	12. 76
Tennessee	6	74	59. 7	11.39	87	59. 8	11. 12
Wisconsin	13	221	59. 7	11.52	249	59. 8	11. 54
Total	199	2,939	58.1	13.20	3,184	57.2	13.30
	C	ARVERS	s, HAND				
Illinois	17	79	57. 0	\$17. 67	83	56. 7	\$17.66
Indiana	6	8	58. 7	16. 69	11	57. 6	17.48
Massachusetts	5	28	45. 1	20. 44	25	45. 2	19.29
Michigan	14	104	58. 0	18. 13	108	54. 0	18.05
New York.	21	82	56. 4	16. 30	82	56. 2	16.54
Ohio	4	7	59. 4	14. 59	7	59. 4	15. 28
Pennsylvania	11	30	56. 9	16. 00	26	56. 8	15. 86
Wisconsin	3	11	58. 9	16. 94	11	58. 9	17. 03
Other States.	1	1	59. 5	13. 00	2	59. 5	13. 63
Total	82	350	56.3	17.44	355	55.1	17.41
	СН	AIR ASS	SEMBLEI	RS.			
Massachusetts	4	138	57. 1	\$10.89	161	57.1	\$10.86
Michigan	4	127	57. 1	12.29	126	55.2	12.81
New York	3	63	58. 0	10.81	84	58.3	10.92
North Carolina	3	28	59. 2	8.02	36	57.3	8.07
Ohio	3	20	59. 9	9.76	19	59. 8	9. 92
Wisconsin	3	52	59. 3	10.14	62	59. 5	10. 95
Other States	3	25	57. 6	13.42	31	57. 7	14. 16
Total	23	453	57.8	11.10	519	57.3	11.32
		FINI	SHERS.				
Illinois	23	672	58.5	\$13.53	702	58.3	\$13.79
Indiana	25	502	58.8	11.75	535	57.8	12.06
Maryland	8	139	58.8	9.79	129	57.1	10.36
Massachusetts	12	223	54.0	12.32	190	54.5	12.56
Michigan	20	1,064	57. 8	11.34	931	54. 2	11. 62
Missouri	9	126	60. 0	11.64	133	60. 0	12. 03
New York	44	864	56. 8	12.21	909	55. 8	12. 59
North Carolina	12	244	59. 4	7.57	240	59. 0	7. 92
Ohio	27	358	59. 5	11. 03	380	59.1	11.53
Pennsylvania	26	571	58. 6	10. 74	610	58.2	11.18
Tennessee	6	80	59. 4	8. 86	91	59.6	9.33
Wisconsin	16	447	59. 6	10. 52	437	59.5	10.97
Total	228	5,290	58.2	11.44	5,287	57.2	11.81

TABLE VII.—AVERAGE FULL-TIME HOURS OF WORK PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, BY STATES, 1912 AND 1913—Concluded.

MACHINE HANDS.

	IVI	AUHINE	HANDS				
	27. 1		1912			1913	
State.	Number of estab- lish- ments.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly earnings.	Number of em- ployees.	Average full-time hours per week.	Average full-time weekly earnings.
Illinois	21	584	59. 0	\$14.74	684	58. 7	\$14.96
Indiana	25	780	58. 8	12.32	804	57. 7	12.16
Maryland	8	175	59. 1	10.87	206	58. 1	11.08
Massachusetts	12	434	56. 5	11.90	436	56. 3	12.22
Michigan	20	749	57. 4	14. 18	879	54.3	14.21
Missouri	9	206	59. 6	12. 83	214	59.6	12.76
New York	43	954	57. 2	12. 62	1,066	56.4	12.78
North Carolina	13	329	59. 5	8. 90	379	59.3	8.89
Ohio	26	481	59. 6	11.89	503	59. 3	12.16
Pennsylvania.	28	685	58. 7	12.18	721	58. 1	12.42
Tennessee	6	152	59. 6	11.14	117	59. 7	11.53
Wisconsin	15	683	59. 4	10.44	691	59. 4	10.83
Total	226	6,212	58.5	12.30	6,700	57.6	12.50
	τ	PHOLST	TERERS.				
Illinois Indiana Massachusetts Michigan New York	8	215	55. 1	\$16.91	212	54. 2	\$16.83
	4	37	56. 9	15.56	35	57. 4	15.75
	5	19	50. 5	19.48	26	50. 3	19.82
	7	41	57. 8	17.28	52	54. 4	17.18
	10	108	57. 0	16.95	136	56. 8	17.19
Ohio.	4	30	58. 5	14.96	32	58. 4	15.18
Pennsylvania	5	41	57. 3	15.68	34	57. 2	16.38
Wisconsin	8	75	57. 9	14.42	83	58. 0	14.48
Other States.	3	17	59. 2	13.40	25	56. 6	12.64
Total	54	583	56. 4	16.33	635	55.8	16.42
		VENEE	RERS.				
Illinois	17	69	59. 5	\$13.54	103	59. 4	\$13.90
Indiana	14	45	59. 1	12.41	60	58. 4	12.34
Massachusetts	3	6	51. 4	14.28	10	50. 8	14.47
Michigan	15	158	57. 1	12.90	170	54. 1	12.81
Missouri. New York. Ohio. Pennsylvania.	3	7	60. 0	13. 14	7	60. 0	13. 51
	25	72	56. 6	12. 44	89	55. 5	12. 52
	13	54	59. 5	12. 14	56	58. 8	12. 75
	17	62	59. 1	12. 11	91	58. 4	11. 82
Tennessee	3	8	60. 0	10.86	14	60. 0	11. 10
	12	81	59. 3	10.38	96	59. 4	10. 53
	1	1	60. 0	20.00	2	55. 0	17. 00
Total	123	563	58.3	12.36	698	57.2	12.45

APPENDIX.

In order that the summary figures in regard to rates of wages and hours of labor in the three industries covered in this Bulletin, hereto-fore published for the years 1890 to 1912, may be available for reference, the following tables are reproduced from Bulletin No. 129.

TABLE 1.—RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN LUMBER MANUFACTURING, 1890 TO 1912.

[Data are included from 56 establishments, 1890–1903; 49 establishments, 1903, 1904; 69 establishments, 1904, 1905; 68 establishments, 1905, 1906; 75 establishments, 1906, 1907; 40 establishments, 1907–1910; 245 establishments, 1910, 1911; and 301 establishments, 1911, 1912.]

Year.	Relative full-time hours per week.	Relative rate of wages per hour.	
Average, 1890–1899	100.0	100.0	
1890	100.4	101.9	
1891	100.2	101.4	
1892	100.2	101.5	
1893.	100.0	99.9	
1894	100.0	96.7	
1895	99.9	97.0	
1896	100.1	97.4	
1897	99.9	97.7	
1898	99.6	101.5	
1899	99.8	104.5	
1900	99.5	105. 4	
1901	99.3	108.6	
1902	98.7	112.1	
1903	98.3	114.2	
1904	97.8	112.3	
1905	97.6	116.3	
1906	96.6	124.4	
1907	96.4	129.6	
1908	96.6	118.7	
1909	96.5	121.6	
1910	96.5	130.0	
1911	96.5	129.9	
1912	96.6	131.5	

TABLE 2.—RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE PRINCIPAL OCCUPATIONS IN LUMBER MANUFAC-TURING, 1890 TO 1912.

[Data are included from 56 establishments, 1890–1903; 49 establishments, 1903, 1904; 69 establishments, 1904, 1905; 68 establishments, 1905, 1906; 75 establishments, 1906, 1907; 40 establishments, 1907–1910; 245 establishments, 1910, 1911; and 301 establishments, 1911, 1912.]

	Carriag	ge men.1	Dog	gers.2	Sett	ters.2	sawy	ers and ers in ods.	Edge	rmen.
Year.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative fulltime hours per week.	Relative rate of wages per hour.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative fulltime hours per week.	Relative rate of wages per hour.
Average, 1890-1899	100.0	100.0					100.0	100.0	100.0	100.0
1890	100. 4 100. 2 100. 2 99. 6 99. 5	100. 2 101. 7 102. 1 101. 1 98. 1					100. 4 100. 4 100. 0 99. 9 99. 9	98. 6 97. 8 99. 3 95. 9 94. 7	100.8 100.3 100.3 99.3 99.3	104. 8 104. 9 106. 1 104. 4 97. 7
1895	100. 1 100. 1 99. 9 100. 0 99. 9	96. 6 97. 7 97. 8 99. 4 103. 1					99. 8 100. 0 99. 8 99. 6 100. 2	98. 5 98. 3 101. 0 106. 5 109. 4	100. 4 100. 3 100. 0 99. 8 99. 5	94. 6 97. 6 95. 5 96. 2 98. 3
1900 1901 1902 1903 1904	99. 6 98. 5 98. 1 98. 3 98. 0	104. 2 106. 1 111. 1 115. 0 117. 3					100. 0 99. 9 100. 0 99. 8 99. 4	109. 5 113. 2 115. 7 116. 3 109. 9	99. 2 98. 9 98. 4 98. 7 98. 2	102. 9 105. 8 105. 9 110. 2 110. 5
1905. 1906. 1907. 1908. 1909.	97. 8 96. 8 96. 4 96. 6 96. 6	122. 4 128. 6 135. 5 128. 7 131. 2					99. 4 99. 3 99. 4 (³)	115. 4 120. 8 125. 7 (3)	98. 1 97. 1 96. 8 96. 8 96. 8	112. 9 117. 3 120. 5 116. 8 117. 9
1910 1911 1912	96. 4 96. 2	136. 2 138. 2	4 100. 0 4 99. 8	4 100. 0 4 100. 7	4 100. 0 4 99. 8	4 100. 0 4 100. 5			96. 6 96. 6 96. 4	125. 8 127. 6 127. 7
	Fil	ers.	Cant setters, gang.5		Laborers.6		Planer feeders.		Sawyers	s, band.
Average, 1890-1899	100.0	100.0	100.0	100.0	100.0	100.0		,	100.0	100.0
1890. 1891. 1892. 1893. 1894.	100. 5 100. 2 100. 1 99. 5 99. 4	100. 6 101. 2 100. 1 102. 0 97. 6	100. 2 100. 2 100. 2 100. 2 100. 2	101. 3 101. 4 101. 6 101. 5 101. 4	100. 3 100. 1 100. 3 100. 1 100. 2	104. 8 104. 4 103. 3 102. 8 98. 1			100. 3 99. 9 100. 1 100. 2 100. 1	101. 0 101. 9 101. 5 102. 5 97. 8
1895 1896 1897 1898 1899	100. 2 100. 3 100. 1 100. 0 99. 9	96. 4 98. 9 98. 8 100. 4 104. 1	100. 2 100. 0 100. 0 99. 4 99. 4	99. 6 95. 4 95. 4 99. 2 103. 4	100. 0 100. 1 100. 0 99. 4 99. 5	95. 6 96. 7 94. 8 97. 9 101. 2			100. 0 99. 9 99. 9 99. 8 99. 9	99. 8 98. 6 99. 5 98. 6 101. 0
1900 1901 1902 1903 1904	99. 7 99. 5 98. 8 98. 4 98. 7	107. 0 108. 2 108. 2 112. 8 114. 8	99. 4 99. 4 97. 8 95. 8 96. 1	104. 3 104. 7 106. 7 113. 1 113. 7	99. 1 98. 8 97. 5 96. 8 97. 0	102. 3 105. 8 110. 6 113. 1 113. 2			99. 5 99. 5 98. 8 98. 7 98. 0	105. 0 107. 7 114. 8 122. 0 119. 9
1905 1906 1907 1908 1909	98. 6 97. 6 97. 2 (8)	117.8 121.0 127.1 (8)	96. 1 94. 7 94. 7	116. 6 122. 1 126. 6	96. 9 95. 5 7 95. 2 95. 4 95. 4	116. 6 126. 1 7 131. 6 119. 9 123. 0			97. 9 97. 1 96. 8 96. 8 96. 8	123. 7 129. 7 133. 0 130. 4 132. 8
1910					95. 2 95. 2 95. 4	131. 9 132. 3 133. 9	4 100. 0 4 99. 7	4 100. 0 4 103. 2	96. 6 96. 6 96. 6	135. 9 138. 5 138. 7

¹ Employees reported as carriage men for 1890 to 1911 are reported as doggers or setters for subsequent years.

Employees reported as carriage men for 1890 to 1911 are reported as doggers or setters for subsequent years.
 The occupations doggers and setters include employees reported as carriage men for 1890 to 1911.
 Data for 1890 to 1910 not available; computed with 1911=100.0.
 Employees reported in this occupation for 1890 to 1907 are reported as laborers for subsequent years.
 This occupation includes employees reported as cant setters, gang, for 1890 to 1907.
 Average of relatives of laborers and cant setters, gang, computed by weighting the relatives for each of those occupations according to the number of employees reported in 1907

TABLE 2.—RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE PRINCIPAL OCCUPATIONS IN LUMBER MANUFACTURING, 1890 TO 1912—Concluded.

	Sawyers,	circular.	Sawyer	s, gang.	Sawyers	s, resaw.	Trimmer operators.		
Year.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative full-time hours per week.	Relative rate of wages per hour.	
Average, 1890-1899	100.0	100.0	100.0	100.0			100.0	100.0	
1890 1891 1892 1893	101. 0 100. 6 100. 8 98. 6 98. 6	104. 9 105. 4 102. 8 102. 9 101. 2	100. 0 100. 0 100. 0 100. 2 100. 2	97. 7 97. 7 98. 5 98. 3 93. 5			100. 4 100. 3 100. 1 100. 2 100. 1	113.7 108.9 106.1 107.2 97.2	
1895 1896 1897 1898	100. 6 100. 5 100. 1 99. 7 99. 4	100. 0 99. 5 95. 0 94. 9 93. 7	100. 0 100. 0 99. 9 99. 9 99. 9	95. 2 95. 5 107. 0 106. 7 110. 0			100. 1 99. 9 99. 7 99. 7 99. 7	97. 90. 88. 94. 95.	
1900 1901 1902 1903 1904	98. 6 98. 2 96. 9 96. 9 97. 8	96.3 99.6 103.5 107.2 113.9	99.5 99.5 98.8 99.1 98.7	113. 6 115. 4 119. 3 122. 1 120. 1			99.7 99.7 99.7 100.7 99.8	98. 99. 96. 98. 104.	
1905 1906 1907 1908	97. 7 97. 0 96. 8 96. 8 96. 8	118. 0 128. 0 126. 9 120. 8 122. 4	98.8 97.2 96.7 96.7 96.7	119.7 124.4 129.8 122.6 123.8			99.7 98.9 98.9 98.9 98.9	106. 109. 110. 104. 104.	
1910 1911 1912	96. 8 97. 0 97. 0	128. 2 128. 5 129. 9	96. 7 97. 0 97. 0	126. 6 123. 1 123. 0	1 100.0 1 100.0	1 100. 0 1 101. 6	98. 9 98. 9 98. 9	104. 106. 106.	

¹ Data for 1890 to 1910 not available; computed with 1911=100.0.

TABLE 3.—RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE MILLWORK INDUSTRY, 1890 TO 1912.

[Data are included from 94 establishments, 1890–1903; 112 establishments, 1903, 1904; 113 establishments, 1904, 1905; 116 establishments, 1905, 1906; 120 establishments, 1906, 1907; 62 establishments, 1907–1910; 232 establishments, 1910, 1911; and 269 establishments, 1911, 1912.]

Year,	Relative full-time hours per week.	Relative rate of wages per hour	
Average, 1890–1899	100.0	100.0	
1890.	101. 3	99. 2	
1891.	100. 6	100. 4	
1892.	100. 7	100. 1	
1893.	100. 1	100. 0	
1894.	100. 3	97. 0	
1895 1896 1897 1898	99.7 99.0 99.6 99.4 99.2	98. 1 99. 3 100. 0 101. 7 104. 1	
1900	98. 9	105. 9	
1901	98. 7	108. 6	
1902	97. 7	112. 5	
1903	97. 2	116. 5	
1904	97. 9	115. 7	
1905	98. 1	116. 7	
1906	96. 9	120. 6	
1907	96. 7	124. 5	
1908	96. 7	123. 4	
1908	96. 7	124. 9	
1910.	96. 9	127. 8	
1911.	96. 8	129. 0	
1912.	96. 2	132, 3	

TABLE 4.—RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE PRINCIPAL OCCUPATIONS OF THE MILLWORK INDUSTRY, 1890 TO 1912.

[Data are included from 94 establishments, 1890-1903; 112 establishments, 1903, 1904; 113 establishments, 1904, 1905; 116 establishments, 1905, 1906; 120 establishments, 1906, 1907; 62 establishments, 1907-1910; 232 establishments, 1910, 1911; and 269 establishments, 1911, 1912.]

	Carpe	nters.1	Fran	ners.1	Bench	hands.2	Glaz	ziers.	
Year.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative full-time hours per week	Relative rate of wages per hour.	Relative full-time hours per week	Relative rate of wages per hour.	Relative full-time hours per week.	Relative rate of wages per hour.	
Average, 1890–1899	100, 0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1890. 1891. 1892. 1893. 1894.	101. 9 101. 1 101. 3 100. 2 100. 1	98. 7 100. 0 99. 2 100. 2 96. 7	100. 5 100. 0 100. 0 99. 8 100. 5	100.3 101.5 103.0 102.3 98.1			100. 5 100. 5 100. 5 100. 5 99. 5	95.7 99.0 100.5 104.7 102.8	
1895. 1896. 1897. 1898.	99. 8 98. 0 99. 1 99. 4 99. 0	98. 0 100. 8 101. 1 102. 3 102. 8	99.8 100.2 100.2 100.0 98.9	97. 0 95. 9 97. 6 100. 2 104. 0			99. 6 99. 6 99. 6 99. 6 100. 0	97. 7 96. 8 100. 7 99. 8 102. 4	
1900 1901 1902 1903 1904	98. 4 98. 2 97. 0 96. 5 96. 3	106.7 108.0 113.6 119.3 122.4	99. 2 98. 6 97. 9 97. 9 98. 0	105. 2 108. 6 111. 3 114. 2 113. 7			98.3 98.3 98.6 99.1 98.4	106.7 105.7 103.1 107.0 111.0	
1905 1906 1907 1908 1909		123, 4 126, 6 131, 6	98. 2 97. 9 97. 7	116. 2 117. 9 119. 5	³ 95. 9 95. 9 96. 1	³ 130. 0 128. 6 128. 6	98.1 95.7 96.3 (4)	113. 2 121. 6 129. 4 (4)	
1910					95. 8 96. 0 95. 5	133. 1 133. 7 134. 1			
	Labo	orers.		e wood- kers. ⁵	Saw	yers.5	Machine hands.6		
Average, 1890-1899	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1890	100. 1 100. 1 100. 1 99. 9 100. 0	102. 4 105. 3 101. 5 98. 3 94. 1	101. 2 100. 6 100. 6 100. 1 100. 4	98. 4 99. 2 99. 7 99. 6 97. 4	101. 6 100. 4 100. 4 100. 2 101. 2	99. 5 100. 5 100. 7 100. 4 97. 5			
1895. 1896. 1897. 1898. 1899.	100. 0 99. 8 99. 9 100. 0 100. 2	95. 9 96. 5 96. 0 101. 5 108. 5	99. 6 99. 4 99. 7 99. 2 99. 0	98. 8 99. 7 101. 0 102. 0 104. 0	98.8 99.4 99.6 99.3 99.0	99. 1 98. 9 99. 7 100. 6 103. 1			
1900. 1901. 1902. 1903. 1904.	99. 9 100. 0 100. 0 99. 9 100. 4	102. 8 110. 8 110. 8 113. 3 110. 4	98. 9 98. 7 97. 3 96. 7 96. 7	106. 6 108. 7 113. 0 116. 3 115. 7	99. 8 99. 4 98. 2 97. 9 97. 2	104. 0 107. 3 111. 4 113. 1 115. 0			
1905	100. 0 97. 9 98. 0 97. 5 97. 2	112.7 117.7 121.4 121.0 124.0	96. 7 95. 6 95. 2	117. 4 121. 2 125. 1	97. 1 96. 2 96. 2	116. 6 120. 1 122. 4	7 95. 5 95. 8 96. 0	7 124. 4 122. 8 123. 8	
1910 1911 1912	97. 7 97. 7 97. 4	125. 9 126. 4 130. 7					96. 3 96. 0 95. 2	126, 6 129, 3 132, 9	

¹ Employees reported as carpenters and framers for 1890 to 1907 are reported as bench hands for subsequent years.

This occupation includes employees reported as carpenters and framers for 1890 to 1907.
 Average of relatives of carpenters and framers, computed by weighting the relative for each of those occupations according to the number of employees reported in 1907.
 Discontinued.

⁵ Employees reported as machine woodworkers and sawyers for 1890 to 1907 are reported as machine

Employees reported as machine woodworkers and sawyers for 1890 to 1907.
 This occupation includes employees reported as machine woodworkers and sawyers for 1890 to 1907.
 Average of relatives of machine woodworkers and sawyers, computed by weighting the relative for each of those occupations according to the number of employees reported in 1907.

TABLE 5.—RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN FURNITURE MANUFACTURING, 1890 TO 1912.

[Data are included from 58 establishments, 1890–1903; 61 establishments, 1903, 1904; 63 establishments, 1905; 63 establishments, 1906, 1907; 52 establishments, 1907–1910; 128 establishments, 1910, 1911; and 199 establishments, 1911, 1912.]

Year.	Relative full-time hours per week.	Relative rate of wages per hour.	
Average, 1890-1899	100.0	100.0	
1890 1891 1892 1893 1894	101. 3 100. 7 99. 8 99. 9 98. 2	100. 5 101. 5 102. 5 101. 1 99. 4	
1895 1896 1897 1898 1899	99. 8 100. 0 99. 6 100. 4 100. 3	97. 9 97. 7 100. 2 98. 0 102. 0	
1900	100. 2 99. 3 98. 3 98. 1 97. 3	102. 4 107. 3 114. 1 115. 2 117. 5	
1905	96. 6 95. 8 95. 7 95. 9 95. 5	121. 0 125. 7 127. 3 127. 5 126. 7	
1910. 1911. 1912.	95. 1 94. 5 93. 9	130. 5 132. 1 135. 1	

TABLE 6.—RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE PRINCIPAL OCCUPATIONS IN FURNITURE MANUFACTURING, 1890 TO 1912.

 $[\begin{tabular}{l} Data are included from 58 establishments, 1890–1903; 61 establishments, 1903, 1904; 63 establishments, 1905; 63 establishments, 1905; 67 establishments, 1906, 1907; 52 establishments, 1907–1910; 128 establishments, 1910, 1911; and 199 establishments, 1911, 1912.] \\ \end{tabular}$

	Cabinet	Cabinetmakers.		Carvers, hand.		Chair assemblers.		hers.1	Varnishers.1	
Year.	Relative fulltime hours per week.	Relative rate of wages per hour.	Relative fulltime hours per week.	Relative rate of wages per hour.	Relative fulltime hours per week.	Relative rate of wages per hour.	Relative fulltime hours per week.	Relative rate of wages per hour.	Relative full-time hours per week.	Relative rate of wages per hour.
Average, 1890-1899	100.0	100.0	100.0	100.0			100.0	100.0	100.0	100.0
1890 1891 1892 1893 1894	99.4	101. 8 102. 3 104. 5 103. 6 100. 1	103. 1 99. 8 96. 0 102. 6 99. 2	97. 0 103. 2 113. 7 97. 7 95. 6			100. 8 100. 5 99. 4 98. 8 98. 3	97. 6 104. 6 100. 9 102. 1 99. 4	101. 5 100. 8 100. 3 99. 8 97. 6	97. 7 99. 2 98. 3 99. 2 100. 2
1895 1896 1897 1898 1899	99. 8 99. 8 100. 7	98. 2 97. 2 98. 1 95. 7 98. 6	102. 2 101. 6 99. 5 99. 8 96. 4	84. 6 95. 2 101. 0 99. 7 112. 3			98. 5 100. 7 100. 5 100. 7 101. 7	96. 8 100. 1 100. 3 98. 3 99. 9	100. 2 100. 3 99. 3 100. 5 99. 7	97. 3 94. 6 105. 3 98. 1
1900 1901 1902 1903 1904	98. 3 96. 8 96. 7	100. 4 107. 2 115. 1 116. 9 119. 0	101. 2 99. 4 97. 2 99. 8 97. 3	102. 2 112. 3 119. 0 112. 7 115. 9			98. 0 95. 4 94. 1	102.3 115.8 127.7 141.3 137.9	99. 9 99. 5 98. 3 98. 6 97. 7	106.3 109.7 117.3 112.4 114.4
1905 1906 1907 1908 1909	93. 4 93. 7 94. 4	122. 2 128. 5 128. 5 125. 5 124. 6	97. 2 97. 3 98. 4 98. 9 96. 2	116. 7 120. 7 120. 7 121. 8 126. 7						
1910 1911 1912	93. 3	129. 8 130. 6 130. 4	95. 7 94. 6 94. 8	131. 2 134. 9 136. 3	2 100. 0 2 100. 5 2 99. 6	2 100. 0 2 104. 7 2 106. 7				

¹ Employees reported separately as finishers and varnishers for 1890 to 1904 are reported as finishers for subsequent years.

subsequent years.

² Data for 1890 to 1909 not available; computed with 1910=100.0.

TABLE 6.—RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE PRINCIPAL OCCUPATIONS IN FURNITURE MANUFAC-TURING, 1890 TO 1912—Continued.

Year.	cludin	Finishers ¹ (including varnishers).		Machine wood- workers. ²		Sawyers, band.3		Sawyers, circu- lar.4		Sawyers, jig.	
	Relative fulltime hours per week.	Relative rate of wages per hour.	Relative fulltime hours per week.	Relative rate of wages per hour.	Relative fulltime hours per week.	Relative rate of wages per hour.	Relative fulltime hours per week.	Relative rate of wages per hour.	Relative fulltime hours per week.	Relative rate of wages per hour.	
Average, 1890–1899	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1890 1801 1892 1893 1894			101. 4 101. 0 100. 0 100. 0 98. 0	100. 7 101. 1 101. 4 99. 8 98. 6	101. 4 100. 3 99. 5 100. 5 96. 3	105. 2 102. 6 102. 7 101. 2 99. 1	100. 5 100. 4 100. 3 100. 3 96. 2	101. 7 102. 2 102. 6 102. 0 97. 9	100. 4 100. 1 100. 1 100. 1 100. 1	92. 9 100. 5 98. 6 100. 9 100. 9	
1895 1896 1897 1898 1899			99. 4 99. 9 99. 3 100. 2 100. 8	98. 6 99. 2 100. 4 99. 5 101. 1	99. 3 100. 8 100. 0 100. 0 101. 9	98. 8 97. 7 98. 4 97. 1 97. 5	100. 4 100. 3 100. 5 100. 3 100. 8	98. 7 98. 0 99. 4 98. 4 99. 2	100. 1 100. 1 100. 1 100. 1 98. 9	100. 3 98. 6 101. 9 100. 9 104. 4	
1900 1901 1902 1903 1904			100.8 101.1 100.6 100.3 99.7	102. 1 103. 0 108. 7 112. 2 111. 1	101. 3 100. 8 100. 8 100. 7 99. 6	100. 5 103. 7 104. 4 105. 8 109. 5	99. 9 99. 3 98. 9 99. 1 98. 5	102. 9 107. 1 111. 4 113. 4 113. 9	95. 7 94. 6 93. 1 93. 1 92. 3	107. 6 113. 8 124. 1 124. 1 132. 5	
1905 1906 1907 1907 1908	96. 2 95. 7 95. 5 95. 8 95. 5	127. 1 130. 5 131. 0 133. 7 129. 8	99. 6 99. 1 99. 1	114. 5 119. 0 122. 1	99. 4	111.7 114.1	98. 4 98. 0	117. 6 122. 1	92. 0 91. 0	133. 1 131. 2	
1910	95. 5 94. 7 94. 1	132. 5 134. 0 138. 0									

¹ This occupation includes employees reported separately as finishers and varnishers for 1890 to 1904.

2 Employees reported as machine woodworkers for 1890 to 1907 are reported as machine hands for subsequent years.

3 Employees reported as band sawyers for 1890 to 1906 are reported as sawyers for 1907 and as machine hands for subsequent years.

4 Employees reported as circular sawyers and jig sawyers for 1890 to 1906 are reported as sawyers for 1907 and as machine hands for subsequent years.

5 Average of relatives of finishers and varnishers, computed by weighting the relatives for each of those occupations according to the number of employees reported in 1904.

TABLE 6.-RELATIVE FULL-TIME HOURS PER WEEK AND RELATIVE RATES OF WAGES PER HOUR IN THE PRINCIPAL OCCUPATIONS IN FURNITURE MANUFACTOR TURING, 1890 TO 1912-Concluded.

	Sawy	vers. 1	Machine	hands.2	Uphols	sterers.	Veneerers.	
Year.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative fulltime hours per week.	Relative rate of wages per hour.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative fulltime hours per week.	Relative rate of wages per hour.
Average, 1890–1899	100.0	100.0	100.0	100.0	100.0	100.0		
1890	0.1.5.7.				100.5	99.4		
1891					100.3	101.4		
1892					99.9	100.2		
1893					100.3	98. 2		
				5 3 8 2 5 5 5	100. 2	100.6		
1895			- 19		100.1	99.9		
1896					99.7	98.1		
1897			1914.3890	00300330	99.7	97.6		
898					99.7	100.6	000000000000000000000000000000000000000	
899				2000000	99.6	104.0		
.899 	1342	E. 1.90%	3 5 5 50	F10		- and a rain	Par 1 1 1 1 1	
1900					98.3	106.0		
1901					94.4	121.1		
1902					94.9	125. 2		
903		1000			92.1	- 125.3		
1904					91.3	125.1		
1905				S. Carrier				
					91.7	126. 2		
1903					91.5	130.0		
1907		125.6	3 98. 2	8 123. 1	91.3	131.8		
1908			98.0	123. 2	91.1	130.6		
1909			97.7	124.5	91.6	130.0		
910			96.9	127.5	91.6	136.5	4 100. 0	4 100.
1911			96. 2	130.1	91.1	143. 5	4 99. 3	4 101.
				130. 1		143. 5	4 98. 6	4 107.
1912			95.5	155.0	90.6	140.9	* 99. 0	107.



¹ This occupation includes employees reported as band sawyers, circular sawyers, and jig sawyers, 1890 to 1906.

² This occupation includes employees reported as machine woodworkers, band sawyers, circular sawyers, and jig sawyers, 1890 to 1906, and as machine woodworkers and sawyers for 1907.

³ Average of relatives of machine woodworkers and sawyers, computed by weighting the relatives for each of those occupations according to the number of employees reported in 1907.

⁴ Data for 1890 to 1909 not available; computed with 1910=100.0.