

**UNITED STATES DEPARTMENT OF LABOR**

FRANCES PERKINS, Secretary

**BUREAU OF LABOR STATISTICS**

ISADOR LUBIN, Commissioner

BULLETIN OF THE UNITED STATES  
BUREAU OF LABOR STATISTICS

Library  
78

WAGES AND HOURS OF LABOR SERIES

**WAGES AND HOURS OF LABOR IN  
THE DYEING AND FINISHING OF  
TEXTILES, 1932**



JULY 1933

UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1933

## Contents

---

	Page
Average days, hours, and earnings, 1930 and 1932, by occupation.....	1
Average days, hours, and earnings, 1930 and 1932, by sex and State.....	4
Classified earnings per hour, 1930 and 1932.....	5
Full-time hours per week and per day, 1930 and 1932.....	8
Changes in full-time hours since May 1, 1930.....	11
Changes in wage rates since May 1, 1930.....	11
Overtime, Sunday, and holiday work, 1932.....	12
Bonus systems, 1932.....	13
Index numbers of employment and of pay rolls, 1923 to 1932.....	16
Importance of the industry.....	16
Scope and method.....	18
Occupations.....	19
General tables.....	19
TABLE A.—Average number of days on which wage earners worked, average full-time and actual hours and earnings per week, average earnings per hour, and percent of full time worked, 1932, by occupation, sex, and State.....	20
TABLE B.—Average and classified earnings per hour in 12 specified occupations, 1932, by sex and State.....	29
TABLE C.—Average and classified full-time hours per week in 12 specified occupations, 1932, by sex and State.....	34
TABLE D.—Average and classified hours actually worked in 1 week in 12 specified occupations, 1932, by sex and State.....	37
TABLE E.—Average and classified actual earnings in 1 week in 12 specified occupations, 1932, by sex and State.....	42
APPENDIX.—Factory occupational terms, and definitions and classification by Bureau of Labor Statistics.....	47

# BULLETIN OF THE U. S. BUREAU OF LABOR STATISTICS

NO. 568

WASHINGTON

JULY 1933

## WAGES AND HOURS OF LABOR IN THE DYEING AND FINISHING OF TEXTILES, 1932

This bulletin presents the results of studies in 1930 and 1932 by the United States Bureau of Labor Statistics of wages and hours of labor of wage earners in the dyeing and finishing of textiles in the United States.

The 1930 basic wage figures which were used in compiling this report were collected by agents of the Bureau from the records of 109 representative dyeing and finishing plants in eight States for a pay period in March, April, or May and covered 21,482 wage earners, consisting of 17,739 males and 3,743 females. Figures for 1932 were collected from the records of 93 plants in the same States as in 1930, for a pay period in January, February, or March, and covered 19,246 wage earners, including 16,205 males and 3,041 females. The work of a vast majority of the plants included in the report consisted mainly in the dyeing and finishing of cotton goods. In a few plants cloth made of mixtures of cotton, rayon, and silk was dyed and finished.

The 1932 wage figures in the tables of this bulletin cover the wage earners of the dyeing and finishing department of 17 cotton mills that produce, dye, and finish cotton goods and for 76 plants that do nothing but the dyeing and finishing of textiles.

### Average Days, Hours, and Earnings, 1930 and 1932, by Occupation

Table 1 shows for each of the 42 important occupations in the dyeing and finishing of textiles, for a group designated as "other employees", and for all occupations combined average days, hours, and earnings in 1 week, average earnings per hour, and the percent of full time worked in the week, in 1930 and in 1932. The group of "other employees" includes wage earners in occupations each containing too few workers to warrant occupational tabulation.

The averages at the end of the table for males and females in all occupations combined, or for the industry as a whole, show that days worked in 1 week were 5.2 in 1930 and 1932; that full-time hours per week increased from 50.9 in 1930 to 51.3 in 1932; that hours actually worked in 1 week increased from 49.3 in 1930 to 49.9 in 1932; that they worked 96.9 percent of full time in 1930 and 97.3 percent in 1932; that earnings per hour decreased from 45.2 cents in

1930 to 40 cents in 1932; that full-time earnings per week decreased from \$23.01 in 1930 to \$20.52 in 1932, and that actual earnings in 1 week decreased from \$22.29 in 1930 to \$19.99 in 1932.

Average earnings per hour of males ranged in 1930 in the various occupations from 29 cents for yarn winders to \$1.247 for machine engravers, and those of females ranged from 28.1 cents for plaiters to 43.8 cents for batchers. In 1932 the averages of males ranged from 30.3 cents for pilers to \$1.021 for hand engravers, and those of females ranged from 24 cents for plaiters to 35.6 cents for measurers. Averages of males in 40 and of females in 12 occupations and of males and of females in the group of other occupations were less in 1932 than in 1930, and in 1 occupation for males were more in 1932 than in 1930.

TABLE 1.—Average days, hours, and earnings, and percent of full time worked, 1930 and 1932, by occupation and sex

Occupation and sex	Year	Number of establishments	Number of wage earners	Average days on which wage earners worked in week	Average full-time hours per week	Hours actually worked in week		Average earnings per hour	Average full-time earnings per week	Average actual earnings in week
						Average number	Percent of full time			
Agar tenders, male.....	1930	28	114	5.5	51.4	61.3	119.3	\$0.435	\$22.36	\$26.67
	1932	24	111	5.2	51.3	56.7	110.5	.379	19.39	21.43
Back tenders, printing, male.....	1930	26	374	5.4	51.3	56.8	110.7	.466	23.91	26.44
	1932	27	414	4.8	51.4	52.9	102.9	.381	19.59	20.18
Balers, male.....	1930	36	66	5.0	51.7	44.9	86.9	.362	18.72	19.24
	1932	34	78	5.1	51.4	46.0	89.6	.331	17.31	18.24
Batchers (cloth winders), male.....	1930	41	300	5.3	49.9	48.3	96.8	.443	22.11	21.41
	1932	46	307	5.3	50.8	51.5	101.4	.377	19.15	19.42
Batchers (cloth winders), female.....	1930	4	34	4.6	48.8	38.9	80.5	.438	21.16	17.02
	1932	2	6	4.2	49.3	28.7	62.2	.331	16.29	8.50
Bath mixers, male.....	1930	27	51	5.1	50.1	49.8	99.4	.473	23.79	23.55
	1932	27	52	5.4	51.9	52.3	102.7	.394	20.45	20.96
Calender tenders, male.....	1930	72	537	5.2	51.4	50.7	98.6	.431	22.15	21.81
	1932	72	507	5.1	52.1	49.6	95.6	.393	19.93	19.06
Color mixers, male.....	1930	58	224	5.4	52.1	55.3	108.1	.490	26.48	27.06
	1932	39	231	5.2	52.5	57.6	109.7	.387	20.32	22.28
Drier tenders, male.....	1930	52	804	5.1	51.2	51.6	100.8	.435	22.27	22.42
	1932	51	827	5.3	51.6	53.6	108.9	.375	19.35	20.09
Drier tenders, female.....	1930	3	47	4.9	48.5	43.8	90.3	.359	14.50	12.10
	1932	2	16	3.3	48.3	31.4	65.0	.270	12.04	6.50
Dyeing-machine tenders, male.....	1930	96	1,618	4.9	50.6	49.6	96.0	.465	23.52	22.69
	1932	80	1,293	5.1	50.8	49.7	97.9	.415	21.08	20.51
Engravers, hand, male.....	1930	8	27	5.9	49.1	50.0	101.8	1.235	60.64	61.70
	1932	12	37	5.5	50.6	50.3	99.4	1.021	51.68	51.37
Engravers, machine, male.....	1930	14	37	5.8	49.4	50.7	102.6	1.247	61.40	63.18
	1932	11	22	5.0	51.7	44.9	85.8	1.004	51.91	45.67
Floormen, male.....	1930	23	133	5.4	52.3	54.3	109.8	.494	24.37	26.31
	1932	49	366	5.1	50.4	47.8	94.8	.376	18.95	17.99
Folders, male.....	1930	57	456	5.2	51.3	47.1	91.8	.387	20.11	20.52
	1932	59	405	5.3	51.7	49.2	95.2	.498	26.75	24.47
Folders, female.....	1930	29	247	5.1	49.4	42.5	86.0	.398	18.18	15.62
	1932	26	198	4.9	51.2	38.9	78.0	.328	17.31	13.14
Inspectors, male.....	1930	46	345	5.2	50.1	47.0	93.8	.459	23.00	21.57
	1932	50	337	5.4	50.4	48.0	96.2	.308	20.55	19.80
Inspectors, female.....	1930	28	269	4.8	51.3	41.2	79.5	.265	15.28	12.14
	1932	24	186	5.3	52.2	44.5	88.2	.249	12.00	11.06
Jackmen, printing, male.....	1930	19	70	5.6	51.3	57.6	112.3	.483	24.73	27.75
	1932	18	64	5.0	51.0	56.7	111.2	.365	20.15	22.37
Kettlemen, color mixing, male.....	1930	26	58	5.3	51.8	56.3	109.7	.495	25.12	27.29
	1932	22	52	5.1	51.2	56.5	110.4	.424	21.71	23.98
Kettlemen's helpers, male.....	1930	10	80	4.8	49.9	49.6	99.4	.475	23.70	23.60
	1932	16	90	4.9	51.3	50.8	99.0	.320	16.42	15.24
Kier boilers, male.....	1930	54	154	5.4	53.0	56.9	107.4	.423	22.95	24.66
	1932	55	122	5.3	53.5	58.4	109.2	.291	15.92	22.53
Knotters, female.....	1930	16	88	4.7	51.0	41.2	80.8	.296	15.20	12.31
	1932	24	118	5.3	51.4	45.4	88.3	.267	13.72	12.12
Mangle tenders, male.....	1930	57	407	5.2	51.2	50.9	99.4	.424	21.71	21.60
	1932	60	470	5.2	51.6	51.5	99.8	.398	18.80	18.98
Mangle tenders, female.....	1930	3	11	5.1	50.4	49.9	99.0	.310	15.62	15.45
	1932	1	5	3.6	49.5	24.8	60.9	.241	11.68	8.35

WAGES AND HOURS OF LABOR

TABLE 1.—Average days, hours, and earnings, and percent of full time worked, 1930 and 1932, by occupation and sex—Continued

Occupation and sex	Year	Number of establishments	Number of wage earners	Average days on which wage earners worked in week	Average full-time hours per week	Hours actually worked in week		Average earnings per hour	Average full-time earnings per week	Average actual earnings in week
						Average number	Percent of full time			
Measurers, male.....	1930	11	46	4.7	50.8	43.2	85.0	\$0.457	\$23.22	\$19.73
	1932	17	67	5.5	53.4	53.1	89.4	.323	17.25	17.14
Measurers, female.....	1930	16	80	5.2	50.5	43.1	85.3	.422	21.36	18.22
	1932	8	35	6.3	50.8	46.9	92.3	.356	18.08	19.09
Marcellizers, male.....	1930	35	118	5.4	52.7	50.2	95.3	.434	22.87	21.79
	1932	32	87	6.4	52.0	56.0	107.7	.430	22.36	24.07
Openers, male.....	1930	43	152	5.1	49.6	47.1	95.0	.457	24.16	22.94
	1932	52	144	5.1	50.1	47.6	95.0	.394	19.74	18.77
Packers, male.....	1930	74	342	5.4	51.8	49.1	94.8	.423	21.91	20.77
	1932	69	255	5.0	52.0	51.4	98.8	.367	19.08	18.89
Fillers, male.....	1930	19	181	4.9	49.4	43.1	87.2	.337	16.95	14.49
	1932	21	135	5.0	51.4	46.5	90.5	.303	15.87	14.19
Plaiters, male.....	1930	35	259	5.0	51.1	46.8	91.6	.374	19.11	17.61
	1932	44	203	5.1	51.8	51.1	98.6	.308	15.95	15.71
Plaiters, female.....	1930	2	9	5.1	50.3	42.2	83.9	.281	14.13	11.98
	1932	1	6	3.8	49.5	34.5	69.7	.240	11.88	8.28
Polishers, metal, male.....	1930	14	47	5.6	50.9	52.9	103.9	.490	24.94	25.91
	1932	10	30	5.5	49.3	48.7	97.8	.425	21.17	20.71
Printing-machine tenders, male.....	1930	28	313	5.4	51.5	64.7	100.2	1.201	61.85	65.66
	1932	26	313	5.3	50.8	55.2	108.7	1.019	51.77	56.23
Roller turners, male.....	1930	10	18	5.6	50.5	51.1	101.2	.570	28.79	29.31
	1932	11	26	5.1	51.7	44.6	86.3	.398	20.58	17.78
Soutcher tenders, male.....	1930	14	40	5.1	50.6	50.9	100.3	.409	20.70	20.81
	1932	8	24	5.2	51.8	54.8	105.2	.304	15.75	16.64
Sowers, male.....	1930	30	149	5.6	51.2	54.2	105.9	.385	19.62	21.07
	1932	39	164	5.3	51.0	52.2	102.4	.332	16.93	17.32
Sowers, female.....	1930	60	504	4.8	51.4	41.4	80.5	.312	16.04	13.93
	1932	60	360	5.4	51.4	46.0	89.5	.277	14.24	12.73
Singers, male.....	1930	47	118	4.9	50.7	46.4	91.5	.415	21.04	19.23
	1932	48	127	5.3	51.6	51.1	99.0	.266	18.89	18.71
Soaper tenders, male.....	1930	27	192	5.4	51.2	58.9	115.0	.410	20.99	24.15
	1932	28	198	5.2	51.8	55.0	100.2	.350	18.13	10.23
Soap mixers, male.....	1930	14	34	5.3	51.1	59.0	115.5	.429	21.62	25.26
	1932	13	24	5.5	50.6	57.7	114.0	.403	20.39	23.24
Sprinkler tenders, male.....	1930	21	68	5.4	51.4	52.7	102.5	.379	19.45	20.00
	1932	28	72	5.1	52.4	51.0	97.3	.338	17.71	17.26
Steamer tenders, male.....	1930	15	126	5.1	48.8	52.4	107.4	.433	21.37	22.67
	1932	13	71	4.9	49.4	51.4	104.0	.345	17.04	17.72
Swing tenders, male.....	1930	36	218	5.2	50.6	50.8	100.4	.373	18.87	18.94
	1932	29	160	5.0	52.0	51.4	98.8	.338	17.47	17.30
Swing tenders, female.....	1930	3	26	4.4	49.2	35.5	72.2	.210	16.25	11.00
	1932	3	13	4.8	53.7	40.6	75.6	.275	14.77	11.18
Tenter-frame tenders, male.....	1930	69	925	5.3	51.0	51.2	100.4	.436	22.19	22.26
	1932	69	970	5.3	51.5	53.3	103.5	.385	19.93	20.55
Tenter-frame tenders, female.....	1930	14	122	5.3	50.4	49.9	92.0	.352	17.79	17.62
	1932	9	75	4.9	50.5	43.8	86.7	.319	16.11	13.95
Truckers, male.....	1930	56	600	5.4	50.6	51.5	101.8	.405	20.49	20.86
	1932	62	750	5.3	51.2	51.2	100.0	.344	17.58	17.58
Tub washers, male.....	1930	20	55	5.5	52.9	56.7	107.2	.404	21.37	22.91
	1932	21	34	5.0	50.8	55.3	108.9	.355	18.03	19.63
Washer tenders, male.....	1930	60	931	4.9	51.3	48.3	94.2	.417	22.93	21.59
	1932	65	660	5.2	51.4	51.8	100.5	.378	19.43	19.58
Yarn winders, male.....	1930	9	68	4.0	58.2	35.5	63.2	.290	16.30	10.28
	1932	4	91	3.8	56.3	32.1	57.0	.346	19.45	11.03
Yarn winders, female.....	1930	13	385	4.2	51.9	30.6	76.3	.350	18.17	13.54
	1932	13	344	4.3	53.4	39.3	73.6	.262	18.90	10.29
Other employees, male.....	1930	109	5,621	5.3	51.0	51.1	100.2	.473	24.23	24.30
	1932	91	5,935	5.3	51.3	50.7	96.8	.441	22.62	22.84
Other employees, female.....	1930	73	1,894	5.1	50.1	43.1	86.0	.336	16.93	14.47
	1932	71	1,679	5.3	50.6	44.4	87.7	.298	15.08	13.22
All employees, male.....	1930	109	17,738	5.2	51.0	50.7	99.4	.473	24.12	23.99
	1932	93	16,205	5.2	51.4	51.1	99.4	.418	21.49	21.37
All employees, female.....	1930	84	3,743	5.0	50.5	42.4	84.0	.335	16.92	14.20
	1932	81	3,041	5.2	51.2	43.5	85.0	.291	14.90	12.65
All employees, both sexes.....	1930	109	21,482	5.2	50.9	49.3	96.9	.452	23.01	22.99
	1932	93	19,246	5.2	51.3	49.9	97.3	.400	20.57	19.99

## Average Days, Hours, and Earnings, 1930 and 1932, by Sex and State

Table 2 shows for all of the males, for all of the females, and for all males and females combined, who were included in the studies of dyeing and finishing of textiles in each State in 1930 and 1932, average days on which they worked and average full-time and actual hours and earnings per week, average earnings per hour, and the percent of full time worked in the week.

In each State the average earnings per hour of males and of females were less in 1932 than in 1930. Those of males ranged, by States, in 1930 from 32 to 57.2 cents; those of females, from 22.3 to 38.6 cents; and those of males and females combined, from 31 to 55.4 cents. In 1932 the averages of males ranged from 27.8 to 49.7 cents, those of females from 21 to 35.2 cents, and those of both sexes combined from 27 to 47.2 cents. The average hourly earnings of males for all States were 47.3 cents in 1930 and 41.8 cents in 1932; those of females were 33.5 cents in 1930 and 29.1 cents in 1932; and those of males and females combined were 45.2 cents in 1930 and 40 cents in 1932.

TABLE 2.—Average days, hours, and earnings, and percent of full time worked, 1930 and 1932, by sex and State

Sex and State	Year	Number of establishments	Number of wage earners	Average days on which wage earners worked in week	Average full-time hours per week	Hours actually worked in week		Average earnings per hour	Average full-time earnings per week	Average actual earnings in week
						Average number	Percent of full time			
<i>Males</i>										
Connecticut.....	1930	5	724	5.3	53.5	54.2	101.3	\$0.572	\$30.40	\$30.96
	1932	5	618	5.3	54.5	54.0	99.1	.497	29.54	26.32
Massachusetts.....	1930	9	4,064	5.5	48.9	52.7	107.8	.438	21.17	22.90
	1932	8	3,174	5.3	49.0	52.1	106.2	.379	18.57	19.76
New Jersey.....	1930	16	5,503	5.1	49.8	48.0	94.4	.523	26.06	25.00
	1932	18	5,299	5.3	50.3	49.9	99.0	.478	23.94	23.59
New York.....	1930	9	1,303	5.0	48.9	45.3	92.6	.520	25.43	23.58
	1932	10	1,083	5.1	48.9	45.7	93.5	.417	20.79	19.07
North Carolina.....	1930	43	1,794	4.8	55.0	47.1	85.6	.320	17.90	15.05
	1932	25	1,010	5.0	54.4	48.3	89.8	.296	16.10	14.29
Pennsylvania.....	1930	12	923	5.1	53.3	51.4	96.4	.566	29.10	29.09
	1932	12	865	5.1	52.2	53.4	102.2	.497	25.94	26.58
Rhode Island.....	1930	10	2,568	5.5	52.5	54.9	104.6	.511	26.83	28.03
	1932	10	2,447	5.2	52.9	50.8	96.0	.453	23.06	23.03
South Carolina.....	1930	5	570	5.6	55.0	58.6	106.5	.332	18.26	19.45
	1932	5	1,130	5.6	55.2	61.2	110.9	.278	15.35	17.01
Total.....	1930	109	17,739	5.2	51.0	50.7	99.4	.473	24.12	23.99
	1932	93	10,205	5.2	51.4	51.1	99.4	.418	21.49	21.37
<i>Females</i>										
Connecticut.....	1930	5	85	5.2	53.4	49.7	93.1	.396	20.61	19.20
	1932	3	81	5.1	54.1	48.1	88.9	.347	18.77	16.67
Massachusetts.....	1930	8	813	5.3	48.0	41.3	86.0	.313	15.03	12.90
	1932	7	577	5.7	48.0	43.2	90.0	.298	13.73	12.34
New Jersey.....	1930	16	1,077	5.0	48.6	40.5	83.3	.377	18.32	15.27
	1932	18	741	5.2	48.7	40.6	83.4	.362	17.14	14.28
New York.....	1930	9	278	4.9	48.5	40.6	83.7	.243	16.56	13.93
	1932	9	154	4.5	48.7	38.4	78.9	.295	13.85	10.65
North Carolina.....	1930	20	863	4.5	54.0	42.0	77.8	.298	15.56	12.10
	1932	20	797	4.8	54.5	42.7	80.2	.232	12.64	10.15
Pennsylvania.....	1930	11	230	4.8	51.7	43.5	84.7	.352	18.20	15.42
	1932	9	204	5.0	51.7	44.6	86.2	.338	17.47	15.07
Rhode Island.....	1930	10	359	5.1	52.5	47.2	89.9	.377	19.79	17.78
	1932	10	237	5.2	52.9	44.2	83.6	.316	16.77	13.69
South Carolina.....	1930	5	96	6.1	55.0	54.4	98.9	.223	12.27	12.13
	1932	5	150	5.7	55.0	58.5	106.4	.210	11.55	12.28
Total.....	1930	84	3,743	5.0	50.5	42.4	84.0	.335	16.92	14.26
	1932	81	3,041	5.2	51.2	43.5	85.0	.291	14.90	12.65

WAGES AND HOURS OF LABOR

TABLE 2.—Average days, hours, and earnings, and percent of full time worked, 1930 and 1932, by sex and State—Continued

Sex and State	Year	Number of establishments	Number of wage earners	Average days on which wage earners worked in week	Average full-time hours per week	Hours actually worked in week		Average earnings per hour	Average full-time earnings per week	Average actual earnings in week
						Average number	Percent of full time			
<i>Males and females</i>										
Connecticut.....	1930	5	809	5.3	53.4	53.7	100.6	\$0.554	\$29.58	\$20.73
	1932	5	899	5.3	54.4	53.3	98.0	.472	25.68	25.20
Massachusetts.....	1930	9	4,877	5.5	48.8	50.8	104.1	.417	20.35	21.15
	1932	8	3,751	5.3	48.9	50.8	103.9	.367	17.95	18.82
New Jersey.....	1930	16	6,580	5.1	49.6	46.2	94.4	.502	24.90	23.48
	1932	18	6,039	5.3	50.1	48.7	97.2	.463	23.26	22.53
New York.....	1930	9	1,521	5.0	48.8	44.7	91.6	.497	24.25	22.30
	1932	10	1,217	5.0	48.9	44.8	91.6	.403	19.71	18.04
North Carolina.....	1930	43	2,647	4.7	54.7	45.4	83.0	.310	16.96	14.09
	1932	25	2,407	4.9	54.4	46.8	86.0	.276	15.01	12.92
Pennsylvania.....	1930	12	1,163	5.0	53.0	49.9	94.2	.512	27.14	25.56
	1932	12	1,069	5.1	52.1	51.7	99.2	.471	24.54	24.37
Rhode Island.....	1930	10	2,927	5.4	52.5	53.9	102.7	.497	26.09	26.78
	1932	10	2,784	5.2	52.9	50.0	94.5	.439	23.25	21.94
South Carolina.....	1930	5	998	5.6	55.0	53.2	105.8	.321	17.66	18.71
	1932	5	1,280	5.6	55.1	60.9	110.5	.270	14.88	16.45
Total.....	1930	109	21,482	5.2	50.9	49.3	96.9	.452	23.01	22.29
	1932	93	19,240	5.2	51.3	49.9	97.3	.400	20.52	19.99

Classified Earnings per Hour, 1930 and 1932

Average earnings per hour and a percentage distribution by average earnings per hour of the wage earners found in 12 representative occupations in the industry in 1930 and 1932 are presented in table 3.

The 1932 figures in the table are for males in each of the 12 occupations and for females in 6 of them, no females being reported in the other 6. The 6,677 males in these occupations are 41 percent of the total number of males included in the study of the industry; the 1,179 females are 39 percent of all females, and both sexes combined constitute 41 percent of all wage earners in the plants included in this report.

In 1930 the 537 calender tenders, male (the first occupation in the table), earned an average of 43.1 cents per hour, 1 percent of them earned less than 25 cents per hour, and 26 percent earned an average of 50 cents or more per hour. The 507 covered in the 1932 study earned an average of 38.3 cents per hour, or 4.8 cents per hour less than the average for 1930; 2 percent earned an average of less than 25 cents per hour, and only 7 percent earned an average of 50 cents or more per hour.

TABLE 3.—Average and classified earnings per hour in 12 specified occupations, 1930 and 1932, by sex

Occupation and sex	Year	Number of establishments	Number of wage earners	Average earnings per hour	Percent of wage earners whose average earnings per hour were—																	
					Under 12 cts.	12, under 14 cts.	14, under 16 cts.	16, under 18 cts.	18, under 20 cts.	20, under 25 cts.	25, under 30 cts.	30, under 35 cts.	35, under 40 cts.	40, under 45 cts.	45, under 50 cts.	50, under 60 cts.	60, under 70 cts.	70, under 80 cts.	80, under 90 cts.	90 cts., under \$1	\$1, under \$1.10	\$1.10, under \$1.25
<b>Calender tenders:</b>																						
Male.....	1930	72	537	\$0.491					1	8	10	18	22	17	22		3	1	(1)			
	1932	72	507	.383				(1)	2	15	18	17	22	19	7		7	(1)				
<b>Drier tenders:</b>																						
Male.....	1930	83	804	.435				(1)	1	5	15	8	22	30	17		1					
	1932	81	627	.375			(1)	1	8	11	13	18	23	12	4		(1)	(1)				
Female.....	1930	3	47	.299					4	21	74											
	1932	2	16	.270					19	19	63											
<b>Dyeing-machine tenders:</b>																						
Male.....	1930	96	1,618	.465	(1)				2	4	12	8	9	25	33	7	2			(1)	(1)	
	1932	80	1,393	.415				(1)	4	8	8	13	35	19	10	3	1					
<b>Folders:</b>																						
Male.....	1930	57	456	.537						5	4	6	5	7	20	21	25	5	2	(1)		
	1932	59	405	.498					2	10	4	11	9	10	20	25	9	(1)				
Female.....	1930	29	247	.368				(1)	9	12	17	27	20	8	4	1	1					
	1932	26	198	.338			4	10	13	14	4	15	9	13	5	1	4	3	2			
<b>Inspectors:</b>																						
Male.....	1930	46	345	.459						8	8	11	7	20	26	5	3					
	1932	50	337	.408					1	7	9	11	9	25	21	13	3	1				
Female.....	1930	28	269	.345				(1)	1	34	24	12	22	2	2	1						
	1932	24	186	.240	2		(1)	3	15	7	25	23	16	8	2							
<b>Mangle tenders:</b>																						
Male.....	1930	57	407	.424					1	8	14	15	21	15	22	4	(1)					
	1932	59	470	.386				(1)	9	13	15	19	20	11	5							
<b>Printing-machine tenders:</b>																						
Male.....	1930	28	313	1.201					(1)	3	2		1	1	2	3	5	4	2	8	8	13
	1932	26	313	1.019						3	2	2	4	3	6	3	1	9	7	6	34	39
<b>Sawers:</b>																						
Male.....	1930	39	149	.389						5	10	15	21	15	10	14	2					
	1932	39	154	.332				(1)	14	36	8	12	15	10	3							
Female.....	1930	56	504	.313				(1)	22	23	27	17	5	2	3		1					
	1932	60	360	.277			(1)	3	6	36	33	18	10	3	1	1	(1)					
<b>Tenter-frame tenders:</b>																						
Male.....	1930	69	925	.435					2	7	12	11	10	31	28	3	(1)					
	1932	69	970	.385					4	12	13	17	26	13	8	(1)						
Female.....	1930	14	122	.353					21	25	33	13	7	2								
	1932	9	75	.319					12	32	28	27	4	3								



<b>Truckers:</b>	1930	56	800	.405						( <sup>1</sup> )	11	20	14	16	17	17	8									
Male.....	1932	62	750	.344		1		( <sup>1</sup> )	12	18	19	15	26	7	2											
<b>Washer tenders:</b>	1930	80	931	.447					1	4	11	7	13	36	27		1	( <sup>1</sup> )								
Male.....	1932	65	660	.378				2	5	13	10	16	31	17	4		1									
<b>Yarn winders:</b>	1930	9	68	.290					43	22	18	6	3	9												
Male.....	1932	4	91	.346					21	7	3	13	30	23	2											
Female.....	1930	13	385	.350		( <sup>1</sup> )	2	2	13	21	12	27	12	4	4		4	1								
	1932	13	344	.262	3	3	6	2	6	24	17	26	11	1												

<sup>1</sup> Less than 1 percent.

Table 4 shows the number and percent of wage earners of each sex and of both sexes combined at each classified group of average earnings per hour. Each wage earner covered in the study in 1932 is grouped according to the average amount earned per hour.

TABLE 4.—Number and percent of wage earners earning each classified amount per hour, 1932, by sex

Classified earnings	Number			Percent		
	Males	Females	Total	Males	Females	Total
3 and under 4 cents		1	1		( )	( )
7 and under 8 cents		1	1		( )	( )
9 and under 10 cents		4	4		( )	( )
10 and under 11 cents		6	6		( )	( )
11 and under 12 cents		6	6		( )	( )
12 and under 13 cents		7	7		( )	( )
13 and under 14 cents	2	5	7	( )	( )	( )
14 and under 15 cents	14	13	27	( )	( )	( )
15 and under 16 cents	15	20	35	( )	1	( )
16 and under 17 cents	44	111	155	( )	2	1
17 and under 18 cents	16	51	67	( )	4	( )
18 and under 19 cents	98	131	229	1	2	1
19 and under 20 cents	25	59	83	( )	4	( )
20 and under 21 cents	227	188	415	1	6	2
21 and under 22 cents	123	102	225	1	9	1
22 and under 23 cents	307	85	392	2	2	2
23 and under 24 cents	195	198	393	1	7	1
24 and under 25 cents	191	80	270	1	3	1
25 and under 27½ cents	1,075	294	1,369	7	10	7
27½ and under 30 cents	945	346	1,291	6	11	7
30 and under 32½ cents	1,117	414	1,531	7	14	6
32½ and under 35 cents	808	194	1,002	5	6	5
35 and under 37½ cents	1,247	183	1,430	8	6	6
37½ and under 40 cents	920	146	1,066	6	5	6
40 and under 42½ cents	1,709	111	1,820	11	4	9
42½ and under 45 cents	1,828	74	1,902	11	2	10
45 and under 47½ cents	1,546	70	1,716	10	2	9
47½ and under 50 cents	697	45	742	4	1	4
50 and under 55 cents	1,096	82	1,178	7	1	6
55 and under 60 cents	524	19	543	3	1	3
60 and under 65 cents	266	11	277	2	( )	2
65 and under 70 cents	249	6	255	2	( )	1
70 and under 75 cents	172	8	180	1	( )	1
75 and under 80 cents	92	8	100	1	( )	1
80 and under 85 cents	57	4	61	( )	( )	( )
85 and under 90 cents	42		42	( )	( )	( )
90 and under 95 cents	23		23	( )	( )	( )
95 cents and under \$1	30		30	( )	( )	( )
\$1 and under \$1.10	44		44	( )	( )	( )
\$1.10 and under \$1.20	69		69	( )	( )	( )
\$1.20 and under \$1.30	84		84	1	( )	( )
\$1.30 and under \$1.40	68		68	( )	( )	( )
\$1.40 and under \$1.50	24		24	( )	( )	( )
\$1.50 and under \$1.60	13		13	( )	( )	( )
\$1.60 and under \$1.70	3		3	( )	( )	( )
Total	16,205	3,041	19,246	100	100	100
Average earnings per hour	\$0.418	\$0.291	\$0.400			

<sup>1</sup> Less than 1 percent.

### Full-Time Hours per Week and per Day, 1930 and 1932

The full-time hours per week and per day of a wage earner are the hours established for him by a regular time of beginning and quitting work each day less his regular time off duty for meals. Such hours do not include any overtime nor extra work on Sunday and holidays, nor are they reduced by the exclusion of any regular time lost by slack or short-time work, sickness, or other disability, or for any other cause.

Table 5 shows average full-time hours per week and a percentage distribution by full-time hours per week of the wage earners in each of 12 representative occupations in the industry in 1930 and 1932.

In compiling this table for each occupation the full-time hours of each wage earner found in the occupation was used, even though the wage earner actually worked more or less than his regular full time.

TABLE 5.—Average and classified full-time hours per week in 12 specified occupations, 1930 and 1932, by occupation and sex

Occupation and sex	Year	Number of establishments	Number of wage earners	Average full-time hours per week	Percent of wage earners whose full-time hours per week were—										
					Under 48	48	Over 48, under 50	50	Over 50, under 54	54	55	Over 55, under 60	60	Over 60	
Calender tenders:															
Male	1930	72	537	51.4	4	36	3	10	6	17	21	(1)	3	(1)	
Male	1932	72	507	52.1	3	26	4	14	3	16	23		5	(1)	1
Drier tenders:															
Male	1930	82	804	51.2	3	50	3	5	3	11	13	1	7	3	
Male	1932	81	627	51.6	3	38	3	12	2	13	18	1	8	1	
Female	1930	3	47	48.5											
Female	1932	2	10	48.3											
Dyeing-machine tenders:															
Male	1930	96	1,618	50.6	2	66	3	5	4	8	18	1	4		
Male	1932	80	1,303	50.8	5	45	4	10	5	11	12	(1)	5		1
Folders:															
Male	1930	57	458	51.3	3	38	2	7	10	13	26	(1)	(1)		
Male	1932	59	405	51.7	4	25	6	10	4	17	24				
Female	1930	29	247	49.4	2	71	4	4	1	5	12				
Female	1932	26	168	51.2	5	45		1	1	10	27				
Inspectors:															
Male	1930	46	345	50.1	1	60	(1)	2	3	7	13	(1)	5		
Male	1932	40	337	50.4		56	1	11	0	12	14		2		
Female	1930	28	269	51.8		45	(1)	(1)		6	45		2		
Female	1932	24	186	52.2		39	1		2	6	20		2		
Mangle tenders:															
Male	1930	57	407	51.2	7	33	7	9	4	12	23		4		
Male	1932	50	470	51.6	6	30	6	12	4	15	23	1	6		
Female	1930	3	11	50.4			73								
Female	1932	1	3	49.5			100								
Printing-machine tenders:															
Male	1930	28	313	51.5	1	41	7	1	5	30	10		4	1	
Male	1932	26	313	50.8	1	45	6	12		17	17		1	1	
Sewers:															
Male	1930	39	149	51.2	1	50	1	4	3	19	17		4	1	
Male	1932	36	154	51.0	1	48	2	12	4	13	14		5	1	
Female	1930	58	594	51.4	1	44	3	3	1	5	43				
Female	1932	50	360	51.4	4	39	3	4	1	8	42				
Tenter-frame tenders:															
Male	1930	60	925	51.0	2	54	1	6	4	8	17	1	7	1	
Male	1932	66	970	51.5	2	45	3	11	4	10	13	1	10	1	2
Female	1930	14	122	50.4	4	40	11	4	16	26	12				
Female	1932	9	75	50.5	5	29	17	13	5	23	5				
Truckers:															
Male	1930	55	600	50.6	2	55	2	2	6	15	10	1	1	(1)	
Male	1932	62	750	51.2	1	43	3	11	4	10	25		3	(1)	
Washer tenders:															
Male	1930	60	631	51.3	2	59	2	3	2	8	11		8	5	
Male	1932	65	660	51.4	3	47	4	5	3	11	18		8	2	
Yarn winders:															
Male	1930	9	68	56.2		3		10			49		38		
Male	1932	4	91	56.3							74		20		
Female	1930	13	385	51.9		5		57	3	18	8		9		
Female	1932	13	344	53.4	2	2		19		17	50				

(1) Less than 1 percent.

The full-time hours per day, Monday to Thursday, Friday, and Saturday, and per week, in table 6, are the regular hours of operation for daywork in each of the 93 plants included in the 1932 study of the industry and for nightwork in 22 of the 93 plants in which there were both day and night shifts.

Full-time hours per week for daywork in the 93 plants ranged from 42½ in 2 plants to 60 in 4 plants, and for nightwork in the 22 plants that had both day and night shifts, ranged from 48 in 1 plant to 70 in 2 plants. In a majority of the plants in which there were day and night shifts, the night force was less than the day force and was limited to certain departments.

The 5-day week, with no work on Saturday, was in effect in 27 of the 93 plants in which there was daywork, and in 20 of the 22 in which there was nightwork. The hours of 1 plant in which there was nightwork were 12 per night, Monday to Thursday, with no work on Friday and Saturday or 48 per week and of 1 were 10 per night, Monday to Saturday, or 60 per week.

Hours for daywork, Monday to Friday ranged from 8¼ to 12, and for nightwork, from 10 to 14. On Saturday hours for daywork ranged from 3 to 5½.

TABLE 6.—Classification of establishments in each State by full-time hours per week and per day, for daywork and for nightwork, 1932

DAYWORK

Full-time hours per week	Full-time hours per day			Number of establishments in—							Total establishments	
	Monday to Thursday	Friday	Saturday	Connecticut	Massachusetts	New Jersey	New York	North Carolina	Pennsylvania	Rhode Island		South Carolina
42½	8½	8½	0				1		1			2
45	9	9	0							1		1
47½	9½	9½	0			1	1					2
48	8½	8½	4½			10	1					11
	8¾	8¾	4¾		4		1				1	6
	9	9	3		1							1
	9½	9½	0			1						1
48¾	9¾	9¾	0				1				1	1
49½	9	9	4½				1					1
49¾	9	9	4¾			1						1
50	9	9	5			1	1			1		4
	10	10	0	1	1		1		5			10
50½	9½	9½	4½			1						1
52½	9½	9½	5									1
	10½	10½	0				1					1
53¾	9¾	9¾	5									1
	9¾	9¾	5¾			1						1
	9¾	9¾	5¾									1
54	9¾	9¾	4¾						2			2
	10	10	4							1		1
	10	9	5			1				5		6
55	10	10	5	3	1	1						1
	11	11	0	1	2			16	2		2	23
60	11	11	5	1				2	1			7
	12	12	0		1							1
Total				8	8	18	10	25	12	10	6	93

NIGHTWORK

48	12	0	0		1							1
50	10	10	0					2				2
54	11	10	0									1
55	11	11	0	2		1		1				3
60	10	10	10			1						1
	12	12	0		1	1						2
62½	12½	12½	0			3	1	1		1		7
65	12	12	0	1		1						1
67½	13½	13½	0			2						1
70	14	14	0		1	1				1		3
Total				3	3	9	1	4	1	1		22

<sup>1</sup> Includes 1 establishment in which hours of females were 49½ per week—9 on Monday to Friday and 4½ on Saturday.

## Changes in Full-Time Hours Since May 1, 1930

Only 6 of the 93 plants included in the 1932 study of the industry reported changes in regular full-time hours per week since May 1, 1930.

Table 7 shows the hours per week and per day before and after the change for each of the six plants.

TABLE 7.—Hours per week and per day of establishments before and after change between May 1, 1930, and period of 1932 study

Number of establishments	Wage earners affected by change	Hours before change			Hours after change		
		Per week	Monday to Friday	Saturday	Per week	Monday to Friday	Saturday
1	All.....	40	8	0	50	10	0
1	do.....	55	10	5	50	10	0
1	do.....	55	10	5	55	11	0
1	do.....	47½	9½	0	45	8	0
1	do.....	48	9¾	4¾	54	10	4
1	Ageing, calender, napping, starching and tentering, cotton dyeing, soaping, cloth, and bleaching departments, and males in shear and singe departments.....	48	8¾	4¾	50	10	0
	Females in shear and singe department.....	48	8¾	4¾	45	9	0
	Repair department.....	48	9¾	4¾	54	9	0

## Changes in Wage Rates Since May 1, 1930

Changes in wages between May 1, 1930, and the period of the 1932 study were reported by 81 of the 93 plants for which figures are given in this report. All changes were decreases.

Table 8 shows the wage earners affected by the change, the percent of decrease in rates, and the year in which each change was made.

The table shows that the rates of all or a specified part of the wage earners in 64 plants were reduced once only between May 1, 1930, and the period of the 1932 study, and in 13 plants were reduced twice; and that the rates of all wage earners in 4 plants were reduced three times (5, 5, and 5 percent) during the period. The decreases ranged, by plants, from 5 percent to 12½ and 10 percent.

TABLE 8.—Changes in wage rates in 81 establishments between May 1, 1930, and the period of the 1932 study

Number of establishments	Wage earners affected by the change	Percent of decrease and year in which change was made
3	All.....	15 in 1931.
1	do.....	13 $\frac{1}{4}$ in 1931.
2	do.....	12 $\frac{1}{2}$ in 1 plant in 1931 and 1 in 1932.
1	do.....	12 in 1930.
48	do.....	10 in 1 plant in 1930, in 82 plants in 1931, and in 18 in 1932.
1	do.....	8 in 1931.
1	do.....	7 $\frac{1}{4}$ in 1932.
3	do.....	6 in 2 plants in 1931 and in 1 in 1932.
2	Those at weekly rates.....	10 in 1931.
1	Those at 50 cents or more per hour.....	10 in 1931.
1	All.....	12 $\frac{1}{4}$ in 1930 and 10 in 1931.
1	do.....	12 $\frac{1}{4}$ and 10 in 1931.
1	do.....	10 in 1930 and 10 in 1931.
2	do.....	10 in 1931 and 10 in 1932.
1	do.....	10 in 1931 and various individual cuts in 1932.
1	do.....	10 in 1931 and 8 in 1932.
1	do.....	10 and 8 in 1931.
1	do.....	7 $\frac{1}{4}$ in 1930 and 7 $\frac{1}{4}$ in 1932.
1	do.....	10 and 5 $\frac{1}{4}$ in 1931.
1	Winders.....	11 in 1931.
1	All.....	10 in 1932.
1	Those at more than 40 cents per hour.....	10 in 1931.
1	Those at more than 30 cents per hour.....	10 in 1932.
1	Overseers.....	10 in 1931.
1	Part only but not specified.....	Various individual cuts in 1932.
4	All.....	5 and 5 in 1931 and 5 in 1932.
1	Those at less than 35 cents per hour.....	5 in 1931.
1	Those at 35 to 45 cents per hour.....	7 $\frac{1}{4}$ in 1931.
1	Those at more than 45 cents and those at piece rates.....	10 in 1931.
1	All.....	5 in 1931.

### Overtime, Sunday, and Holiday Work, 1932

Overtime is any time worked in excess of the regular full time per day or per week, regardless of the rate paid for such work. Work on Sunday and holidays is extra work only when the working schedule does not provide for work on those days. Work on Saturday in a plant in which the 5-day week, Monday to Friday, is in effect is overtime.

In reply to inquiries concerning overtime and extra work on Sunday and holidays 88 of the 93 plants reported a small amount of overtime as having been worked during the pay period covered by the 1932 study and 27 reported extra work on Sunday and holidays. Only 23 of the 88 plants in which there was overtime and 26 of the 27 in which there was extra work on Sunday and holidays paid a higher rate for such work than for regular working time. Four of the plants that were on the 5-day week basis had a limited amount of overtime and paid a higher rate for it than for regular working time. The same rate was paid for overtime in 65 plants, and for extra work on Sunday and holidays in 1 plant, as for regular working time.

Table 9 shows the number of plants in which there was provision for the payment of a higher rate for overtime and for work on Sunday and holidays, the wage earners who were entitled to the extra rate for such work, and the number of times the regular rate paid for such work.

TABLE 9.—Higher rate of pay for overtime, and extra work on Sunday and holidays, and wage earners entitled, 1932

Number of establishments	Wage earners entitled	Times regular rate for each hour of—		
		Overtime	Extra work on Sunday and holidays	Overtime on Saturdays
9	All	1½	1½	
1	do	1½	2	
1	do	1½	1½	
1	do	1½	1½	1½
1	do	1½	2	1½
2	do		1½	
1	do		1½	1½
1	All except printers	1½	1½	
1	Printers	1½	1½	
4	do	1½	1½	
1	Printers and engravers and their apprentices, and those in the repair department	1½	1½	
1	Those in the maintenance department		1½	
1	Those at time rates	1½	1½	
1	Printers, colorists, color mixers, and color-mixing kettlemen at less than \$1 per hour	(?)		
1	All except night kief boilers	1½	1½	
1	Printers, hand and machine engravers, die makers, etchers, pantograph setters, sketch makers, and their apprentices	1½	2	1½

<sup>1</sup> Saturday afternoon.

<sup>2</sup> \$1 per hour for overtime.

### Bonus Systems, 1932

A bonus is compensation in addition to earnings at time or piece rates.

Twenty-six of the 93 plants included in the 1932 study of the industry reported bonus systems in operation. The basis of the bonus, the wage earners entitled to bonus payments, and the amount of and conditions necessary to get the bonus are shown for each plant in table 10.

The basis of the bonus in 16 plants was production; in 2 production and attendance; in 1 production and time saving; in 4 time saving; in 1 efficiency; in 1 attendance; and in 1 service and attendance.

TABLE 10.—Bonus systems in operation in 26 establishments in 1932

Number of establishments	Bonus based on—	Wage earners entitled to bonus	Bonus earned when—	Amount of bonus
1	Production	Printers, color boys, color mixers, gray tenders, and back tenders.	Production by group is over 25,000 yards in 10 hours.	10 percent of earnings at basic rates when production in 10 hours is 25,001 to 29,999 yards and 15 percent when it is 30,000 yards or more.
1	do	All in dyshouse except elevator man.	Production is more than the set standard for a specified unit of time.	¼ of all production over set standard at basic wage rates.

TABLE 10.—*Bonus systems in operation in 38 establishments in 1932—Continued*

Number of establishments	Bonus based on—	Wage earners entitled to bonus	Bonus earned when—	Amount of bonus
1	Production	Doubling-machine operators.	Production is more than the set standard for a specified unit of time.	A fixed amount for each unit of production over set standard.
1	do	Markers, wrappers, folders, and hooker and doubling-machine operators.	do	Do.
1	do	Stringers	do	Do.
1	do	Markers, sewers, inspectors, folders, wrappers, and hooker and doubling-machine operators.	do	Do.
1	do	Pressmen, folders, male, and hooker and doubling-machine operators.	do	Do.
1	do	Openers, sewers and hooker-machine operators.	do	Do.
1	do	Sewers and singers and those in bleaching, ageing, steaming, mercerizing, folding, back gray, dyehouse and finishing departments.	do	Do.
1	do	Those in bleaching, dyeing, mercerizing, singeing, packing, and unwinding departments.	do	¼ of all production over set standard at basic wage rates.
1	do	Openers	Layout is over 80,000 yards per day.	4 cents per each 1,000 yards over 60,000 per day.
1	do	Folders	Average yards folded in specified unit of time is over 34,000 per day of 9½ hours.	3 cents per hour when average is 34,000 to 38,000 yards per day and 6 cents per hour when average is over 38,000 yards per day.
1	do	Yarders and hookers or folders.	Over 25,000 yards are handled in a day.	10 cents for each 1,000 yards over 25,000 per day.
		Tackers	do	5 cents for each 1,000 yards over 25,000 per day.
		Doublers and batchers	Over 325 pieces are handled in a day.	1 cent for each piece over 325 pieces per day.
1	do	Starch manglers	Over 41,000 yards are handled in a day.	4½ cents for each 1,000 yards over 41,000 per day.
		Truckers	Over 110,000 yards are transferred to hook in a day.	9½ cent for each 1,000 yards over 110,000 yards daily.
		Assistant foremen	All machine operators earn a bonus.	18¼ cents for each machine.
		Starch mixers	do	9 cents for each machine.
		Mangle-room truckers	do	4½ cents for each machine.
		Waste washers	Over 16 bales are washed in a day.	10 cents for each bale over 16 per day.
1	do	Hookers	Over 25,000 yards are handled in a day.	4½ cents for each 1,000 yards over 25,000 per day.
		Stitchers	Over 22,000 yards are handled in a day.	3½ cents for each 1,000 yards over 22,000 per day.
		Packers	Over 150,000 yards are handled in a day.	1½ cent for each 1,000 yards over 150,000 per day.
		Folders	Over 22,000 yards are handled in a day.	6¾ cents for each 1,000 yards over 22,000 per day.
1	do	Yarders, folders, and tackers.	Over 25,000 yards are handled in a day.	8 cents for each 1,000 yards over 25,000 per day.
		Sewers	900 seams or more are made in a day.	35 cents per day for 900 seams and 10 cents additional for each 100 over 900 per day.
		Winders	40,000 yards or more are wound in a day.	40 cents per day for 40,000 yards and 4 cents additional for each 1,000 yards over 40,000 per day.
		Balers	40 bales or more are made in a day.	20 cents per day for 40 bales and 2 cents additional for each bale over 40 per day.



TABLE 10.—*Bonus systems in operation in 28 establishments in 1932—Continued*

Number of establishments	Bonus based on—	Wage earners entitled to bonus	Bonus earned when—	Amount of bonus
1	Production and attendance.	All with little or no lost time in a pay period.	Production is more than set standard for specified unit of time.	All production over set standard at basic rates.
1	do.	Printing-machine tenders, colorists, and second hands.	Machine averages in a week, 1,300 yards per hour.	\$5 per week to each one in crew who worked full time, and \$2.50 per week to any who worked part time.
1	Efficiency.	Wrappers, doublers, batcher ticketers, and stampers.	Over 325 pieces are handled in a day.	1 cent for each piece over 325 per day.
1	do.	All except overseer.	Defects are found in work of others.	5 or 10 percent of earnings at basic rates of pay as determined by overseer.
1	Attendance.	Printers.	Full or part of a day is worked.	\$1 for each full or part day.
1	Time saving.	Those in white winding, dyehouse, dry can, aniline color, printing, engraving, tenter frame, starch, calender, print box, make-up, color, calender, and shade departments or shops.	Task is completed in time allotted or less.	20 percent of earnings at basic wage rates for finishing task in time allotted or less, and also 60 percent of time saved at basic wage rates for finishing task in less than time allotted.
1	do.	Gray, singe, mercerize, white winding, printing, tenter-frame, calender, make-up, packing, machinists, storahouse, steam and soap, dyehouse, plant trucking, elevators, color, and bleach departments.	Set task is completed in less than time allotted.	Specified percent of time saved at basic wage rates.
1	do.	Gray, mercerize, printing, tenter-frame, calender, folding, packing, mechanics, storehouse, bleaching, and dyehouse departments.	do.	Do.
1	do.	Gray, singe, mercerizing, white winding, printing, calender and silk finish, starch, frame, packing and loose stock, folding, machinists, storehouse, steam and soap, dyehouse and engraving departments.	do.	Do.
1	Service and attendance.	All	In service 1 or more years and no time lost in week.	50 cents per week each to those in service 1 and under 3 years; \$1 per week to those in service 3 and under 5 years; and \$1.50 per week to those in service 5 years or more.
1	Production.	Openers.	Lay-out is more than 1,500 pieces per day.	14 cents for each 100 pieces over 1,500 per day.
		Sewers.	Completed more than 5,000 yards per hour.	10 cents for each 1,000 yards over 5,000 per hour.
	Time saving.	Jig dyers, starch mangle tenders, and starch boilers.	Task is completed in less than time allotted.	¼ of time saved at basic wage rates.
		Pad dyers, winding-machine operators, backers, bundlers, stampers, paperers, and yard-machine operators.	do.	¼ of time saved plus 20 percent of time worked at basic wage rates.
		Folders.	do.	¼ of time saved plus 5 percent of time worked at basic wage rates.

## Index Numbers of Employment and of Pay Rolls, 1923 to 1932

Index numbers of employment and of pay rolls in the dyeing and finishing of textiles industry are presented in table 11 for each month from January 1923 to December 1932, inclusive. These index numbers were computed from the volume of employment and the amounts of pay rolls for each month and year, with the 1926 average as the base or 100. The index numbers are as published by the bureau in monthly reports on Trend of Employment in the United States.

During the period covered by the table employment was highest at 106.1 in April 1923 and lowest at 64.1 in July 1932. Pay rolls were highest at 110 in March 1925 and February 1929 and lowest at 37.8 in July 1932.

TABLE 11.—Index numbers of employment and of pay rolls, January, 1923, to December 1932, by month and year

[Average for 1926=100]

Month	Employment									
	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
January.....	105.9	92.3	102.0	103.6	100.3	102.0	102.0	99.8	97.9	83.0
February.....	104.6	97.7	104.0	103.6	101.5	103.3	104.7	100.4	95.5	80.2
March.....	105.5	96.5	105.0	103.8	102.1	102.2	105.2	99.8	95.4	85.8
April.....	106.1	96.0	105.2	101.8	102.2	99.5	104.3	96.0	93.5	80.7
May.....	104.8	93.0	102.8	99.4	100.4	98.5	108.1	94.8	91.2	74.9
June.....	100.7	90.3	97.7	98.0	99.3	96.5	101.6	90.4	86.0	71.5
July.....	101.0	88.7	98.1	93.8	97.3	94.8	99.4	84.2	82.7	64.1
August.....	95.1	86.4	97.2	96.2	96.6	95.5	98.0	86.0	84.1	68.1
September.....	96.6	92.3	99.0	98.1	100.4	96.5	100.8	85.5	86.0	77.8
October.....	101.2	96.1	102.9	99.7	102.2	99.4	102.4	91.4	82.9	77.9
November.....	101.0	98.0	103.4	100.9	102.2	101.9	100.6	92.6	82.5	78.1
December.....	103.0	100.7	103.0	100.5	102.9	103.3	99.0	93.1	83.0	78.0
Average.....	102.1	94.0	101.7	100.0	100.5	99.5	101.8	98.0	88.0	77.2

  

Month	Pay-roll totals									
	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
January.....	101.3	91.2	108.9	104.5	101.5	100.6	104.2	94.5	88.9	70.0
February.....	101.8	88.0	107.8	108.5	108.3	108.6	110.0	99.2	98.2	75.4
March.....	103.7	94.2	110.0	106.3	107.0	108.7	109.8	100.6	94.5	72.4
April.....	104.5	93.0	105.4	102.5	105.7	100.5	107.4	96.3	90.6	69.7
May.....	108.6	88.8	102.2	97.8	101.2	100.2	106.5	90.4	84.7	49.4
June.....	100.2	83.2	94.3	94.1	99.6	95.6	100.8	80.0	76.2	46.5
July.....	96.1	79.7	94.1	80.0	94.9	91.6	96.1	72.8	73.7	37.8
August.....	87.5	82.5	92.9	93.1	98.5	94.1	97.4	76.4	77.4	47.3
September.....	93.0	92.3	94.5	98.0	102.2	97.2	100.0	79.9	78.6	60.0
October.....	100.0	96.3	107.8	102.7	106.2	104.0	102.5	86.9	70.9	67.6
November.....	98.3	96.6	108.4	102.2	104.2	106.7	98.5	96.1	70.4	64.0
December.....	103.8	105.9	108.3	102.8	105.3	106.7	94.4	86.1	71.5	53.3
Average.....	99.9	91.8	102.2	100.0	102.5	101.0	102.2	87.9	80.7	67.2

### Importance of the Industry

Table 12 shows, for the industry, the number of establishments, average number of wage earners, the amount paid in wages, the cost of materials, the value of products, and the value added by manufacture, as published by the United States Census of Manufactures. The figures are for the United States as a whole for each of the specified years from 1899 to 1929, and in 1929 for each of the 8 States included in the 1932 study.

From the census figures the average per wage earner of each item was computed by the Bureau of Labor Statistics, as was the percent that amount of wages was of the value added by manufacture.

Average annual wages per wage earner were \$1,188 in 1929 and ranged by years from \$427 in 1899 to \$1,242 in 1927. By States averages in 1929 ranged from \$826 to \$1,299.

Wages formed 41 percent of value added by manufacture in 1929 and ranged, by years, from 38 percent in 1919 to 50 percent in 1904; in 1929 the percent ranged by States from 29 to 45.

TABLE 12.—Number of establishments, average number of wage earners, amount of wages, cost of materials, value of products, and value added by manufacture, 1899 to 1929 by year and 1929 by State

State and year	From United States Census of Manufactures					
	Number of establishments	Average number of wage earners	Amount paid in wages	Cost of materials	Value of products	Value added by manufacture
<b>United States:</b>						
1899.....	238	29,776	\$12,729,316	\$17,958,137	\$44,993,331	\$27,005,194
1904.....	360	35,565	15,469,205	19,621,253	50,849,545	31,228,292
1909.....	420	44,046	21,226,924	35,261,391	83,656,432	48,236,131
1914.....	607	48,467	24,872,318	50,705,135	109,291,536	62,536,401
1919.....	628	55,985	57,188,978	174,742,815	323,967,683	149,224,969
1921.....	599	51,510	58,134,729	141,198,956	276,750,670	135,561,714
1923.....	713	63,414	72,524,711	199,156,387	366,623,213	167,466,826
1925.....	697	70,749	83,983,377	230,678,181	498,515,484	187,637,303
1927.....	743	73,851	91,697,219	210,680,900	498,047,372	195,366,472
1929.....	732	79,327	94,244,685	235,712,156	463,820,629	230,108,473
<b>1929</b>						
Connecticut.....	21	2,309	2,801,222	4,991,570	12,440,511	7,448,941
Massachusetts.....	67	14,450	16,853,664	53,034,427	93,148,770	49,114,343
New Jersey.....	167	23,097	29,943,872	47,184,154	113,558,338	66,374,184
New York.....	157	5,561	8,346,446	14,296,162	33,257,993	18,991,740
North Carolina.....	18	2,363	1,952,693	10,822,594	16,079,262	5,256,668
Pennsylvania.....	133	8,858	11,504,787	44,617,951	73,958,467	29,340,516
Rhode Island.....	62	9,242	11,308,266	22,816,892	51,894,741	28,677,849
South Carolina.....	11	1,939	1,690,178	2,048,133	8,555,189	5,907,056
Other States.....	96	10,508	9,845,537	35,300,273	63,427,449	28,127,176
State and year	Computed by United States Bureau of Labor Statistics				Percent wages are of value added	
	Average annual wages	Cost of materials	Value of products	Value added by manufacture		
<b>United States:</b>						
1899.....	\$427	\$903	\$1,510	\$907	47	
1904.....	435	552	1,430	878	50	
1909.....	482	801	1,697	1,096	44	
1914.....	513	1,170	2,255	1,085	47	
1919.....	1,022	3,121	5,787	2,666	36	
1921.....	1,129	2,741	5,373	2,632	43	
1923.....	1,144	3,141	5,781	2,641	43	
1925.....	1,187	3,119	5,774	2,655	45	
1927.....	1,242	2,858	5,498	2,645	47	
1929.....	1,188	2,971	5,872	2,901	41	
<b>1929</b>						
Connecticut.....	1,213	2,162	5,388	3,220	39	
Massachusetts.....	1,166	3,670	6,446	2,776	42	
New Jersey.....	1,266	2,043	4,917	2,974	45	
New York.....	1,372	2,179	5,069	2,890	44	
North Carolina.....	826	4,580	6,805	2,225	37	
Pennsylvania.....	1,290	5,037	8,349	3,312	39	
Rhode Island.....	1,223	2,469	5,561	3,092	40	
South Carolina.....	872	1,366	4,412	3,046	29	
Other States.....	937	3,359	5,036	2,677	35	

## Scope and Method

This bulletin presents 1932 wage figures for 19,246 wage earners of 93 representative plants that were engaged in dyeing and finishing textiles, mostly cotton goods, in Connecticut, Massachusetts, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, and South Carolina. In some plants the goods included rayon and silk mixtures. These States, according to the 1929 Census of Manufactures, are the most important in the industry in number of wage earners. Together they include 87 percent of the total number of wage earners in the industry in the United States. The number for which wage figures are shown for 1932 is 24 percent of the total in all the States. Data for executives and office and clerical workers were not used in compiling the report.

Data for each of the plants with a pay period of more than 1 week were reduced to a 1-week basis. A majority of the plants covered in the 1932 study had weekly pay periods.

Average days worked in 1 week were computed by dividing the total days on which all wage earners in an occupation worked in 1 week by the total number of wage earners in the occupation in the week. In computing the average, each day or part of a day on which a wage earner did any work was counted a day.

Average full-time hours per week for the wage earners in each occupation were computed by dividing the aggregate full-time hours of all wage earners in the occupation by the number in the occupation. The full-time hours of each wage earner were used in obtaining this average, even though part of them may have worked more or less than full time.

Average hours actually worked in 1 week were computed by dividing the aggregate hours actually worked in 1 week by all wage earners in an occupation by the number of wage earners in the occupation in the week.

Average earnings per hour in each occupation were computed by dividing the aggregate earnings of all wage earners in the occupation by the aggregate number of hours worked by them during the week.

Average full-time earnings per week were computed by multiplying the average earnings per hour of the wage earners in an occupation by their full-time hours per week. This shows what the earnings would have been had all wage earners in the occupation worked full time, no more, no less, and at the same average earnings per hour as for the time that was actually worked in 1 week.

Average actual earnings per week were computed by dividing the aggregate earnings in 1 week of all wage earners in an occupation by the number of wage earners in the occupation.

Table 13 shows by States the number of wage earners in the industry in 1929 as reported by the United States Census of Manufactures, the number of establishments from which the Bureau of Labor Statistics obtained data in 1932, and the number of wage earners included in the 1932 study.

TABLE 13.—Number of wage earners in dyeing and finishing textiles in 1929, and number of establishments and wage earners for which 1932 data are shown, by States

State	Wage earners reported by United States Census in 1929	Number of establishments and wage earners for which data are shown by the Bureau of Labor Statistics for 1932	
		Establishments	Wage earners
Connecticut.....	2,309	5	699
Massachusetts.....	14,450	8	3,751
New Jersey.....	23,097	18	6,039
New York.....	6,561	10	1,217
North Carolina.....	2,363	25	2,407
Pennsylvania.....	8,858	12	1,069
Rhode Island.....	9,242	10	2,784
South Carolina.....	1,939	5	1,280
Other States.....	10,508		
Total.....	79,327	93	19,245

### Occupations

Wages and hours of labor are presented in this bulletin for each of the occupations below and also for the miscellaneous group designated as "Other employees." Each occupation found in the industry is defined in the Appendix (p. 47).

Ager tenders.  
 Back tenders, printing.  
 Balers.  
 Batchers (cloth winders).  
 Bath mixers.  
 Calendar tenders.  
 Color mixers.  
 Drier tenders.  
 Dyeing-machine tenders.  
 Engravers, hand.  
 Engravers, machine.  
 Floormen.  
 Folders.  
 Inspectors.  
 Jackmen, printing.  
 Kettle-men, color mixing.  
 Kettle-men's helpers.  
 Kier boilers.  
 Knotters.  
 Mangle tenders.  
 Measurers.

Mercerizers.  
 Openers.  
 Packers.  
 Pilers.  
 Plaiters.  
 Polishers.  
 Printing-machine tenders.  
 Roller turners.  
 Soutcher tenders.  
 Sewers.  
 Singers.  
 Soaper tenders.  
 Soap mixers.  
 Sprinkler tenders.  
 Steamer tenders.  
 Swing tenders.  
 Tenter-frame tenders.  
 Truckers.  
 Tub washers.  
 Washer tenders.  
 Yarn winders.

### General Tables

In addition to the preceding text tables, five general tables are presented as follows:

TABLE A.—Average number of days on which wage earners worked, average full-time and actual hours and earnings per week, average earnings per hour, and percent of full time worked, 1932, by occupation, sex, and State.

The presentation in the table in parallel columns of "average full-time hours per week" and "average hours actually worked in 1

week" is for the purpose of easy comparison of the hours that would have been worked in the week had all wage earners in the occupation worked no more nor less than full time, with the average hours that were actually worked in the week. One column shows the full-time hours per week under normal conditions, while the other shows the hours actually worked in the week by all wage earners in the occupation in each State and in all States combined.

On page 28 (at the end of the table) it is seen that 16,205 males in the 93 plants worked on an average of 5.2 days in 1 week; that their average full-time hours in 1 week were 51.4; that they actually worked 51.1 hours in the week, or 99.4 percent of full time; that they earned an average of 41.8 cents per hour and \$21.37 per week; and that had they worked full time at the same average rate per hour as was earned in the 51.1 hours, they would have earned \$21.49 in the week.

The 3,041 females in the 81 plants in which they were found employed worked on an average of 5.2 days in 1 week. Their average full-time hours per week were 51.2 and they worked an average of 43.5 hours in the week or 85 percent of full time. They earned an average of 29.1 cents per hour and \$12.65 in the week. Had they worked their average full time of 51.2 hours at the same average rate per hour as was earned in the 43.5 hours they would have earned an average of \$14.90.

The 19,246 males and females in the 93 plants worked on an average of 5.2 days in 1 week. Their average full-time hours per week were 51.3, and in the week they worked an average of 49.9 hours, or 97.3 percent of full time. They earned an average of 40 cents per hour and \$19.99 in the week. Had they worked their average full-time hours of 51.3 per week at the same average per hour as was earned in the 49.9 hours actually worked they would have earned an average of \$20.52 in the week.

TABLE B.—Average and classified earnings per hour in 12 specified occupations, 1932, by sex and State.

TABLE C.—Average and classified full-time hours per week in 12 specified occupations, 1932, by sex and State.

TABLE D.—Average and classified hours actually worked in 1 week in 12 specified occupations, 1932, by sex and State.

TABLE E.—Average and classified actual earnings in 1 week in 12 specified occupations, 1932, by sex and State.

TABLE A.—Average number of days on which wage earners worked, average full-time and actual hours and earnings per week, average earnings per hour, and percent of full time worked, 1932, by occupation, sex, and State

Occupation, sex, and State	Number of establishments	Number of wage earners	Average days on which wage earners worked in 1 week	Average full-time hours per week	Average hours actually worked in 1 week	Percent of full time worked	Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
<b>Ager tenders, male:</b>									
Connecticut.....	3	3	5.7	55.0	75.4	134.9	\$0.398	\$21.62	\$30.09
Massachusetts.....	6	33	5.2	50.3	52.8	124.9	.320	15.10	20.12
New Jersey.....	6	42	4.8	48.7	47.0	96.5	.437	21.26	20.54
New York.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
North Carolina.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Pennsylvania.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island.....	5	20	5.4	56.7	56.0	106.9	.418	23.26	24.67
South Carolina.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
<b>Total.....</b>	<b>24</b>	<b>111</b>	<b>5.2</b>	<b>51.2</b>	<b>56.7</b>	<b>110.5</b>	<b>.379</b>	<b>19.29</b>	<b>21.42</b>

<sup>1</sup> Data included in total.

TABLE A.—Average number of days on which wage earners worked, average full-time and actual hours and earnings per week, average earnings per hour, and percent of full time worked, 1932, by occupation, sex, and State—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average days on which wage earners worked in 1 week	Average full-time hours per week	Average hours actually worked in 1 week	Percent of full time worked	Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
<b>Back tenders, printing, male:</b>									
Connecticut	3	26	5.8	55.4	62.5	112.8	\$0.501	\$27.76	\$31.8
Massachusetts	6	120	4.9	48.5	56.5	116.5	.339	16.44	19.12
New Jersey	6	86	4.4	48.7	40.1	82.3	.470	22.89	18.88
New York	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
North Carolina	3	12	5.3	51.3	53.9	105.1	.296	16.18	16.97
Pennsylvania	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island	6	109	4.7	55.1	52.3	96.7	.388	21.38	20.67
South Carolina	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total	27	414	4.8	51.4	52.9	102.9	.381	19.58	20.15
<b>Bakers, male:</b>									
Massachusetts	6	15	5.7	48.5	49.0	101.0	.320	15.52	15.68
New Jersey	3	8	5.0	52.2	49.8	96.4	.379	19.73	18.81
New York	2	3	6.0	48.7	53.3	109.4	.351	17.09	18.72
North Carolina	11	31	4.7	53.9	45.0	83.5	.232	12.50	10.45
Pennsylvania	6	16	4.8	47.0	37.9	79.6	.408	22.28	17.78
Rhode Island	3	6	5.8	54.0	51.1	94.6	.557	30.08	28.46
South Carolina	3	5	5.6	55.0	67.6	104.7	.314	17.27	18.06
Total	34	78	5.1	51.4	46.0	89.5	.331	17.01	15.24
<b>Butchers (cloth winders), male:</b>									
Connecticut	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts	5	67	5.3	48.9	52.2	106.7	.304	14.87	15.88
New Jersey	15	121	5.3	50.1	49.7	99.2	.423	21.19	21.04
New York	6	24	4.9	49.5	42.7	86.3	.378	18.71	16.14
North Carolina	4	6	5.0	50.8	49.9	98.2	.247	12.66	12.32
Pennsylvania	2	7	5.4	52.9	52.5	118.1	.337	20.47	24.15
Rhode Island	8	29	5.0	52.6	50.1	95.2	.432	22.72	21.68
South Carolina	5	34	5.8	55.0	59.0	107.8	.306	16.83	18.04
Total	46	297	5.3	50.8	51.5	101.4	.377	19.15	19.42
<b>Butchers (cloth winders), female:</b>									
Massachusetts	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
South Carolina	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total	2	6	4.2	49.2	25.7	52.2	.331	16.29	8.60
<b>Bath mixers, male:</b>									
Connecticut	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts	4	6	5.6	49.6	61.7	124.4	.334	16.57	20.57
New Jersey	6	17	5.8	49.5	52.8	106.7	.470	23.27	24.79
New York	6	7	5.1	49.0	49.1	100.2	.388	19.01	19.07
North Carolina	4	9	5.3	57.5	54.7	96.1	.317	18.28	17.34
Pennsylvania	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island	4	8	4.0	54.9	46.9	85.4	.402	22.07	18.82
South Carolina	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total	27	52	5.4	51.9	53.3	102.7	.394	20.45	20.98
<b>Calendar tenders, male:</b>									
Connecticut	3	45	4.7	53.9	44.8	83.1	.457	24.63	20.48
Massachusetts	8	111	4.1	49.8	52.9	106.2	.389	18.88	17.91
New Jersey	17	76	5.3	51.7	63.1	102.7	.442	22.85	23.49
New York	10	62	4.0	49.0	41.9	85.5	.414	20.26	17.35
North Carolina	11	35	5.5	54.0	50.9	94.3	.284	15.34	14.45
Pennsylvania	8	20	5.3	53.3	65.1	103.4	.435	22.65	23.43
Rhode Island	10	104	4.8	53.0	45.2	85.3	.439	23.27	19.84
South Carolina	5	54	5.5	55.6	57.8	104.0	.274	15.23	15.83
Total	72	507	5.1	52.1	49.8	95.6	.383	19.95	19.06
<b>Color mixers, male:</b>									
Connecticut	4	21	5.2	55.5	57.9	104.3	.409	26.03	27.18
Massachusetts	7	42	5.3	50.0	59.8	119.6	.326	16.40	19.63
New Jersey	6	36	5.3	49.8	59.9	106.2	.550	27.39	29.09
New York	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
North Carolina	8	18	5.2	58.0	54.2	102.3	.319	16.91	17.30
Pennsylvania	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island	9	62	5.1	53.4	56.6	106.0	.396	21.15	22.42
South Carolina	3	40	5.1	55.0	59.2	107.6	.254	13.97	15.01
Total	39	231	5.2	52.5	57.5	109.7	.387	20.32	22.28

<sup>1</sup> Data included in total.

TABLE A.—Average number of days on which wage earners worked, average full-time and actual hours and earnings per week, average earnings per hour, and percent of full time worked, 1932, by occupation, sex, and State—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average days on which wage earners worked in 1 week	Average full-time hours per week	Average hours actually worked in 1 week	Percent of full time worked	Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
<b>Drier tenders, male:</b>									
Connecticut.....	8	15	5.5	53.7	61.0	113.6	\$0.302	\$21.06	\$23.89
Massachusetts.....	8	100	5.4	50.0	54.9	109.8	.832	16.00	19.28
New Jersey.....	18	221	5.3	51.0	54.1	106.1	.432	22.09	23.34
New York.....	6	57	5.0	48.7	51.4	105.5	.383	18.45	19.99
North Carolina.....	8	47	5.1	54.3	51.5	94.8	.298	14.01	13.29
Pennsylvania.....	12	38	5.1	53.0	48.7	91.9	.440	23.64	21.73
Rhode Island.....	10	102	5.2	52.3	51.7	98.9	.340	19.87	19.65
South Carolina.....	4	47	5.3	55.3	59.7	108.0	.241	18.33	14.42
Total.....	81	627	5.2	51.6	53.6	103.9	.375	19.36	20.09
<b>Drier tenders, female:</b>									
New Jersey.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
New York.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total.....	2	16	3.6	43.3	31.4	65.0	.270	13.04	8.60
<b>Dyeing-machine tenders, male:</b>									
Connecticut.....	3	36	5.2	53.8	53.3	99.1	.418	22.49	22.29
Massachusetts.....	7	132	4.9	49.1	50.1	102.0	.831	16.26	16.56
New Jersey.....	18	656	5.2	50.1	51.5	102.8	.439	21.99	22.61
New York.....	9	71	5.4	48.7	51.5	105.7	.347	18.86	19.94
North Carolina.....	18	94	4.7	53.2	48.8	91.7	.296	14.16	12.95
Pennsylvania.....	12	181	4.7	52.0	44.5	85.6	.498	25.79	22.09
Rhode Island.....	10	175	4.8	51.5	45.3	88.3	.443	22.81	20.15
South Carolina.....	3	44	5.2	55.0	53.5	100.9	.266	14.69	14.73
Total.....	80	1,368	5.1	50.6	49.7	97.8	.415	21.06	20.61
<b>Engravers, hand, male:</b>									
Connecticut.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts.....	3	8	6.0	48.0	56.8	106.8	1.042	60.02	62.00
New Jersey.....	2	7	6.0	48.0	48.0	100.0	1.151	55.20	55.20
Pennsylvania.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island.....	4	6	5.0	54.3	52.0	95.8	.901	48.02	46.00
South Carolina.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total.....	12	28	5.5	50.6	50.3	99.4	1.021	51.66	51.37
<b>Engravers, machine, male:</b>									
Massachusetts.....	4	7	5.3	48.3	44.7	92.5	1.127	54.43	50.24
New Jersey.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Pennsylvania.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island.....	4	11	4.9	54.5	45.8	84.0	.935	50.96	42.63
South Carolina.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total.....	11	22	5.0	51.7	44.9	86.8	1.094	51.91	46.07
<b>Floormen, male:</b>									
Connecticut.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts.....	5	35	5.4	48.6	53.8	110.7	.851	17.05	18.90
New Jersey.....	17	198	5.1	49.6	47.5	95.8	.411	20.39	19.54
New York.....	8	46	4.3	48.6	41.7	85.5	.371	18.10	15.49
North Carolina.....	8	41	4.7	55.4	45.5	82.1	.264	14.62	11.69
Pennsylvania.....	6	27	5.0	51.5	52.3	101.8	.320	17.00	17.25
Rhode Island.....	4	12	5.1	52.7	50.0	94.9	.430	22.66	21.49
South Carolina.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total.....	49	366	5.1	50.4	47.8	94.8	.376	18.95	17.99
<b>Folders, male:</b>									
Connecticut.....	3	11	5.3	54.1	57.3	105.9	.676	31.18	33.09
Massachusetts.....	8	90	5.1	49.0	45.3	92.4	.477	23.37	21.61
New Jersey.....	7	50	5.3	51.6	56.4	109.3	.613	31.63	34.57
New York.....	6	35	4.8	46.5	38.7	79.8	.533	26.58	20.92
North Carolina.....	12	57	5.3	53.9	48.3	90.6	.329	17.28	15.61
Pennsylvania.....	9	24	5.3	50.5	47.6	94.1	.430	22.06	20.77
Rhode Island.....	10	99	5.2	52.8	48.3	91.5	.599	31.06	28.40
South Carolina.....	4	39	5.3	55.0	59.8	108.7	.408	22.44	24.42
Total.....	69	406	5.3	51.7	49.2	95.2	.496	25.75	24.47

1 Data included in total.



TABLE A.—Average number of days on which wage earners worked, average full-time and actual hours and earnings per week, average earnings per hour, and percent of full time worked, 1932, by occupation, sex, and State—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average days on which wage earners worked in 1 week	Average full-time hours per week	Average hours actually worked in 1 week	Percent of full time worked	Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
<b>Folders, female:</b>									
Massachusetts	3	39	5.3	48.0	38.5	80.2	\$0.541	\$25.97	\$20.86
New Jersey	10	54	5.1	48.1	35.2	73.2	.418	20.11	14.72
New York	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
North Carolina	1	66	4.4	54.8	39.9	72.8	.190	10.41	7.60
Rhode Island	5	27	4.6	51.7	39.9	77.2	.356	18.41	14.20
South Carolina	2	10	5.4	55.0	52.6	95.6	.164	9.02	8.64
Total	25	198	4.9	51.2	38.9	76.0	.338	17.31	13.14
<b>Inspectors, male:</b>									
Connecticut	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts	4	50	5.4	48.0	48.3	101.7	.322	15.46	15.69
New Jersey	11	153	5.3	49.1	47.6	96.9	.457	22.44	21.77
New York	5	24	5.3	49.6	44.1	89.9	.390	19.34	17.19
North Carolina	11	34	5.2	53.8	46.3	86.1	.269	14.47	12.42
Pennsylvania	8	27	5.6	52.9	52.5	99.4	.443	23.70	23.57
Rhode Island	6	29	5.2	53.4	44.4	83.1	.509	27.18	22.60
South Carolina	4	12	5.9	55.0	60.2	109.6	.261	14.38	15.89
Total	50	337	5.4	50.4	48.0	96.2	.403	20.56	19.60
<b>Inspectors, female:</b>									
Connecticut	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts	3	23	5.8	48.0	41.6	86.7	.232	11.42	9.91
New Jersey	6	39	5.2	48.2	38.0	78.8	.336	16.20	12.78
New York	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
North Carolina	3	68	5.3	55.2	47.2	85.5	.213	11.76	10.05
Pennsylvania	2	5	5.8	52.6	52.5	99.6	.343	18.43	18.32
Rhode Island	2	11	5.6	54.0	51.0	94.4	.256	12.52	12.08
South Carolina	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total	24	186	5.3	52.2	44.5	85.2	.249	13.00	11.06
<b>Jackmen, printing, male:</b>									
Connecticut	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts	5	20	5.2	48.3	61.4	127.1	.355	17.15	21.77
New Jersey	6	16	4.4	48.0	39.8	81.4	.490	23.47	19.11
Pennsylvania	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island	4	20	5.1	54.1	62.6	115.7	.383	20.72	23.95
South Carolina	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total	18	84	5.0	51.0	56.7	111.2	.395	20.15	22.37
<b>Kettlemen, color mixing, male:</b>									
Connecticut	2	4	5.8	55.0	61.3	111.5	.514	28.27	31.51
Massachusetts	5	25	4.9	48.5	55.7	114.8	.377	18.28	21.01
New Jersey	4	4	5.5	48.0	48.8	101.7	.619	44.11	44.88
North Carolina	4	6	5.5	55.6	54.0	98.2	.284	15.62	15.33
Pennsylvania	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island	5	10	4.9	64.7	55.0	100.5	.394	21.55	21.69
South Carolina	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total	22	62	5.1	51.2	58.5	110.4	.424	21.71	23.96
<b>Kettlemen's helpers, male:</b>									
Connecticut	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts	5	33	5.1	48.7	55.8	114.6	.331	16.12	18.48
New Jersey	4	17	4.5	48.0	38.9	81.0	.467	22.42	18.18
North Carolina	3	30	4.9	55.0	48.6	84.7	.239	13.15	11.12
Pennsylvania	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
South Carolina	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total	16	90	4.9	51.3	50.8	99.0	.320	16.42	16.24
<b>Kier boilers, male:</b>									
Connecticut	3	6	5.7	51.7	58.7	113.5	.400	26.33	26.78
Massachusetts	8	31	5.2	49.7	57.7	118.1	.358	17.60	20.56
New Jersey	6	10	5.6	53.9	65.2	121.0	.464	25.01	30.24
New York	7	11	5.0	59.6	57.3	96.1	.403	24.02	22.11
North Carolina	11	16	5.1	57.4	55.7	98.8	.237	18.47	16.28
Pennsylvania	7	3	5.5	51.6	59.9	116.1	.521	28.88	31.24
Rhode Island	10	42	5.4	53.3	57.2	107.3	.405	21.50	23.18
South Carolina	3	8	5.6	55.6	62.5	112.4	.325	18.07	20.35
Total	55	132	5.3	53.5	58.4	106.2	.391	20.92	22.83

1 Data included in total.

TABLE A.—Average number of days on which wage earners worked, average full-time and actual hours and earnings per week, average earnings per hour, and percent of full time worked, 1932, by occupation, sex, and State—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average days on which wage earners worked in 1 week	Average full-time hours per week	Average hours actually worked in 1 week	Percent of full time worked	Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
<b>Knotters, female:</b>									
Connecticut.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts.....	3	21	5.0	48.0	47.8	99.2	80.267	\$14.26	\$14.18
New Jersey.....	4	12	4.0	50.7	37.2	73.4	.205	15.46	11.24
New York.....	6	22	5.2	47.9	42.2	88.1	.276	13.22	11.06
North Carolina.....	4	21	5.3	54.5	48.5	88.6	.227	12.37	10.90
Pennsylvania.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island.....	4	33	5.3	53.1	44.8	84.4	.264	14.02	11.63
South Carolina.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
<b>Total.....</b>	<b>24</b>	<b>113</b>	<b>5.3</b>	<b>51.4</b>	<b>45.4</b>	<b>88.3</b>	<b>.267</b>	<b>13.72</b>	<b>12.13</b>
<b>Mangle tenders, male:</b>									
Connecticut.....	2	15	5.0	52.7	49.6	94.1	.448	23.61	22.21
Massachusetts.....	5	43	5.0	49.0	49.3	100.0	.320	15.66	15.79
New Jersey.....	12	131	5.5	51.4	52.3	101.8	.428	22.00	22.37
New York.....	8	69	4.0	48.5	41.7	85.8	.300	18.95	16.29
North Carolina.....	11	49	5.5	54.4	54.9	100.9	.273	14.85	14.95
Pennsylvania.....	3	15	5.1	52.4	49.1	93.7	.426	22.48	21.02
Rhode Island.....	9	93	5.3	51.4	52.7	102.5	.392	20.18	20.67
South Carolina.....	4	35	5.2	53.2	59.4	107.6	.254	14.02	15.06
<b>Total.....</b>	<b>59</b>	<b>470</b>	<b>5.2</b>	<b>51.5</b>	<b>51.5</b>	<b>99.9</b>	<b>.306</b>	<b>18.90</b>	<b>18.66</b>
<b>Mangle tenders, female:</b>									
New York.....	1	5	3.5	49.5	34.5	69.9	.241	11.03	8.20
<b>Measurers, male:</b>									
New Jersey.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
New York.....	3	8	4.3	46.7	41.4	88.7	.372	17.37	15.42
North Carolina.....	2	18	5.1	54.2	46.1	85.1	.282	15.28	13.00
Pennsylvania.....	3	3	4.7	50.0	40.3	80.5	.406	20.25	16.25
Rhode Island.....	3	9	5.3	52.7	55.0	104.4	.349	18.29	19.19
South Carolina.....	4	30	5.8	55.0	58.3	106.0	.310	17.05	18.06
<b>Total.....</b>	<b>17</b>	<b>67</b>	<b>5.5</b>	<b>53.4</b>	<b>52.1</b>	<b>99.4</b>	<b>.323</b>	<b>17.25</b>	<b>17.14</b>
<b>Measurers, female:</b>									
Connecticut.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts.....	2	12	5.7	48.0	45.1	94.0	.299	19.15	17.99
New York.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
North Carolina.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Pennsylvania.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island.....	2	6	4.8	48.0	48.1	96.0	.491	23.65	20.79
<b>Total.....</b>	<b>8</b>	<b>35</b>	<b>5.3</b>	<b>50.8</b>	<b>49.9</b>	<b>92.3</b>	<b>.356</b>	<b>18.08</b>	<b>16.69</b>
<b>Mercerizers, male:</b>									
Connecticut.....	2	6	5.0	52.5	48.6	92.5	.442	23.21	21.50
Massachusetts.....	4	9	5.3	48.7	53.9	110.5	.342	16.65	18.41
New Jersey.....	6	16	5.4	51.7	60.7	117.4	.479	24.70	29.02
New York.....	4	4	5.0	49.1	48.4	98.5	.444	21.80	21.46
North Carolina.....	4	5	5.5	57.0	52.7	110.0	.365	20.95	22.96
Pennsylvania.....	4	17	5.9	53.7	64.5	120.1	.513	27.55	33.12
Rhode Island.....	6	23	5.3	50.6	48.3	95.5	.467	20.68	19.62
South Carolina.....	2	7	5.3	55.0	59.0	107.3	.291	16.01	17.17
<b>Total.....</b>	<b>32</b>	<b>87</b>	<b>5.4</b>	<b>52.0</b>	<b>56.0</b>	<b>107.7</b>	<b>.430</b>	<b>22.26</b>	<b>24.07</b>
<b>Openers, male:</b>									
Connecticut.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts.....	5	22	5.1	48.5	52.3	108.9	.399	18.44	17.92
New Jersey.....	19	42	5.6	48.5	45.4	90.2	.443	21.86	21.08
New York.....	5	30	4.5	48.5	38.2	79.0	.405	19.64	15.49
North Carolina.....	4	8	5.5	54.4	49.5	91.2	.292	14.25	13.00
Pennsylvania.....	7	11	5.4	52.5	51.9	97.0	.475	25.41	24.62
Rhode Island.....	5	19	4.8	50.7	43.9	86.5	.448	22.71	18.06
South Carolina.....	3	11	5.5	55.0	61.1	111.1	.269	13.79	15.24
<b>Total.....</b>	<b>52</b>	<b>144</b>	<b>5.1</b>	<b>50.1</b>	<b>47.6</b>	<b>95.0</b>	<b>.364</b>	<b>19.74</b>	<b>18.77</b>

1 Data included in total.

TABLE A.—Average number of days on which wage earners worked, average full-time and actual hours and earnings per week, average earnings per hour, and percent of full time worked, 1932, by occupation, sex, and State—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average days on which wage earners worked in 1 week	Average full-time hours per week	Average hours actually worked in 1 week	Percent of full-time worked	Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
<b>Packers, male:</b>									
Connecticut.....	3	7	5.9	54.3	55.4	102.0	\$0.474	\$25.74	\$26.23
Massachusetts.....	6	30	6.0	46.9	50.8	103.9	.353	17.26	17.90
New Jersey.....	17	52	5.6	49.7	50.9	102.4	.439	21.52	22.32
New York.....	9	28	5.1	48.8	43.3	88.7	.421	20.54	18.25
North Carolina.....	13	51	5.3	54.8	47.1	85.9	.296	14.58	12.53
Pennsylvania.....	8	15	5.7	53.6	54.2	101.1	.446	23.91	24.18
Rhode Island.....	9	37	5.6	52.2	52.5	100.6	.438	22.56	22.97
South Carolina.....	4	36	6.0	65.0	61.9	112.5	.281	14.36	16.14
Total.....	69	256	5.6	52.0	51.4	98.8	.387	19.08	18.86
<b>Pilers, male:</b>									
Connecticut.....	2	11	4.3	54.5	39.1	71.7	.353	19.24	13.79
Massachusetts.....	5	45	5.3	45.0	49.2	102.5	.278	13.34	13.67
North Carolina.....	3	5	3.6	53.0	34.6	65.3	.218	11.55	7.53
Rhode Island.....	9	60	5.0	52.5	45.2	86.1	.347	18.22	15.63
South Carolina.....	2	14	4.9	56.0	54.1	96.4	.209	11.50	11.32
Total.....	21	135	5.0	51.4	46.5	90.5	.303	15.57	14.10
<b>Plaiters, male:</b>									
Massachusetts.....	5	37	5.3	52.1	60.8	116.3	.308	15.05	18.69
New Jersey.....	6	32	5.4	51.5	54.3	105.4	.369	19.00	20.04
New York.....	8	37	4.9	48.6	43.0	88.5	.325	15.90	13.98
North Carolina.....	8	38	5.0	53.4	49.8	93.2	.223	11.91	11.12
Pennsylvania.....	6	22	5.0	53.0	50.3	94.9	.351	18.60	17.68
Rhode Island.....	10	32	5.0	52.3	46.5	89.1	.312	16.32	14.54
South Carolina.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total.....	44	202	5.1	51.8	51.1	98.6	.306	15.95	15.71
<b>Plaiters, female:</b>									
New York.....	1	6	3.8	49.5	34.5	69.7	.240	11.88	8.28
<b>Polishers, male:</b>									
Connecticut.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts.....	3	13	6.0	48.5	53.2	109.7	.330	16.98	18.61
New Jersey.....	2	7	5.3	45.0	43.1	89.8	.578	27.74	24.93
Pennsylvania.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island.....	2	5	4.7	54.3	42.8	78.8	.422	22.91	18.05
Total.....	10	30	5.5	49.8	48.7	97.8	.426	21.17	20.71
<b>Printing-machine tenders, male:</b>									
Connecticut.....	3	24	5.0	55.4	52.5	94.8	.975	54.02	51.21
Massachusetts.....	6	62	5.4	49.1	57.0	116.1	1.063	52.19	60.59
New Jersey.....	6	74	5.9	48.9	50.0	102.2	1.070	52.32	53.45
New York.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
North Carolina.....	2	14	5.3	50.4	52.5	104.2	.330	16.63	17.31
Pennsylvania.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island.....	6	35	5.0	52.9	54.5	103.0	1.132	59.88	61.71
South Carolina.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total.....	26	313	5.3	50.8	55.2	103.7	1.019	51.77	56.23
<b>Roller turners, male:</b>									
Connecticut.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Massachusetts.....	4	9	5.8	48.8	47.2	96.7	.404	19.72	19.05
New Jersey.....	2	3	4.7	48.0	38.0	79.2	.517	24.82	19.66
Pennsylvania.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island.....	2	5	4.8	54.6	40.1	73.4	.425	23.21	17.06
South Carolina.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Total.....	11	26	5.1	51.7	44.6	86.3	.398	20.63	17.73
<b>Scutcher tenders, male:</b>									
Massachusetts.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
New Jersey.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
North Carolina.....	3	5	5.7	53.3	55.3	103.8	.224	11.94	12.36
Pennsylvania.....	1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Rhode Island.....	2	7	6.4	55.1	61.6	100.8	.338	18.96	20.83
Total.....	8	24	5.2	51.8	54.8	105.8	.304	15.75	16.64

<sup>1</sup> Data included in total.

TABLE A.—Average number of days on which wage earners worked, average full-time and actual hours and earnings per week, average earnings per hour, and percent of full time worked, 1932, by occupation, sex, and State—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average days on which wage earners worked in 1 week	Average full-time hours per week	Average hours actually worked in 1 week	Percent of full-time worked	Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
<b>Brewers, male:</b>									
Connecticut.....	3	8	5.0	55.0	48.0	87.3	30.300	\$21.78	\$19.00
Massachusetts.....	5	64	5.2	48.2	51.0	106.5	.285	13.74	14.51
New Jersey.....	3	20	5.3	52.3	52.8	101.0	.430	22.80	22.02
New York.....	3	5	5.2	49.3	48.4	92.1	.444	21.90	20.15
North Carolina.....	4	15	5.2	53.8	49.2	91.4	.231	12.43	11.36
Pennsylvania.....	4	8	5.4	51.9	58.4	112.5	.367	20.00	22.00
Rhode Island.....	7	28	5.5	53.6	56.4	105.2	.355	19.03	20.02
South Carolina.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Total.....	30	154	5.3	51.0	52.2	102.4	.332	18.93	17.32
<b>Brewers, female:</b>									
Connecticut.....	2	12	4.3	52.9	40.9	77.3	.309	16.55	12.64
Massachusetts.....	6	70	5.4	47.8	39.3	82.2	.244	11.90	9.30
New Jersey.....	12	76	5.4	48.5	42.8	88.2	.330	16.01	14.13
New York.....	6	13	4.5	48.2	36.9	76.8	.339	15.91	12.31
North Carolina.....	7	129	5.3	54.8	52.6	96.0	.252	13.81	15.29
Pennsylvania.....	5	10	5.5	51.5	49.5	96.1	.335	17.26	16.50
Rhode Island.....	3	30	4.3	51.2	40.5	79.1	.336	17.20	13.58
South Carolina.....	3	20	5.4	55.0	54.4	98.9	.222	12.21	12.00
Total.....	50	360	5.4	51.4	48.0	89.5	.277	14.24	12.73
<b>Singers, male:</b>									
Connecticut.....	2	4	5.0	51.3	50.6	98.6	.490	25.44	25.06
Massachusetts.....	8	32	5.3	49.2	49.6	100.8	.300	14.76	14.87
New Jersey.....	10	25	5.6	46.7	54.6	106.9	.424	21.07	23.18
New York.....	5	5	5.2	48.7	47.8	98.2	.499	24.30	23.85
North Carolina.....	6	18	5.2	55.0	51.0	92.7	.208	16.20	16.23
Pennsylvania.....	5	13	4.6	50.6	46.2	96.2	.537	26.78	24.90
Rhode Island.....	7	18	5.2	51.9	47.5	91.5	.389	20.19	18.45
South Carolina.....	3	12	5.4	55.8	60.8	109.0	.237	13.22	14.42
Total.....	48	127	5.3	51.6	51.1	99.0	.366	18.90	18.71
<b>Soap tenders, male:</b>									
Connecticut.....	2	3	5.5	53.1	68.3	128.6	.406	21.56	27.70
Massachusetts.....	5	70	5.1	49.8	53.8	108.0	.307	15.20	16.53
New Jersey.....	7	32	5.2	50.9	56.1	110.2	.406	20.97	22.77
New York.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
North Carolina.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Pennsylvania.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Rhode Island.....	9	50	5.3	53.3	60.5	94.7	.402	21.43	20.31
South Carolina.....	2	19	4.9	55.0	58.4	106.2	.254	13.97	14.94
Total.....	28	198	5.2	51.8	55.0	106.2	.350	18.12	19.22
<b>Soap mixers, male:</b>									
Connecticut.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Massachusetts.....	3	4	5.5	48.5	50.1	123.9	.243	15.84	20.02
New Jersey.....	6	10	5.6	48.0	53.9	112.3	.479	22.99	25.61
Pennsylvania.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Rhode Island.....	2	3	5.5	54.0	60.9	112.8	.258	19.33	21.93
Total.....	13	24	5.5	50.6	57.7	114.0	.403	20.30	23.94
<b>Sprinkler tenders, male:</b>									
Connecticut.....	2	6	4.3	53.2	42.5	79.7	.425	22.55	18.05
Massachusetts.....	2	2	5.1	48.2	59.0	122.2	.316	15.35	18.74
New Jersey.....	2	7	5.4	52.1	48.4	92.9	.430	22.40	20.92
New York.....	4	9	4.9	47.3	42.3	89.4	.351	16.60	14.84
North Carolina.....	4	5	5.5	53.0	54.6	103.0	.273	14.47	14.50
Rhode Island.....	4	25	4.9	53.3	48.8	91.6	.379	20.20	18.48
South Carolina.....	4	12	5.3	56.3	61.1	108.6	.230	12.95	14.08
Total.....	28	72	5.1	52.4	51.0	97.3	.338	17.71	17.26
<b>Steamer tenders, male:</b>									
Connecticut.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Massachusetts.....	3	28	4.6	48.4	47.9	99.0	.298	12.97	12.91
New Jersey.....	4	27	5.0	48.0	47.4	98.8	.443	21.26	20.98
North Carolina.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Pennsylvania.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Rhode Island.....	2	9	5.4	56.1	65.8	121.0	.319	17.20	21.00
South Carolina.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Total.....	13	71	4.9	49.4	51.4	104.0	.245	17.04	17.73

<sup>1</sup> Data included in total.

TABLE A.—Average number of days on which wage earners worked, average full-time and actual hours and earnings per week, average earnings per hour, and percent of full time worked, 1932, by occupation, sex, and State—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average days on which wage earners worked in 1 week	Average full-time hours per week	Average hours actually worked in 1 week	Percent of full-time worked	Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
<b>Swing tenders, male:</b>									
Connecticut	2	22	5.3	55.0	52.3	95.1	\$0.391	\$21.51	\$20.43
Massachusetts	5	49	5.0	49.5	55.1	113.1	.287	14.24	16.12
New Jersey	2	5	5.3	52.4	55.4	105.7	.381	19.96	21.07
New York	8	21	4.9	46.1	45.1	98.8	.332	15.97	14.97
Pennsylvania	3	6	5.3	51.9	61.0	117.6	.373	19.35	22.76
Rhode Island	8	51	4.6	53.8	48.2	89.9	.374	20.12	17.26
South Carolina	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Total	29	160	5.0	52.0	51.4	98.8	.336	17.47	17.30
<b>Swing tenders, female:</b>									
New Jersey	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
New York	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Pennsylvania	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Total	3	13	4.8	53.7	40.6	75.6	.275	14.77	11.18
<b>Tenter-frame tenders, male:</b>									
Connecticut	4	22	5.6	54.5	55.9	120.9	.452	24.68	29.78
Massachusetts	7	146	5.2	50.0	55.2	110.4	.320	16.00	17.65
New Jersey	17	452	5.5	50.8	51.9	102.2	.430	21.84	22.33
New York	10	69	5.1	49.1	50.5	102.9	.376	18.56	19.10
North Carolina	10	54	4.9	53.0	47.0	88.7	.271	14.36	12.73
Pennsylvania	7	38	5.4	53.3	58.9	110.6	.428	22.81	25.23
Rhode Island	10	123	5.1	53.4	50.9	95.3	.405	21.63	20.63
South Carolina	4	66	5.6	55.5	64.5	115.6	.381	14.56	16.30
Total	69	970	5.3	51.5	53.3	108.5	.385	19.83	20.55
<b>Tenter-frame tenders, female:</b>									
Connecticut	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
New Jersey	3	32	5.3	48.6	47.1	96.9	.327	15.89	16.41
New York	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Pennsylvania	2	11	4.7	53.9	41.4	76.8	.314	16.92	13.00
Rhode Island	2	14	5.1	51.4	46.5	90.7	.302	15.62	14.09
Total	9	75	4.9	50.5	43.8	86.7	.319	16.11	13.95
<b>Truckers, male:</b>									
Connecticut	2	20	5.4	54.3	50.7	93.4	.430	23.35	21.82
Massachusetts	7	158	5.3	48.8	51.9	106.4	.314	15.32	16.32
New Jersey	13	199	5.4	49.0	49.0	98.8	.426	21.23	31.00
New York	8	51	5.4	48.8	47.3	96.9	.370	18.06	17.62
North Carolina	11	32	5.2	54.3	48.5	89.3	.256	12.81	11.43
Pennsylvania	8	41	5.1	53.4	58.9	108.6	.373	19.92	21.20
Rhode Island	9	91	5.0	52.5	49.8	92.7	.361	19.21	17.83
South Carolina	4	69	5.7	55.0	60.5	110.0	.235	12.93	14.24
Total	62	750	5.3	51.2	51.2	100.0	.344	17.66	17.68
<b>Tub washers, male:</b>									
Connecticut	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Massachusetts	6	12	4.8	49.5	56.5	113.9	.308	15.26	17.42
New Jersey	5	9	4.7	45.8	45.2	94.7	.424	20.69	19.59
New York	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
North Carolina	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Pennsylvania	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Rhode Island	6	7	5.3	64.1	59.8	110.5	.352	19.04	21.03
South Carolina	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Total	21	34	5.0	50.8	55.3	108.9	.355	18.03	19.62
<b>Washer tenders, male:</b>									
Connecticut	3	20	5.2	53.4	51.4	96.3	.428	22.86	22.02
Massachusetts	6	25	5.2	49.3	53.0	110.0	.306	14.89	16.37
New Jersey	15	235	5.1	51.1	51.2	100.2	.437	22.38	22.35
New York	3	41	5.0	48.9	45.3	92.0	.372	18.19	16.83
North Carolina	11	36	5.0	54.3	50.7	93.5	.349	18.44	12.85
Pennsylvania	7	23	5.2	52.1	54.3	104.2	.458	23.56	24.59
Rhode Island	10	98	5.4	52.1	50.3	96.4	.369	19.22	18.32
South Carolina	5	54	5.4	55.2	61.1	110.7	.340	13.25	14.67
Total	65	600	5.2	51.4	51.8	100.8	.378	19.43	19.68

<sup>1</sup> Data included in total.

TABLE A.—Average number of days on which wage earners worked, average full-time and actual hours and earnings per week, average earnings per hour, and percent of full time worked, 1932, by occupation, sex, and State—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average days on which wage earners worked in 1 week	Average full-time hours per week	Average hours actually worked in 1 week	Percent of full-time worked	Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
<b>Yarn winders, male:</b>									
North Carolina.....	4	91	3.8	56.3	32.1	57.0	\$0.346	\$19.48	\$11.08
<b>Yarn winders, female:</b>									
New Jersey.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
North Carolina.....	3	270	4.2	53.8	39.4	73.2	.250	13.45	9.83
Pennsylvania.....	4	96	4.8	52.6	40.1	76.2	.309	16.25	12.41
<b>Total.....</b>	<b>13</b>	<b>344</b>	<b>4.3</b>	<b>53.4</b>	<b>39.3</b>	<b>73.0</b>	<b>.263</b>	<b>13.90</b>	<b>10.30</b>
<b>Other employees, male:</b>									
Connecticut.....	4	223	5.5	54.8	54.3	99.1	.497	27.24	26.98
Massachusetts.....	8	1,247	5.3	48.0	50.4	105.1	.292	19.17	19.79
New Jersey.....	18	2,129	5.3	50.4	48.4	96.0	.506	25.50	24.48
New York.....	9	834	5.2	48.9	45.8	93.7	.464	22.09	21.37
North Carolina.....	25	675	5.1	54.9	49.2	90.1	.326	17.80	16.08
Pennsylvania.....	12	223	5.4	52.0	55.1	107.9	.529	27.81	29.70
Rhode Island.....	10	737	5.4	52.8	51.9	98.3	.475	25.08	24.66
South Carolina.....	5	390	5.9	55.1	64.2	116.6	.296	16.31	19.01
<b>Total.....</b>	<b>91</b>	<b>5,935</b>	<b>5.3</b>	<b>51.3</b>	<b>50.7</b>	<b>98.5</b>	<b>.441</b>	<b>22.62</b>	<b>22.34</b>
<b>Other employees, female:</b>									
Connecticut.....	3	59	5.3	54.4	45.3	90.6	.344	18.71	15.97
Massachusetts.....	7	497	5.7	48.0	44.4	92.5	.299	12.91	11.94
New Jersey.....	18	800	5.3	48.7	41.0	84.2	.357	17.30	14.63
New York.....	8	78	4.7	48.3	36.6	81.1	.290	14.15	11.48
North Carolina.....	14	212	4.7	54.3	42.7	77.9	.215	11.78	9.17
Pennsylvania.....	8	103	5.2	50.6	47.9	94.7	.359	18.17	17.21
Rhode Island.....	10	216	5.3	53.4	44.7	83.7	.318	16.98	14.20
South Carolina.....	5	106	5.8	55.0	60.3	109.6	.213	11.72	12.86
<b>Total.....</b>	<b>71</b>	<b>1,679</b>	<b>5.3</b>	<b>50.6</b>	<b>44.4</b>	<b>87.7</b>	<b>.289</b>	<b>15.08</b>	<b>12.22</b>
<b>All employees, male:</b>									
Connecticut.....	5	619	5.3	54.5	54.0	99.1	.487	26.54	26.32
Massachusetts.....	8	2,174	5.3	49.0	52.1	105.3	.279	18.57	19.76
New Jersey.....	18	5,236	5.3	50.3	48.8	99.0	.476	23.94	23.60
New York.....	10	1,063	5.1	48.9	45.7	93.5	.417	20.79	19.07
North Carolina.....	25	1,810	5.0	54.4	48.3	88.8	.296	16.10	14.39
Pennsylvania.....	23	865	5.1	52.2	53.4	102.3	.497	26.94	26.85
Rhode Island.....	10	2,447	5.2	52.9	50.8	96.0	.453	23.95	22.03
South Carolina.....	5	1,130	5.6	55.2	61.2	110.9	.278	15.35	17.01
<b>Total.....</b>	<b>93</b>	<b>16,205</b>	<b>5.2</b>	<b>51.4</b>	<b>51.1</b>	<b>99.4</b>	<b>.418</b>	<b>21.49</b>	<b>21.37</b>
<b>All employees, female:</b>									
Connecticut.....	3	81	5.1	54.1	48.1	88.9	.247	13.77	13.67
Massachusetts.....	7	577	5.7	48.0	43.2	90.0	.296	12.73	12.24
New Jersey.....	18	741	5.2	49.7	40.6	82.4	.352	17.14	14.28
New York.....	9	154	4.5	48.7	38.4	78.9	.285	13.88	10.95
North Carolina.....	20	797	4.8	54.8	43.7	80.2	.232	12.64	10.15
Pennsylvania.....	9	204	5.0	51.7	44.6	86.3	.338	17.47	15.07
Rhode Island.....	10	237	5.2	52.9	44.2	83.6	.316	16.72	13.69
South Carolina.....	5	150	5.7	55.0	58.5	106.4	.210	11.65	12.28
<b>Total.....</b>	<b>81</b>	<b>3,041</b>	<b>5.2</b>	<b>51.2</b>	<b>43.5</b>	<b>85.0</b>	<b>.291</b>	<b>14.90</b>	<b>12.65</b>
<b>All employees, male and female:</b>									
Connecticut.....	5	699	5.3	54.4	52.3	98.0	.472	25.98	25.20
Massachusetts.....	8	3,751	5.3	48.9	50.8	103.9	.297	17.95	18.92
New Jersey.....	18	6,036	5.3	50.1	48.7	97.2	.463	22.20	22.53
New York.....	10	1,217	5.0	48.9	44.8	91.6	.403	19.71	18.04
North Carolina.....	25	2,407	4.9	54.4	46.8	86.0	.276	15.01	12.92
Pennsylvania.....	12	1,069	5.1	52.1	51.7	99.2	.471	24.54	24.37
Rhode Island.....	10	2,784	5.2	52.9	50.0	94.5	.439	23.22	21.94
South Carolina.....	5	1,280	5.6	55.1	60.9	110.5	.270	14.86	16.45
<b>Total.....</b>	<b>93</b>	<b>19,245</b>	<b>5.2</b>	<b>51.2</b>	<b>49.8</b>	<b>97.3</b>	<b>.400</b>	<b>20.52</b>	<b>19.90</b>

<sup>1</sup> Data included in total.

TABLE B.—Average and classified earnings per hour in 12 specified occupations, 1932, by sex and State

Occupation, sex, and State	Number of establishments	Number of wage earners	Average earnings per hour	Number of wage earners whose earnings per hour were—																						
				Under 12 cts.	12 under 14 cts.	14 under 16 cts.	16 under 18 cts.	18 under 20 cts.	20 under 25 cts.	25 under 30 cts.	30 under 35 cts.	35 under 40 cts.	40 under 45 cts.	45 under 50 cts.	50 under 60 cts.	60 under 70 cts.	70 under 80 cts.	80 under 90 cts.	90 cts., under \$1	\$1, under \$1.10	\$1.10, under \$1.25	\$1.25, under \$1.50	\$1.50 and over			
<b>Calender tenders, male:</b>																										
Connecticut.....	3	45	.487											2	27	7	8									
Massachusetts.....	8	111	.339								10	68		18	15	2	2		1							
New Jersey.....	17	76	.442								1	2		9	20	38	6									
New York.....	10	62	.414									6		10	28	7	6									
North Carolina.....	11	35	.284					7		10	8			4												
Pennsylvania.....	6	20	.425											5	3	10										
Rhode Island.....	10	104	.439											36	18	83	18									
South Carolina.....	5	54	.274					1	1	42	9															
<b>Total.....</b>	<b>72</b>	<b>507</b>	<b>.383</b>					<b>1</b>	<b>6</b>	<b>75</b>	<b>92</b>			<b>87</b>	<b>111</b>	<b>97</b>	<b>35</b>									
<b>Drier tenders, male:</b>																										
Connecticut.....	5	15	.392									2		7	5	1										
Massachusetts.....	8	100	.332						3	27	21			41	7		1									
New Jersey.....	18	221	.432								6			14	130	51	11									
New York.....	8	57	.363								2	14		17	22	2										
North Carolina.....	16	47	.258				1	5	18	11	12															
Pennsylvania.....	12	38	.446									8		3	10	13	3	3	1							
Rhode Island.....	10	102	.380								14	22		27	24	8	7									
South Carolina.....	4	47	.241							30	14	2														
<b>Total.....</b>	<b>81</b>	<b>627</b>	<b>.375</b>				<b>1</b>	<b>5</b>	<b>81</b>	<b>71</b>	<b>61</b>			<b>110</b>	<b>207</b>	<b>75</b>	<b>22</b>	<b>3</b>	<b>1</b>							
<b>Drier tenders, female:</b>																										
New Jersey.....	1	13	.285								3	3	10													
New York.....	1	3	.223																							
<b>Total.....</b>	<b>2</b>	<b>16</b>	<b>.270</b>								<b>3</b>	<b>3</b>	<b>10</b>													
<b>Dyeing-machine tenders, male:</b>																										
Connecticut.....	3	38	.418										6	5	15	11	1									
Massachusetts.....	7	132	.331						1	42	46			26	17											
New Jersey.....	18	658	.420										5	34	301	182	39	7								
New York.....	9	71	.387										5	26	30	8										
North Carolina.....	18	94	.266					2	22	33	21			6												

WAGES AND HOURS OF LABOR

TABLE B.—Average and classified earnings per hour in 12 specified occupations, 1932, by sex and State—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average earnings per hour	Number of wage earners whose earnings were—																			
				Under 12 cts.	12, under 14 cts.	14, under 16 cts.	16, under 18 cts.	18, under 20 cts.	20, under 25 cts.	25, under 30 cts.	30, under 35 cts.	35, under 40 cts.	40, under 45 cts.	45, under 50 cts.	50, under 60 cts.	60, under 70 cts.	70, under 80 cts.	80, under 90 cts.	90 cts., under \$1	\$1, under \$1.10	\$1.10, under \$1.25	\$1.25, under \$1.50	\$1.50 and over
<b>Dyeing-machine tenders, male—</b>																							
Continued.																							
Pennsylvania.....	12	181	\$0.496							13	12	10	47	60	28	11							
Rhode Island.....	10	175	.443						2	12	65	23	28	42	4								
South Carolina.....	3	44	.266						16	20	7												
<b>Total.....</b>	<b>80</b>	<b>1,398</b>	<b>.415</b>					<b>2</b>	<b>51</b>	<b>107</b>	<b>107</b>	<b>178</b>	<b>485</b>	<b>271</b>	<b>142</b>	<b>39</b>	<b>11</b>						
<b>Folders, male:</b>																							
Connecticut.....	3	11	.576										1		5	4	1						
Massachusetts.....	8	90	.477							17	1	13	8	5	12	25	9						
New Jersey.....	7	50	.613										4	2	16	20	8						
New York.....	6	35	.533										1	3	22	9							
North Carolina.....	13	57	.320						8	21	11	7	4	5	1								
Pennsylvania.....	8	24	.436									2	2	14	3								
Rhode Island.....	10	99	.583								4	7	5		21	44	17	1					
South Carolina.....	4	39	.408						1	1		13	11	13									
<b>Total.....</b>	<b>59</b>	<b>405</b>	<b>.498</b>						<b>9</b>	<b>36</b>	<b>18</b>	<b>43</b>	<b>36</b>	<b>42</b>	<b>80</b>	<b>102</b>	<b>35</b>	<b>1</b>					
<b>Folders, female:</b>																							
Massachusetts.....	3	39	.541							5	2	3		4	2	1	6	12	4				
New Jersey.....	10	54	.418									13	16	16	4		2	2					
New York.....	1	(1)	(1)											(1)	(1)								
North Carolina.....	3	66	.190			2	17	24	21		2												
Rhode Island.....	6	27	.356						1	5	11	1	5	2	1		1						
South Carolina.....	2	10	.164			5	3	2															
<b>Total.....</b>	<b>36</b>	<b>198</b>	<b>.338</b>			<b>7</b>	<b>20</b>	<b>26</b>	<b>27</b>	<b>7</b>	<b>20</b>	<b>17</b>	<b>26</b>	<b>9</b>	<b>2</b>	<b>5</b>	<b>16</b>	<b>4</b>					
<b>Inspectors, male:</b>																							
Connecticut.....	1	2	.429									1	1	1									
Massachusetts.....	4	60	.322							13	7	21	2	3			1						
New Jersey.....	11	158	.457											77	57	23	1						
New York.....	5	24	.390									5	14	1	3	1							
North Carolina.....	11	34	.269					2	7	11	10	2											
Pennsylvania.....	2	27	.443							5		4	2	5	9		2						
Rhode Island.....	6	29	.509									7	1	5	8	7	1						
South Carolina.....	4	12	.361					1	2	7	2												
<b>Total.....</b>	<b>50</b>	<b>327</b>	<b>.408</b>					<b>4</b>	<b>22</b>	<b>30</b>	<b>35</b>	<b>31</b>	<b>65</b>	<b>71</b>	<b>44</b>	<b>9</b>	<b>3</b>						



Inspectors, female:																					
Connecticut.....	1	( <sup>1</sup> )	( <sup>1</sup> )							( <sup>1</sup> )											
Massachusetts.....	3	23	238					21	1												
New Jersey.....	6	39	336						4	21	11										
New York.....	1	12	301						10	2											
North Carolina.....	8	88	213	3		1	25	12	18	26	3										
Pennsylvania.....	2	6	349							2		3									
Rhode Island.....	2	11	256						7	2	2										
South Carolina.....	1	7	155	1		2	3	1													
<b>Total.....</b>	<b>24</b>	<b>186</b>	<b>249</b>	<b>4</b>	<b>3</b>	<b>28</b>	<b>13</b>	<b>46</b>	<b>43</b>	<b>30</b>	<b>15</b>	<b>4</b>									
Mangle tenders, male:																					
Connecticut.....	2	15	448							2	10		3								
Massachusetts.....	5	43	320					1	19	4	17	1									
New Jersey.....	12	131	428							11	8	74	33	5							
New York.....	8	69	390							11	30	25	3								
North Carolina.....	11	49	273					17	19	10	2	1									
Pennsylvania.....	8	15	429							2		6									
Rhode Island.....	9	93	392						26	26	19	6	9	13							
South Carolina.....	4	55	264			1	24	22	7		1										
<b>Total.....</b>	<b>69</b>	<b>470</b>	<b>366</b>			<b>1</b>	<b>42</b>	<b>60</b>	<b>71</b>	<b>86</b>	<b>136</b>	<b>52</b>	<b>22</b>								
Printing-machine tenders, male:																					
Connecticut.....	3	24	.975								7				2	1					
Massachusetts.....	6	62	1,063								1	7	2	2	1	21	10	5	25	18	3
New Jersey.....	6	74	1,070								2	4	3			6	5	45	8		2
New York.....	1	4	1,309															8	1		
North Carolina.....	2	14	330					1	7	2	1	3									
Pennsylvania.....	1	17	1,475															2	6		6
Rhode Island.....	6	65	1,132								1	5	2		6	4	7	27	14		6
South Carolina.....	1	23	417						3	8	4	4	3								14
<b>Total.....</b>	<b>26</b>	<b>313</b>	<b>1,019</b>			<b>1</b>	<b>10</b>	<b>5</b>	<b>5</b>	<b>11</b>	<b>8</b>	<b>20</b>	<b>10</b>	<b>4</b>	<b>29</b>	<b>22</b>	<b>19</b>	<b>106</b>	<b>49</b>	<b>14</b>	
Sewers, male:																					
Connecticut.....	3	5	.396							3	1										
Massachusetts.....	5	64	285				9	46	4	3		2									
New Jersey.....	8	28	436						1	1	15	7	2								
New York.....	2	5	444								2	3									
North Carolina.....	8	16	231				12	4													
Pennsylvania.....	4	8	387					2	1	2		2	1								
Rhode Island.....	7	28	355					4	7	10	5	1	1								
South Carolina.....	1	( <sup>1</sup> )	( <sup>1</sup> )			( <sup>1</sup> )	( <sup>1</sup> )														
<b>Total.....</b>	<b>39</b>	<b>154</b>	<b>.332</b>			<b>1</b>	<b>22</b>	<b>56</b>	<b>13</b>	<b>19</b>	<b>23</b>	<b>16</b>	<b>4</b>								

<sup>1</sup> For less than 3 employees in 1 establishment, data included in total.



New York.....	8	51	.370					6	12	16	17										
North Carolins.....	11	82	.236			9		47	16	10											
Pennsylvania.....	8	41	.373					2	4	5	20	6	3	1							
Rhode Island.....	9	91	.361						48	22		17	6	3							
South Carolina.....	4	69	.235				3	39	26		1										
<b>Total.....</b>	<b>62</b>	<b>750</b>	<b>.344</b>			<b>9</b>		<b>3</b>	<b>91</b>	<b>135</b>	<b>139</b>	<b>111</b>	<b>195</b>	<b>51</b>	<b>16</b>						
<b>Washer tenders, male:</b>																					
Connecticut.....	2	29	.428							15	8	3	2	1							
Massachusetts.....	6	85	.309						40	20	24	1									
New Jersey.....	16	295	.437							8	14	167	93	11	3						
New York.....	8	41	.372				1	1	5	21	12			1							
North Carolina.....	11	36	.248				23	7	6												
Pennsylvania.....	7	22	.458						2	3	5	6	6	2							
Rhode Island.....	10	98	.369						13	22	32	12	7	7							
South Carolina.....	5	54	.240				13	12	23	6											
<b>Total.....</b>	<b>65</b>	<b>660</b>	<b>.378</b>				<b>13</b>	<b>36</b>	<b>89</b>	<b>69</b>	<b>108</b>	<b>206</b>	<b>109</b>	<b>26</b>	<b>5</b>						
<b>Yarn winders, male:</b>																					
North Carolina.....	4	91	.346					19	6	4	12	27	21	2							
<b>Yarn winders, female:</b>																					
New Jersey.....	1	8	.345					4		4											
North Carolina.....	8	270	.250	12	12	17	7	22	70	56	44	28	3								
Pennsylvania.....	4	68	.309						9	4	42	11									
<b>Total.....</b>	<b>13</b>	<b>344</b>	<b>.262</b>	<b>12</b>	<b>12</b>	<b>17</b>	<b>7</b>	<b>22</b>	<b>83</b>	<b>69</b>	<b>90</b>	<b>39</b>	<b>3</b>								

TABLE C.—Average and classified full-time hours per week in 18 specified occupations, 1932, by sex and State

Occupation, sex, and State	Number of establishments	Number of wage earners	Average full-time hours per week	Number of wage earners whose full-time hours per week were—									
				Under 45	45	Over 45, under 50	50	Over 50, under 54	54	55	Over 55, under 60	60	Over 60
<b>Calender tenders, male:</b>													
Connecticut.....	3	45	53.9				10				35		
Massachusetts.....	3	111	49.6		74		15				18		4
New Jersey.....	17	76	51.7	3	28	2	13	2	17	2			8
New York.....	10	62	49.0	8	14	17	25	1					4
North Carolina.....	11	35	54.0				7				25		
Pennsylvania.....	3	20	53.3				3	13	1	2			1
Rhode Island.....	10	104	53.0	3	16				61	10			9
South Carolina.....	5	54	55.5							47			7
<b>Total.....</b>	<b>72</b>	<b>507</b>	<b>52.1</b>	<b>15</b>	<b>132</b>	<b>19</b>	<b>73</b>	<b>15</b>	<b>79</b>	<b>142</b>			<b>34</b>
<b>Drier tenders, male:</b>													
Connecticut.....	5	15	53.7				4			11			
Massachusetts.....	3	100	50.0		47		38			12			3
New Jersey.....	18	221	51.0	2	148	3	5	4	14	3			4
New York.....	3	57	48.7	3	25	18	11						
North Carolina.....	16	47	54.3				12			28	6		1
Pennsylvania.....	12	38	53.0	2			7	9	9	9			2
Rhode Island.....	10	102	52.3	12	18				58	8			5
South Carolina.....	4	47	55.3							44			3
<b>Total.....</b>	<b>51</b>	<b>527</b>	<b>51.5</b>	<b>19</b>	<b>238</b>	<b>21</b>	<b>77</b>	<b>13</b>	<b>51</b>	<b>115</b>	<b>6</b>	<b>39</b>	<b>4</b>
<b>Drier tenders, female:</b>													
New Jersey.....	1	(1)	(1)		(1)								
New York.....	1	(1)	(1)		(1)	(1)							
<b>Total.....</b>	<b>2</b>	<b>16</b>	<b>48.8</b>		<b>13</b>	<b>3</b>							
<b>Dyeing-machine tenders, male:</b>													
Connecticut.....	3	38	52.8				9				20		
Massachusetts.....	7	132	49.1		84		37				11		
New Jersey.....	16	558	50.1	12	482	15	24	13	25	5			10
New York.....	9	71	48.7	7	19	35	3	2					62
North Carolina.....	15	94	53.2				42			43	5		4
Pennsylvania.....	12	181	52.0	26			20	60	34	28			11
Rhode Island.....	10	175	51.5	26	40				95	8			0
South Carolina.....	3	44	55.0							44			
<b>Total.....</b>	<b>80</b>	<b>1,393</b>	<b>50.8</b>	<b>73</b>	<b>525</b>	<b>51</b>	<b>140</b>	<b>75</b>	<b>154</b>	<b>108</b>	<b>5</b>	<b>83</b>	<b>19</b>
<b>Folders, male:</b>													
Connecticut.....	3	11	54.1				2				9		
Massachusetts.....	3	90	49.0		68		12				10		
New Jersey.....	7	50	51.6		15	5		14	5	10			
New York.....	6	35	48.5	5	14	5	10						
North Carolina.....	13	57	53.9				12				45		
Pennsylvania.....	3	24	50.5			13	3	4	2	2			
Rhode Island.....	10	99	52.8	12	6				60	21			
South Carolina.....	4	39	55.0							39			
<b>Total.....</b>	<b>59</b>	<b>405</b>	<b>51.7</b>	<b>17</b>	<b>103</b>	<b>24</b>	<b>39</b>	<b>18</b>	<b>65</b>	<b>126</b>			
<b>Folders, female:</b>													
Massachusetts.....	3	30	48.0			30							
New Jersey.....	10	54	48.1	3		40		2					
New York.....	1	(1)	(1)		(1)				2				
North Carolina.....	5	65	54.8				2			64			
Rhode Island.....	5	27	51.7	7						20			
South Carolina.....	2	10	55.0							10			
<b>Total.....</b>	<b>25</b>	<b>196</b>	<b>51.2</b>	<b>10</b>	<b>60</b>		<b>2</b>	<b>2</b>	<b>20</b>	<b>74</b>			

¹Data included in total.

WAGES AND HOURS OF LABOR

TABLE C.—Average and classified full-time hours per week in 12 specified occupations, 1932, by sex and State—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average full-time hours per week	Number of wage earners whose full-time hours per week were—								
				Under 48	48	Over 48, under 50	50	Over 50, under 54	54	55	Over 55, under 60	60
<b>Inspectors, male:</b>												
Connecticut.....	1	( <sup>1</sup> )	( <sup>1</sup> )								( <sup>1</sup> )	
Massachusetts.....	4	50	48.0		49		1					
New Jersey.....	11	158	49.1		131	2	6		10	3		6
New York.....	5	24	49.6		4	1	19					
North Carolina.....	11	24	53.8				8			28		
Pennsylvania.....	8	37	52.9				2	19	3	3		
Rhode Island.....	6	29	53.4		3				25			
South Carolina.....	4	12	55.0							12		
<b>Total.....</b>	<b>50</b>	<b>337</b>	<b>50.4</b>		<b>187</b>	<b>3</b>	<b>36</b>	<b>19</b>	<b>39</b>	<b>47</b>		<b>6</b>
<b>Inspectors, female:</b>												
Connecticut.....	1	( <sup>1</sup> )	( <sup>1</sup> )							( <sup>1</sup> )		
Massachusetts.....	3	23	48.0		23							
New Jersey.....	6	39	48.2		38				1			
New York.....	1	( <sup>1</sup> )	( <sup>1</sup> )		( <sup>1</sup> )							
North Carolina.....	8	88	55.2							85		3
Pennsylvania.....	2	5	52.8			1		4				
Rhode Island.....	2	11	54.0						11			
South Carolina.....	1	( <sup>1</sup> )	( <sup>1</sup> )							( <sup>1</sup> )		
<b>Total.....</b>	<b>24</b>	<b>186</b>	<b>52.2</b>		<b>73</b>	<b>1</b>		<b>4</b>	<b>12</b>	<b>93</b>		<b>3</b>
<b>Mangle tenders, male:</b>												
Connecticut.....	2	15	52.7					7			8	
Massachusetts.....	5	43	49.0		25			17			1	
New Jersey.....	12	131	51.4	2	71	3	8		21	2		24
New York.....	8	69	48.6	4	30	25	10					
North Carolina.....	11	49	54.4				10				33	6
Pennsylvania.....	8	15	52.4				5	5	3	2		
Rhode Island.....	9	93	51.4	20	14				48	9		2
South Carolina.....	4	55	55.2							53		2
<b>Total.....</b>	<b>59</b>	<b>470</b>	<b>51.5</b>	<b>26</b>	<b>140</b>	<b>28</b>	<b>57</b>	<b>5</b>	<b>72</b>	<b>106</b>	<b>6</b>	<b>28</b>
<b>Mangle tenders, female:</b>												
New York.....	1	5	49.5			5						
<b>Printing-machine tenders, male:</b>												
Connecticut.....	3	24	55.4							23		1
Massachusetts.....	6	92	49.1		67		15		8			3
New Jersey.....	6	74	48.0		67					5		2
New York.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )								
North Carolina.....	2	14	50.4				13			1		
Pennsylvania.....	1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )		( <sup>1</sup> )						
Rhode Island.....	6	65	52.9		7		10		46			2
South Carolina.....	1	( <sup>1</sup> )	( <sup>1</sup> )							( <sup>1</sup> )		
<b>Total.....</b>	<b>26</b>	<b>313</b>	<b>50.8</b>	<b>4</b>	<b>141</b>	<b>17</b>	<b>38</b>		<b>54</b>	<b>52</b>		<b>4</b>
<b>Sewers, male:</b>												
Connecticut.....	3	5	55.0							5		
Massachusetts.....	5	64	48.2		56		6					
New Jersey.....	8	28	52.3	1	12		5			1		6
New York.....	3	5	49.3			3	2					
North Carolina.....	8	16	53.8				4			12		
Pennsylvania.....	4	8	51.9				2	6				
Rhode Island.....	7	28	53.6		4				20	2		2
South Carolina.....	1	( <sup>1</sup> )	( <sup>1</sup> )							( <sup>1</sup> )		
<b>Total.....</b>	<b>39</b>	<b>154</b>	<b>51.0</b>	<b>1</b>	<b>74</b>	<b>3</b>	<b>19</b>	<b>6</b>	<b>20</b>	<b>22</b>		<b>8</b>

<sup>1</sup>Data included in total.

TABLE C.—Average and classified full-time hours per week in 18 specified occupations, 1932, by sex and State—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average full-time hours per week	Number of wage earners whose full-time hours per week were—								
				Under 48	48	Over 48, under 50	50	Over 50, under 54	54	55	Over 55, under 60	60
<b>Sewers, female:</b>												
Connecticut.....	2	12	52.9				5				7	
Massachusetts.....	6	70	47.8	5	65							
New Jersey.....	13	76	48.5	1	66	1	2	2	5			
New York.....	6	13	48.2	1	7	5						
North Carolina.....	7	129	54.8				6			123		
Pennsylvania.....	5	10	51.3			4	1	1	4			
Rhode Island.....	6	90	51.2	6	5				19			
South Carolina.....	3	20	55.0							20		
<b>Total.....</b>	<b>50</b>	<b>360</b>	<b>51.4</b>	<b>13</b>	<b>142</b>	<b>10</b>	<b>14</b>	<b>3</b>	<b>28</b>	<b>150</b>		
<b>Tenter-frame tenders, male:</b>												
Connecticut.....	4	22	54.5				2			20		
Massachusetts.....	7	146	50.0		79		45			12		
New Jersey.....	17	452	50.8	4	326	5	8	5	17	3		10
New York.....	10	99	49.1	5	13	26	24	1				63
North Carolina.....	10	54	53.0				25			24	5	
Pennsylvania.....	7	38	53.3				5	28	1	2		2
Rhode Island.....	10	122	53.4	7	16				80	5		14
South Carolina.....	4	66	55.8							55		10
<b>Total.....</b>	<b>60</b>	<b>970</b>	<b>51.5</b>	<b>16</b>	<b>434</b>	<b>31</b>	<b>109</b>	<b>34</b>	<b>98</b>	<b>123</b>	<b>5</b>	<b>97</b>
<b>Tenter-frame tenders, female:</b>												
Connecticut.....	1	(1)	(1)							(1)		
New Jersey.....	3	32	48.6		22		10					
New York.....	1	(1)	(1)			(1)						
Pennsylvania.....	2	11	55.9					4	7			
Rhode Island.....	2	14	51.4	4					10			
<b>Total.....</b>	<b>9</b>	<b>75</b>	<b>50.5</b>	<b>4</b>	<b>22</b>	<b>13</b>	<b>10</b>	<b>4</b>	<b>17</b>	<b>5</b>		
<b>Truckers, male:</b>												
Connecticut.....	2	29	54.3				4			25		
Massachusetts.....	7	188	48.5		141		35			12		
New Jersey.....	13	199	49.5		150	2	15		20	2		7
New York.....	5	51	48.5	3	20	18	10					3
North Carolina.....	11	82	54.3				14			86		2
Pennsylvania.....	5	41	53.4					31	4	2		3
Rhode Island.....	9	91	53.5	6	9		1		54	13		9
South Carolina.....	4	69	55.0							69		
<b>Total.....</b>	<b>62</b>	<b>750</b>	<b>51.2</b>	<b>9</b>	<b>320</b>	<b>20</b>	<b>79</b>	<b>31</b>	<b>78</b>	<b>180</b>		<b>21</b>
<b>Washer tenders, male:</b>												
Connecticut.....	3	29	52.4				9			20		
Massachusetts.....	6	85	48.2		80		2			2		
New Jersey.....	15	295	51.1	2	207	3	6	2	10	6		47
New York.....	5	41	48.9	2	11	21	7					12
North Carolina.....	11	36	54.2				3			25		2
Pennsylvania.....	7	22	52.1	1				16	1	1		
Rhode Island.....	10	98	52.1	12	15		3		61	10		
South Carolina.....	5	54	55.2							52		2
<b>Total.....</b>	<b>65</b>	<b>660</b>	<b>51.4</b>	<b>17</b>	<b>313</b>	<b>24</b>	<b>36</b>	<b>18</b>	<b>72</b>	<b>117</b>		<b>51</b>
<b>Yarn winders, male:</b>												
North Carolina.....	4	91	55.3							67		24
<b>Yarn winders, female:</b>												
New Jersey.....	1	(1)	(1)		(1)							
North Carolina.....	3	270	52.8				86			204		
Pennsylvania.....	4	66	52.9	5					56			
<b>Total.....</b>	<b>13</b>	<b>344</b>	<b>52.4</b>	<b>5</b>	<b>5</b>		<b>86</b>		<b>56</b>	<b>204</b>		

1 Data included in total.

TABLE D.—Average and classified hours actually worked in 1 week in 12 specified occupations, 1932, by sex and State

Occupation, sex, and State	Number of establishments	Number of wage earners	Average hours actually worked in 1 week	Number of wage earners whose hours actually worked in 1 week were—																							
				Under 4	4, under 8	8, under 12	12, under 16	16, under 20	20, under 24	24, under 28	28, under 32	32, under 36	36, under 40	40, under 44	44, under 48	48	Over 48, under 52	52, under 54	54	Over 54, under 58	58, under 60	60	Over 60, under 65	65, under 70	70, under 80	80 and over	
<b>Calender tenders, male:</b>																											
Connecticut.....	3	45	44.9				1																				
Massachusetts.....	8	111	52.9				1	2				1	3		10	7	1	1	9			3			5	8	
New Jersey.....	17	76	53.1					1	1						2	4	11	10			3	2			8	2	
New York.....	10	82	41.9									2	6	18	8	6	7				1	2			9	4	
North Carolina.....	11	35	50.9												1	1	3							8	1	18	
Pennsylvania.....	4	30	55.1			1									2		1	1			3				3	2	
Rhode Island.....	10	104	45.2		1		1						7	3	11	11		6	1	8				12	4	12	
South Carolina.....	5	54	57.8												1									4	1	13	
<b>Total.....</b>	<b>72</b>	<b>507</b>	<b>49.8</b>		<b>2</b>	<b>2</b>	<b>6</b>	<b>9</b>	<b>6</b>	<b>20</b>	<b>52</b>	<b>24</b>	<b>29</b>	<b>63</b>	<b>23</b>	<b>33</b>	<b>15</b>	<b>4</b>	<b>72</b>	<b>26</b>	<b>16</b>	<b>42</b>	<b>36</b>	<b>23</b>	<b>6</b>	<b>6</b>	
<b>Drier tenders, male:</b>																											
Connecticut.....	5	15	61.0														1										
Massachusetts.....	8	100	54.0				2	2				3	2	2	4	4		1	9		4				4	22	
New Jersey.....	18	221	54.1		4	1	6	3	4	4	4	6	2	2	10	21	2	15	6	6					25	32	
New York.....	8	67	51.4						2	2		1	9	2	1	5	1	7	3						4	7	
North Carolina.....	16	47	51.5		1	1			1		2				1	3	2		6						7	1	
Pennsylvania.....	12	38	49.7						1		1	3			3	4	4		3		1	4	4	4	4	4	
Rhode Island.....	10	102	51.7		1						6	5	9	9	4	4		8	8						6	6	
South Carolina.....	4	47	59.7						1	1					2										8	8	
<b>Total.....</b>	<b>81</b>	<b>627</b>	<b>53.6</b>		<b>8</b>	<b>2</b>	<b>7</b>	<b>7</b>	<b>11</b>	<b>14</b>	<b>17</b>	<b>26</b>	<b>16</b>	<b>24</b>	<b>47</b>	<b>9</b>	<b>61</b>	<b>24</b>	<b>9</b>	<b>73</b>	<b>71</b>	<b>18</b>	<b>57</b>	<b>65</b>	<b>67</b>	<b>16</b>	
<b>Drier tenders, female:</b>																											
New Jersey.....	1	13	39.5			2	2	1																			
New York.....	1	3	40.0												3												
<b>Total.....</b>	<b>2</b>	<b>16</b>	<b>31.4</b>			<b>2</b>	<b>2</b>	<b>1</b>						<b>4</b>		<b>1</b>	<b>3</b>								<b>1</b>	<b>2</b>	

WAGES AND HOURS OF LABOR





<b>Inspectors, male:</b>																											
Connecticut.....	1	3	50.2																								
Massachusetts.....	4	50	49.8																								
New Jersey.....	11	158	47.6		1	2	2	2	2	1	3	8	16	22	12	4	80	3	3	1	10	3	3	11	2	4	
New York.....	6	24	44.1								1	5	3	7	3	7	11	2	1								
North Carolina.....	11	34	46.3			1			2	1	3	1	3	1	3	3	3	1	1	12		2			1		
Pennsylvania.....	8	27	52.6						1							5	5	7	1	2	2			1	2		
Rhode Island.....	6	29	44.4			2						4	3	5	9	1	8	1	3			1	2	2	1		
South Carolina.....	4	12	60.2																2	3			2	4			
<b>Total.....</b>	<b>50</b>	<b>337</b>	<b>48.0</b>		<b>1</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>4</b>	<b>27</b>	<b>22</b>	<b>33</b>	<b>44</b>	<b>12</b>	<b>65</b>	<b>16</b>	<b>8</b>	<b>29</b>	<b>8</b>	<b>5</b>	<b>17</b>	<b>20</b>	<b>9</b>	<b>1</b>	
<b>Inspectors, female:</b>																											
Connecticut.....	1	(1)	(1)							(1)																	
Massachusetts.....	3	23	41.6								4	3	3	3	8												
New Jersey.....	6	39	38.0			1	4	1		2	3	1	1	3	8	11		2	1	2							
New York.....	1	19	39.8			1								9	8												
North Carolina.....	8	88	47.2			1	2		1	1	3	6		9	10		14					38					
Pennsylvania.....	2	5	52.6														14		3	4							
Rhode Island.....	2	11	51.0									1							3	4	2						
South Carolina.....	1	7	50.0																3	7							
<b>Total.....</b>	<b>24</b>	<b>186</b>	<b>44.5</b>			<b>2</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>12</b>	<b>14</b>	<b>23</b>	<b>27</b>	<b>8</b>	<b>26</b>	<b>18</b>	<b>4</b>	<b>38</b>							
<b>Mangle tenders, male:</b>																											
Connecticut.....	2	15	49.6							1				1	3	1											
Massachusetts.....	5	48	49.3			1				1	3	2		1	1	3	3	1	10	5	2	2	2	3	3		
New Jersey.....	12	131	52.8			1	1					13	2	13	8	28	1	0	19	7	7	5	4	2	12	10	
New York.....	8	69	41.7				1	3	2	2	5	10	2	2	8	15		1	7	2	2	6	1	8	1		
North Carolina.....	11	49	54.9									1	1	1	1	4			5	3		3	3	8	3		
Pennsylvania.....	8	15	49.1									1	1	1	1	4			2	2		3	1	1			
Rhode Island.....	9	93	52.7				1			3	3	2	2	6	2	8		1	15	3	1	10	4	5	7	1	
South Carolina.....	4	55	59.4							2	2	2	2	7	2	3			1	3	0	4	5	8	7	4	
<b>Total.....</b>	<b>59</b>	<b>470</b>	<b>51.5</b>			<b>2</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>7</b>	<b>13</b>	<b>17</b>	<b>27</b>	<b>35</b>	<b>62</b>	<b>12</b>	<b>62</b>	<b>25</b>	<b>11</b>	<b>49</b>	<b>21</b>	<b>14</b>	<b>36</b>	<b>33</b>	<b>30</b>	<b>6</b>	
<b>Printing-machine tenders, male:</b>																											
Connecticut.....	3	24	52.5							2		1	3	2	1					1							
Massachusetts.....	6	92	57.0			1						1		1	1			19	3			7	3	24	2		
New Jersey.....	5	74	50.0															62	1	2	2		1	5	6		
New York.....	1	4	50.5																4								
North Carolina.....	2	14	52.5																10						1		
Pennsylvania.....	1	17	69.2																			3			4	10	
Rhode Island.....	5	65	54.5			1	1			3		5	2						10	12	1		4	2	8	8	
South Carolina.....	1	23	61.5									1							1		7	3		2		8	
<b>Total.....</b>	<b>25</b>	<b>313</b>	<b>55.2</b>			<b>1</b>	<b>1</b>	<b>1</b>		<b>3</b>	<b>2</b>	<b>8</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>81</b>	<b>18</b>	<b>14</b>	<b>14</b>	<b>13</b>	<b>36</b>	<b>7</b>	<b>69</b>	<b>17</b>	<b>27</b>		

1 For less than 3 employees in 1 establishment, data included in total.

TABLE D.—Average and classified hours actually worked in 1 week in 12 specified occupations, 1932, by sex and State—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average hours actually worked in 1 week	Number of wage earners whose hours actually worked in 1 week were—																						
				Under 4	4, under 8	8, under 12	12, under 16	16, under 20	20, under 24	24, under 28	28, under 32	32, under 36	36, under 40	40, under 44	44, under 48	48	Over 48, under 52	52, under 54	54	Over 54, under 58	58, under 60	60	Over 60, under 65	65, under 70	70, under 80	80 and over
<b>Sewers, male:</b>																										
Connecticut.....	3	5	48.0															2								
Massachusetts.....	5	64	51.0							2	4	11	10		2			7	4		3	5	8	5	4	1
New Jersey.....	8	26	52.8					1		4	2	3	3	2	1			1	1		3	5			1	2
New York.....	3	5	45.4												2			2								
North Carolina.....	8	15	49.2					1							2			2			5	1			1	
Pennsylvania.....	4	8	58.4												2			1			1				2	2
Rhode Island.....	7	28	55.4					1							1	1	1						2	1	6	2
South Carolina.....	1	(?)	(?)															(?)						(?)		
Total.....	30	154	52.2					3		1	5	11	16	16	2	17	7	4	20	11	10	9	14	6	2	
<b>Sewers, female:</b>																										
Connecticut.....	3	12	40.0															5								
Massachusetts.....	6	70	39.3			1				2	5	18	3	16												
New Jersey.....	13	76	42.8		3	1	4	3		4	1	7	8	7	12	4		18	2							
New York.....	6	13	38.9							2	4	3	2	1	1											
North Carolina.....	7	129	52.6												6			31		1	22		2			
Pennsylvania.....	5	10	49.5												1			5		3						
Rhode Island.....	8	30	40.5			2				1	1	2			1			1		8						
South Carolina.....	3	20	54.4												4	1	3	3	1	4					3	1
Total.....	60	360	46.0		6	1	4	3	9	12	33	26	36	28	18	47	7	11	114	2	2				3	1
<b>Tenter-frame tenders, male:</b>																										
Connecticut.....	4	22	55.0												1			1			3	1	3	3	4	3
Massachusetts.....	7	146	55.2																							
New Jersey.....	17	462	51.9			6	3	1	3	1	4	6	69	25	13	2	10	5	4	28	9	25	14	10	10	
New York.....	10	69	51.5												4	9	75	75	39	5	23	15	7	2	23	45
North Carolina.....	10	84	47.0		1	1									4	1	6	3	1	6	2	2	1	1	1	1
Pennsylvania.....	7	38	58.9												5	3	1	3		1	2	1			3	3
Rhode Island.....	10	123	50.9			1		3		1	1	2	3	3	10	2	18	2	1	3	8	11	18	10	6	2
South Carolina.....	4	66	64.5				1										1		1	9	1	1	17	20	9	4
Total.....	60	970	53.3		1	8	4	4	6	6	19	23	54	51	118	66	102	16	31	87	28	43	69	96	20	15

Tenter-frame tenders, female:																									
Connecticut	1	5	52.2											1		4									
New Jersey	8	82	47.1			7								2	2		11					9		1	
New York	1	13	31.0									0													
Pennsylvania	2	11	41.4										7												
Rhode Island	2	14	46.0										1	1	1	4						3	4		
Total	9	75	43.8			7							8	1	5	4						6	10	4	
Truckers, male:																									
Connecticut	2	29	50.7										3	4	2		2	2					2	4	
Massachusetts	7	188	51.9			2	1					4	4	3	21	6	13	47	11	5	5	10	2	4	
New Jersey	13	199	49.0			3	3	5	1	2	5	2	2	10	19	36	14	34	5	3	3	16	13	11	
New York	8	51	47.3			3					6	6	4	4	8	5	5	10	7			3	6	2	4
North Carolina	11	82	48.5			2				1	1	1	1	2	8	5	1	16		2	30	1	2	4	
Pennsylvania	8	41	55.9			1				1	1	1	1	1	2	4	4	4	1	1	3	3	2	5	2
Rhode Island	9	91	49.6			4				3	4	6	4	3	6	7	1	5	5	1	10	2	7	9	9
South Carolina	4	69	60.5									2	2			1	3	3			16	2	7	1	13
Total	62	750	51.2			3	8	4	5	6	8	18	28	25	60	67	36	121	32	11	105	39	23	63	67
Washer tenders, male:																									
Connecticut	3	29	51.4				1					1	3				3	2			3	1	1	7	2
Massachusetts	6	85	53.0				1				4	8	4	1	5		11	6			14	4	5	9	10
New Jersey	15	205	51.2			2	1	1		9	3	11	20	53	37	2	21	19			22	10	8	16	29
New York	8	41	45.8							1	2	2	5	3	9	2	9	6			1	3	2	2	1
North Carolina	11	36	50.7							1	1	2	1	2	3		2	2			3	14	2	2	4
Pennsylvania	7	22	54.3								1	1	4				5	1			3	3		2	4
Rhode Island	10	98	50.2							3	1	8	10	6	7	12	1	6			17	5	1	8	5
South Carolina	5	54	61.1			1					1				1		4	1			6	6	1	11	12
Total	65	660	51.8			2	2	3	4	1	13	14	36	41	69	68	5	61	42	4	81	28	10	55	62
Yarn winders, male:																									
North Carolina	4	91	32.1			2	1	15	9	5	3	4	2	25	12	3					1		1	3	2
Yarn winders, female:																									
New Jersey	1	8	31.6								2		1	2	3										
North Carolina	8	270	39.4			3	1	6	4	7	18	12	21	19	13	18	82				14	4	1	47	
Pennsylvania	4	68	40.1				4	2		2	4	8	6	2	2	2		1	24				9		
Total	13	344	39.3			3	1	6	8	11	20	16	30	27	18	20	84	1	38	4	1	56			

<sup>1</sup> For less than 3 employees in 1 establishment, data included in total.

TABLE E.—Average and classified actual earnings in 1 week in 19 specified occupations, 1932, by sex and State

Occupation, sex, and State	Number of establishments	Number of wage earners	Average actual earnings in 1 week	Number of wage earners whose earnings in 1 week were—																									
				Under \$4	\$4, under \$6	\$6, under \$8	\$8, under \$10	\$10, under \$12	\$12, under \$14	\$14, under \$16	\$16, under \$18	\$18, under \$20	\$20, under \$22	\$22, under \$24	\$24, under \$26	\$26, under \$28	\$28, under \$30	\$30, under \$32	\$32, under \$34	\$34, under \$36	\$36, under \$38	\$38, under \$40	\$40, under \$45	\$45, under \$50	\$50, under \$60	\$60, under \$75	\$75, under \$100	\$100 and over	
<b>Calender tenders, male:</b>																													
Connecticut.....	3	45	320.48			1			3	7	8	4	6	2	5	1	7			1									
Massachusetts.....	8	111	17.91	1	1	1	3	4	10	28	12	17	12	8	8		2	2	2										
New Jersey.....	17	76	23.49				1	1		1	14	13	10	4	5	6	7	4	4	3	1								
New York.....	10	62	17.35				2	6	17	4	13	4	2	2	5	5	1												
North Carolina.....	11	35	14.45				1	4	13	8	6	1	1	1															
Pennsylvania.....	8	20	23.43		1			1	1	1		1	3	1						1									
Rhode Island.....	10	104	19.84		1	3	6	5	15	11	2	6	6	14	11	11	1	12											
South Carolina.....	5	54	15.83				2	3	8	18	13	6	3																
<b>Total.....</b>	<b>72</b>	<b>507</b>	<b>19.06</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>15</b>	<b>24</b>	<b>67</b>	<b>77</b>	<b>68</b>	<b>52</b>	<b>43</b>	<b>32</b>	<b>41</b>	<b>26</b>	<b>18</b>	<b>10</b>	<b>6</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>1</b>						
<b>Drier tenders, male:</b>																													
Connecticut.....	3	15	23.88								1	1	2	7		1	2												
Massachusetts.....	8	100	18.23		1	3	9	3	4	14	13	24	17	14	4														
New Jersey.....	18	221	23.35	4	1	7	5	7	3	1	4	22	33	16	44	23	13	12	19	6	2								
New York.....	8	57	19.69		2	3	1	1	11	4	8	4	5																
North Carolina.....	16	47	13.29	2	1	4	2	5	13	7	5	3	4																
Pennsylvania.....	13	38	21.72				1	3		4	6	4	2	5	5	1	1												
Rhode Island.....	10	102	19.65		1		5	8	15	7	5	12	21	10	11	2	7	1											
South Carolina.....	4	47	14.42		2	2	1	4	9	14	9	5	1	1															
<b>Total.....</b>	<b>81</b>	<b>627</b>	<b>20.09</b>	<b>7</b>	<b>7</b>	<b>10</b>	<b>17</b>	<b>26</b>	<b>55</b>	<b>51</b>	<b>51</b>	<b>75</b>	<b>66</b>	<b>53</b>	<b>68</b>	<b>27</b>	<b>25</b>	<b>15</b>	<b>26</b>	<b>10</b>	<b>5</b>	<b>2</b>	<b>2</b>						
<b>Drier tenders, female:</b>																													
New Jersey.....	1	13	8.39	2	3		4	1	2	1																			
New York.....	1	3	8.93				3																						
<b>Total.....</b>	<b>2</b>	<b>16</b>	<b>8.60</b>	<b>2</b>	<b>3</b>		<b>7</b>	<b>1</b>	<b>2</b>	<b>1</b>																			
<b>Dyeing-machine tenders, male:</b>																													
Connecticut.....	3	38	32.29							2	5	6	7	7	2	4	2	1	1										
Massachusetts.....	7	132	16.35	1			9	17	31	10	5	13	18	17	6														
New Jersey.....	18	658	32.61	10	5	7	17	16	14	17	32	72	108	103	81	34	50	29	33	30	3	1	2						
New York.....	9	71	19.94	1			2		1	6	13	13	9	15	3	10													
North Carolina.....	15	94	12.95	5	2	3	10	21	14	17	11	5	2	3	1														
Pennsylvania.....	12	181	32.09	3	6	1	4	3	6	14	17	26	15	10	21	9	8	10	14	12	1								

Rhode Island.....	10	175	20.15	1	2	6	3	17	23	14	9	11	29	19	7	2	3	3	3	2	3	13															
South Carolina.....	3	44	14.78			1	3	10	10	17	12	1																									
<b>Total.....</b>	<b>80</b>	<b>1,393</b>	<b>20.61</b>	<b>21</b>	<b>15</b>	<b>18</b>	<b>45</b>	<b>77</b>	<b>104</b>	<b>97</b>	<b>108</b>	<b>147</b>	<b>188</b>	<b>174</b>	<b>120</b>	<b>60</b>	<b>61</b>	<b>48</b>	<b>51</b>	<b>36</b>	<b>6</b>	<b>4</b>	<b>16</b>														
<b>Folders, male:</b>																																					
Connecticut.....	3	11	33.00																																		
Massachusetts.....	8	90	21.61	2				4	6	17	12	2		16	5	1		3	1	2	1	1															
New Jersey.....	7	50	34.57				1		1	2	2	1		1	4	4		1	3	2																	
New York.....	6	35	20.62						5	5	1	2		3	3	4		2																			
North Carolina.....	13	57	15.61			2	8	7	4	15	5	1		4	4	3																					
Pennsylvania.....	8	24	20.77						1	1	4	3		7	6				2																		
Rhode Island.....	10	99	24.42						5	3	1	12		6	8																						
South Carolina.....	4	39	28.40						1		2	2		4	5	12	4	14	4	4	9	11	4														
<b>Total.....</b>	<b>59</b>	<b>405</b>	<b>24.47</b>	<b>2</b>		<b>2</b>	<b>9</b>	<b>11</b>	<b>23</b>	<b>48</b>	<b>27</b>	<b>24</b>	<b>29</b>	<b>49</b>	<b>22</b>	<b>33</b>	<b>16</b>	<b>30</b>	<b>20</b>	<b>11</b>	<b>11</b>	<b>16</b>	<b>17</b>	<b>8</b>	<b>2</b>												
<b>Folders, female:</b>																																					
Massachusetts.....	2	39	20.86				1	6	1	3	2	2		1	7	7	5	4																			
New Jersey.....	10	64	14.72		3	2	2	5	8	2	10	1		1					1	2		1	1														
New York.....	1	(1)	(1)					(1)																													
North Carolina.....	6	66	7.60	3	15	15	26	2	1		2																										
Rhode Island.....	5	27	14.20		6	1	1		2	7	1	2		4	2	1																					
South Carolina.....	2	10	8.64			5	3	2																													
<b>Total.....</b>	<b>28</b>	<b>198</b>	<b>13.14</b>	<b>3</b>	<b>27</b>	<b>23</b>	<b>32</b>	<b>32</b>	<b>12</b>	<b>12</b>	<b>15</b>	<b>5</b>	<b>6</b>	<b>9</b>	<b>8</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>2</b>		<b>1</b>	<b>1</b>															
<b>Inspectors, male:</b>																																					
Connecticut.....	1	2	21.52									1		1	1																						
Massachusetts.....	4	50	15.69				9	8	1	13	6	3		4	8				1																		
New Jersey.....	11	158	21.77	1	3	1	3	2	3	4	24	17	32	16	13	15	13	3	2	2	2	2															
New York.....	5	24	17.19					1	6	3	3	5	1	5																							
North Carolina.....	11	34	12.42	1		2	7	5	11	1	4	3																									
Pennsylvania.....	8	27	23.57						1	3	2	1		5	2	4	2	4	1	1		1															
Rhode Island.....	6	29	22.60	1	1			1		3	2	2		3	4	7	1	2	2	1	1																
South Carolina.....	4	12	15.69				1	1		5	3	1		1																							
<b>Total.....</b>	<b>50</b>	<b>337</b>	<b>19.60</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>20</b>	<b>18</b>	<b>22</b>	<b>29</b>	<b>45</b>	<b>33</b>	<b>47</b>	<b>31</b>	<b>24</b>	<b>18</b>	<b>20</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>1</b>													
<b>Inspectors, female:</b>																																					
Connecticut.....	1	(1)	(1)					(1)																													
Massachusetts.....	3	23	9.91	1			9	11	1			1																									
New Jersey.....	6	39	12.78	1	4	2	2	4	13	6	2	3	2																								
New York.....	1	12	11.96					9	1	2																											
North Carolina.....	8	88	10.06	4	6	13	28	13	12	8	3	1																									
Pennsylvania.....	2	5	18.32						1	1		4																									
Rhode Island.....	2	11	13.08			1		1	5	2	2																										
South Carolina.....	1	7	7.76		1	2	4																														
<b>Total.....</b>	<b>24</b>	<b>188</b>	<b>11.06</b>	<b>6</b>	<b>11</b>	<b>18</b>	<b>4</b>	<b>39</b>	<b>32</b>	<b>19</b>	<b>7</b>	<b>9</b>	<b>2</b>																								

<sup>1</sup> For less than 3 employees in 1 establishment, data included in total.



177000-33

<b>Sewers, female:</b>																
Connecticut	2	12	12.04				3	2	1	6						
Massachusetts	6	70	9.69	1	1	20	27	6	6	5	3					
New Jersey	13	76	14.13	2	2	4	8	3	17	21	14		1			
New York	6	13	12.21						3							
North Carolina	7	129	13.28		1	2	23	19	29	31	14	6	3	1		
Pennsylvania	5	10	16.60						4	2	1	1	1	2		
Rhode Island	8	30	13.58		2	1	2	8	2	5	4		2			
South Carolina	8	20	12.06				1	7	11	1			4			
<b>Total</b>	<b>50</b>	<b>360</b>	<b>12.73</b>	<b>3</b>	<b>6</b>	<b>27</b>	<b>69</b>	<b>48</b>	<b>73</b>	<b>70</b>	<b>26</b>	<b>13</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>1</b>
<b>Tenter-frame tenders, male:</b>																
Connecticut	4	22	20.78							1				3	5	
Massachusetts	7	146	17.65		2	4	4	4	8	25	32	15	33	14	2	3
New Jersey	17	452	22.33	3	3	1	5	1	4	19	48	60	124	45	30	27
New York	10	69	19.10					6	3	10	16	12	10	3	3	2
North Carolina	10	54	12.73	2	1	1	9	8	17	12	2	2	3			
Pennsylvania	7	38	25.23					1			1	6	5	3	7	2
Rhode Island	10	123	20.63	1		1	1	12	5	7	12	13	26	14	14	6
South Carolina	4	68	18.50	1		2	1	5	7	4	18	14	5	1	1	1
<b>Total</b>	<b>69</b>	<b>970</b>	<b>20.55</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>21</b>	<b>20</b>	<b>44</b>	<b>88</b>	<b>129</b>	<b>122</b>	<b>205</b>	<b>83</b>	<b>62</b>	<b>41</b>
<b>Tenter-frame tenders, female:</b>																
Connecticut	1	5	23.30											4	1	
New Jersey	3	32	18.41		7				4	10	2	8	1			
New York	1	15	7.44			9		4								
Pennsylvania	2	11	13.00				6	1	1			4				
Rhode Island	2	14	14.09				2	1	5	2		4				
<b>Total</b>	<b>9</b>	<b>75</b>	<b>13.95</b>		<b>7</b>	<b>9</b>	<b>8</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>10</b>	<b>10</b>	<b>8</b>	<b>5</b>	<b>1</b>	
<b>Truckers, male:</b>																
Connecticut	2	29	21.82						3	3	3	8	5	4	1	2
Massachusetts	7	188	16.32	2	1	4	11	30	30	67	20	11	3	7	2	
New Jersey	13	199	21.00	2	1	6	2	3	6	13	21	38	40	13	15	18
New York	8	51	17.52					6	11	4	5	5	9	10	1	
North Carolina	11	82	11.43	2	5	8	13	23	8	10	8	3	2			
Pennsylvania	8	41	21.20	1		3	1	1	1	4	4	3	4	5	2	4
Rhode Island	9	91	17.88	2	2	1	5	6	4	7	12	15	16	10	4	6
South Carolina	4	69	14.24		1	2	6	25	22	8		4		1		
<b>Total</b>	<b>62</b>	<b>750</b>	<b>17.58</b>	<b>9</b>	<b>9</b>	<b>16</b>	<b>30</b>	<b>56</b>	<b>85</b>	<b>93</b>	<b>123</b>	<b>91</b>	<b>90</b>	<b>46</b>	<b>37</b>	<b>23</b>

1 For less than 3 employees in 1 establishment, data included in total.





## APPENDIX.—Factory Occupational Terms, and Definitions and Classification by Bureau of Labor Statistics

- Acid man.* (See Acid-strength inspector.) Classified as: Other employees.
- Acid mixer.* (See Bath mixer.) Classified as: Bath mixers.
- Acid-pump man* supervises operation of pumps which force various chemical solutions through pipes to bleaching, weighting, and boil-off departments. Classified as: Other employees.
- Acid-strength inspector* checks strength of acid used in vats in which cloth is treated during process of bleaching; also sees that automatic controls in these vats are working properly. Classified as: Other employees.
- Adding-machine operator, cloth room,* adds yardage and weights of various pieces of cloth that go to make up bales or boxes of cloth for shipment, as they are called by weighman, cloth, or yardage caller. Totals are used for invoices and office records. Classified as: Other employees.
- Ager boss, working.* (See Straw boss; also Working foreman.) Classified as: Other employees.
- Ager box tender.* (See Ager tender.) Classified as: Ager tenders.
- Ager tender* tends ager machine, which is used for treating cloth with steam or ammonia when only a short period is necessary for developing and fixing dye or mordant used for setting color. It consists of an iron compartment with a series of guide rollers near top and bottom. Cloth is lead in open width through a slit near top at front end, passes to back end and down around guide rollers to front again, where it emerges through the same slit but underneath the going-in-end, and is delivered on truck. Tender watches to see that cloth is feeding in evenly, sews new pieces on as truck empties and rips them apart when a truck load of steamed cloth is plaited down; starts and stops, oils and cleans machine, and regulates steam or ammonia fumes. Classified as: Ager tenders.
- Ammonia box man.* (See Ammonia solution preparer.) Classified as: Other employees.
- Ammonia solution preparer* prepares ammonia solution used in special apparatus or machine for developing and "fixing" certain colors in cloth. Classified as: Other employees.
- Aniline-dye ager operator.* (See Ager tender.) Classified as: Ager tenders.
- Ash tier boiler.* (See Kier boiler.) Classified as: Kier boilers.
- Assistant foreman* performs supervisory work under direction of foreman, and does some productive work, such as adjusting machines, inspecting work, etc. Classified as: Other employees.
- Assistant second hand.* (See Assistant foreman.) Classified as: Other employees.
- Assorter, cloth stock,* takes cuts of cloth, after they have been properly ticketed, and sorts them by styles on platforms or racks. When required number of pieces of a given style have been accumulated, assorter puts them on truck and takes them to shipping room. Classified as: Other employees.
- Back folder.* (See Back lapper.) Classified as: Other employees.
- Back gray tender* tends back part of printing machine, looking specifically after gray cloths. See also Back tender, printing. Classified as: Back tenders, printing.
- Back lapper* takes bolt of folded cloth after it has been doubled or wound, unwinds it a little, turns end in, and winds it up so as to give a neat appearance to fold or bolt. It is then ready for bander. Classified as: Other employees.
- Back man, cloth drier.* (See Piler.) Classified as: Pilers.
- Back filler* guides flow of cloth through starch mangle in special manner; when it is desired to starch cloth on only one side, it is not immersed in starch but is run over surface of roller which revolves partly immersed in starch. This is called "back filling." See also Mangle tender. Classified as: Mangle tenders.
- Back tender, dyeing machine,* works at rear of dyeing machine to see that cloth comes from machine properly. See also Dyeing-machine tender. Classified as: Dyeing-machine tenders.

- Back tender, printing**, tends back part of printing machine looking after supply of cloth, using a small portable sewing machine to sew on a new piece of white when one batch is about run out, so as to keep a continuous run. Also looks after gray cloths, if there is no back gray tender, as well as after the color in the back boxes, if there is no color boy; keeps steam up in dry cans; and assists printer in pitching pattern when machine is being prepared for a new pattern. When machine is stopped at night or to change patterns, he takes down doctor and color boxes and washes copper rollers off thoroughly with a hose and brush. All color must be removed from rollers lest it harden and cause defective work. Classified as: Back tenders, printing.
- Back tender, soaping machine**, works at rear of soaping machine to see that cloth comes from machine properly. See also Soaper tender. Classified as: Soaper tenders.
- Back tender, tenter frame**, works at rear of tenting frame to see that cloth comes from frame properly. See also Tenter-frame tender. Classified as: Tenter-frame tenders.
- Backer and bander, cloth**, uses specially designed sheets of paper as covering or backing for some cuts of cloth when folding it for trade, and ties band of ribbon or decorative cord around to hold same in place. Classified as: Folders.
- Bag washer, color straining**, washes cloth bags, used by color strainer in color-mixing room, to remove colors and foreign substances from them. Classified as: Other employees.
- Bagging salvager**. (See Salvager, bagging.) Classified as: Other employees.
- Bale marker**. (See Stenciler.) Classified as: Other employees.
- Bale opener, cloth**. (See Opener, bales, cloth.) Classified as: Openers.
- Baler, cloth**, operates press, hydraulic or toggle joint, to bale cloth. A piece of burlap is cut to right size and laid on base and over it is placed a piece of paper if the latter is used. Required number of cuts of cloth are piled on these and on top of them is placed more paper and another piece of burlap. Press is then started and run until bale is compressed to proper size, when burlap is spread over sides and ends and sewed together by hand. Metal tie bands or ropes are put through grooves of press and fastened tightly around bale. Press is released and bale trucked away. In some plants the worker merely bands the bale in the press and sews the heads on it after it is taken out on the floor. Classified as: Balers.
- Bander, cloth, bolts**, pastes 2 specially prepared strips or bands of paper around each bolt of cloth, 1 near each end, for decorative purposes, as well as to hold folds of cloth in shape. Classified as: Other employees.
- Basket man**. (See Trucker.) Classified as: Truckers.
- Batcher boss, working**. (See Straw boss; also Working foreman.) Classified as: Other employees.
- Batcher, cloth winder**, operates machine used for winding any length of cloth around a roller. It consists of two large cloth-covered rollers, set in same horizontal plane and geared to run together, with guide iron at each end and wooden slats over which cloth is drawn to give it tension. Some machines have a sprinkling device to dampen the cloth while being wound. Winder threads cloth through tension slats and starts end around wooden roller, puts pin through roller, places it in position and starts machine, watches to see that there are no creases in cloth and that selvages are winding straight. Winding machines are found in several sections of plant, wherever there is need to wind cloth for bleaching, dyeing, or printing. Classified as: Batchers, cloth winders.
- Bath mixer** looks after mixing chemicals used in bleaching; sees that they are properly prepared and are of correct strength for work to be done. Uses block and fall to handle large drums of caustic. Care must be exercised to avoid danger from burns or fumes, chlorine being especially dangerous; however, workers are protected by ventilating system. Classified as: Bath mixers.
- Beam dyer, yarn**, operates dye vat into which specially devised, perforated, hollow beam with yarn coiled around it is lowered and dye liquor pumped through beam and yarn until properly dyed. Classified as: Other employees.
- Beamer tender** runs a beamer or beaming frame, restoring warp which was made into a chain on ball warper to its original sheet-like form, and winding it into layers on a beam after dyeing. Lease strings which were inserted between warp threads enable operators to lay them in same order as when on warper. Machine consists of two uprights which support section beam, an expansion comb like that on warper, and a swinging comb supported by straps. Tender

- stands with one foot on operating treadle, holds swinging comb in one hand, and has his eyes fixed on expansion comb. As soon as an end ceases to come through a dent in comb, he must stop machine, find ends and tie them up, and if one end is missing, supply yarn from a bobbin kept on hand for that purpose. If yarn is tangled, he knows it by the pull on swinging comb and so can stop machine before ends break. Beamer tenders set up empty beams in their frames and take down full ones. When a warp is about all beamed, the end is tied to end of a new one so as to keep a continuous run. Each new warp, however, must be threaded in combs. Tender usually oils and cleans his machine. Classified as: Other employees.
- Beck-dyeing-machine operator.* (See Spiral dye-beck tender.) Classified as: Dyeing-machine tenders.
- Beetle-machine operator* operates a machine designed to give cloth a special finish as it passes into machine over wooden rollers where it is beaten by wooden hammers called "beetle sticks", which are operated by this machine. This finish gives to cotton cloth an appearance almost like that of satin. Classified as: Other employees.
- Bias cloth cutter* operates cutting device to cut special cloth into bias strips of specified lengths and widths. These strips are rolled up and sold in this form. Classified as: Other employees.
- Bin changer, cloth,* watches cloth being drawn by machine out of bins, and attaches end of cloth from bin being emptied to end of cloth in full bin, to make continuous run of any length desired. Classified as: Other employees.
- Bin packer, cloth,* packs cloth in specially prepared bins after it comes from various bleaching operations. Classified as: Other employees.
- Bleacher boss, working.* (See Straw boss; also Working foreman.) Classified as: Other employees.
- Block engraver* operates routing machine and uses special graving instrument by hand to cut away parts of surface so as to produce or engrave a raised design on wood block used in block-printing cloth. Classified as: Other employees.
- Block printer* uses a wooden block with a raised design on surface to print cloth by hand. Designs are colored by use of a color pad. Classified as: Other employees.
- Blow-machine foreman, working.* (See Working foreman.) Classified as: Other employees.
- Blow-machine man, starch spraying,* operates a blow-type machine which uses compressed air to spray specially prepared starch or finish on cloth with a series of nozzles as the cloth enters mangle. Classified as: Other employees.
- Blue-ager tender.* (See Ager tender.) Classified as: Ager tenders.
- Board winder, cloth.* (See Winder, cloth, bolts.) Classified as: Other employees.
- Boil-off man, cloth.* (See Kier boiler.) Classified as: Kier boilers.
- Boil-off man, skein yarn,* strings skeins of yarn on a pole which is then placed over a vat so that skeins hang in boil-off solution. Classified as: Other employees.
- Boil-off winder, cloth.* (See Batcher, cloth winder.) Classified as: Batcher, cloth winders.
- Boilermaker* works on kiers and metal tubs keeping them in repair and in safe and proper working condition. Classified as: Other employees.
- Bolt labeler.* (See Ticketer; also Label sewer.) Classified as: Other employees.
- Bolt winder, cloth.* (See Winder, cloth, bolts.) Classified as: Other employees.
- Book folder.* (See Folder, cloth, hand.) Classified as: Folders.
- Booker, cloth,* keeps record of cloth, recording style and yardage that goes into make-up of each bale or box for shipment, as it is called by weighman, cloth, or yardage caller. Classified as: Other employees.
- Bookmaker, samples.* (See Sample maker.) Classified as: Other employees.
- Boss laborer, working.* (See Straw boss.) Classified as: Other employees.
- Boss workman.* (See Working foreman; also Straw boss.) Classified as: Other employees.
- Box-machine tender, dyeing.* (See Vat tender, warp dyeing; also Box tender, warp boiling.) Classified as: Other employees.
- Box maker* uses nails and hammer or nailing machine to construct wooden shipping cases from lumber stock, or assembles knocked-down parts purchased from mills which specialize in these parts. See also Sawyer, shipping-case parts. Classified as: Other employees.
- Box pusher.* (See Trucker.) Classified as: Truckers.
- Box tender, warp boiling,* operates box-like apparatus or container used for boiling warp or chain yarn and washing it after dyeing and may also be used for dyeing it. When filled with water or dye, yarn passes in and out of liquid and

- over and between rollers in a manner similar to dyeing done by vat tender, warp dyeing. Box is kept threaded with a leader when no warp is in it. Classified as: Other employees.
- Box washer, colors.* (See Color-box washer.) Classified as: Other employees.
- Boxer.* (See Packer.) Classified as: Packers.
- Breaker, cloth-bale opening.* (See Opener, bales, cloth.) Classified as: Openers.
- Breaker-machine man.* (See Button breaker man; also Conroy operator.) Classified as: Other employees.
- Brown souring washer, cloth.* (See Washer tender.) Classified as: Washer tenders.
- Brush washer* works at a trough or sink supplied with both hot and cold water to wash color from brushes or "furnishers" that furnish color to copper rollers in printing machine. Brush is set in bearings of a device which is made to turn rapidly while water from open jets is forced into it to remove color. Also holds a comb on brush while it is turning to remove lint, etc., from bristles. Classified as: Other employees.
- Brusher-machine operator* operates a machine for brushing cloth to remove all dust and foreign matter. It consists of a large box like structure in which various beating and brushing rollers are so arranged that they brush both sides of cloth as it is drawn through machine. Operator sets large rolls or folds of cloth up in stand behind frame and threads it through machine, starting it around rolling pin on which it is to be rolled. Classified as: Other employees.
- Bumper* assists engraver, machine, to run machine by turning a large wheel by hand when it is desired to engrave a number of repeats of a small figure. Engraver adjusts pattern in machine so figure will fit accurately on copper roller and bumper turns wheel back and forth repeatedly until impression of figure on mill is engraved on roller. This short, jerky, back-and-forth motion is called "bumping." Also assists in moving rollers and in other manual work. Classified as: Other employees.
- Bundler, small shipments,* puts up and wraps securely small orders of cloth, and labels them for shipment. Classified as: Other employees.
- Button breaker man* operates machine designed to remove excess starch from cloth by "breaking up" calendered finish. Cloth is guided through machine over and under series of wooden rollers which are covered with metal buttons, thus making cloth much softer. See also Conroy operator. Classified as: Other employees.
- Calender-machine operator.* (See Calender tender.) Classified as: Calender tenders.
- Calender tender* operates a calender or machine used to give cloth its final and lasting pressing. Machine consists essentially of a series of large, heavy cylinders or bowls supported in an iron frame in contact one with the other and are heated with steam or a gas flame. Operator threads cloth between nips of rollers, regulates speed of bowls, both relative and absolute, and regulates steam in cylinder or gas flow. He has absolute control of machine, starts and stops it, and looks after the oiling and cleaning of same. Classified as: Calender tenders.
- Caller, yardage.* (See Yardage caller.) Classified as: Other employees.
- Can drier.* (See Drier tender.) Classified as: Drier tenders.
- Can feeder, drying.* (See Drier tender.) Classified as: Drier tenders.
- Can man, drying.* (See Drier tender.) Classified as: Drier tenders.
- Card instructor, sample making.* (See Instructor, sample-card making.) Classified as: Other employees.
- Card maker, samples.* (See Sample maker.) Classified as: Other employees.
- Card sample checker.* (See Sample checker.) Classified as: Other employees.
- Cardboard stringer* uses foot lever to operate small power punch to make holes in end of cardboard around which cuts or bolts of cloth are later wound. After punching holes, a string is tied through each hole. When cloth is later wound on these boards, yardage and description tags will be attached to this string. Classified as: Other employees.
- Carpenter* does general carpentry work about plant, making repairs and changes in wooden structure and sometimes makes wooden shipping cases. Classified as: Other employees.
- Carton maker* opens up prepared cartons from flat-folded form in which they were purchased, puts them together, and fastens them in proper shape to receive products for shipment. Classified as: Other employees.
- Carton-parts assembler.* (See Carton maker.) Classified as: Other employees.

- Case maker, packing boxes.* (See Box maker.) Classified as: Other employees.
- Case nailer.* (See Nailer, packing boxes.) Classified as: Other employees.
- Caustic man.* (See Bath mixer.) Classified as: Bath mixers.
- Caustic mixer.* (See Bath mixer.) Classified as: Bath mixers.
- Caustic-soda mixer.* (See Bath mixer.) Classified as: Bath mixers.
- Caustic-soda reclaimer* reclaims caustic soda from solutions that have been used in finishing process of cloth. Caustic-soda solution is pumped to special evaporators for concentration. By means of steam under definite pressure, pumping and vacuum suction, caustic liquor is concentrated until most of salt is separated out. This strong liquor is drawn to water-jacketed settling tanks, where on cooling more salt is separated out. Classified as: Other employees.
- Chain drier.* (See Dry-can man, warp.) Classified as: Other employees.
- Chase-calender tender.* (See Calender tender.) Classified as: Calender tenders.
- Checker, processes,* follows up the work to make sure that cloth is processed in proper order. Checks incoming and outgoing cloth in various departments. Classified as: Other employees.
- Checker, samples.* (See Sample checker; also Inspector, samples.) Classified as: Other employees.
- Checker, shipments,* checks lot number, yardage, quality, etc., of goods which have been assembled for shipment. Classified as: Other employees.
- Chemical-box tender* watches consistency of chemical mixtures used in bleaching, and adds water or chemicals as required. Classified as: Other employees.
- Chemical mixer.* (See Bath mixer.) Classified as: Bath mixers.
- Chemical mixer's helper* helps chemical mixer in unpacking, storing, and mixing chemicals used in preparing bleaching solutions. Classified as: Other employees.
- Chemicker washer tender.* (See Color-John washer tender.) Classified as: Washer tenders.
- Clammer.* (See Clamper.) Classified as: Other employees.
- Clamper* hardens "die" which was made by die maker, puts it into a clamming or clamping machine, a specially constructed rotary press, which reproduces design on die in bas-relief on another soft steel roller, called "mill", used for engraving by machine. Die is set in machine, and the mill in above it and in contact with it. By properly applying pressure, impression of die is made on mill. Operator regulates pressure screw with a large wheel, and his skill comes in knowing how to apply pressure. Too much pressure will spoil mill and even break it or the die. When pressure is adjusted, he starts machine by throwing a lever, runs it about a minute, then takes out mill, dips it into nitric acid for an instant to bring out the impression, and then dips it into water to wash off acid. This operation is repeated many times. Mill must be replaced in machine in exact location from which taken. Operator keeps mill and die well supplied with lubricating oil. First impression made is that of hurrs raised on outside edges of die which make corresponding indentations on the outside edges of mill so the two will fit and not slip when impression of design is being transferred. When design is raised completely on mill and has had the approval of foreman, it is hardened and ready for the engraver, machine. Classified as: Other employees.
- Cleaner, general,* does general cleaning and scrubbing of floors, walls, bins, trucks, benches, etc. Classified as: Other employees.
- Cleaner, oil spots.* (See Oil-spot washer.) Classified as: Other employees.
- Cleaner, sheets and pillowcases.* (See Oil-spot washer.) Classified as: Other employees.
- Clipper, cloth ravelings,* uses hand shears to clip loose threads from end of cloth cuts before they are folded. Classified as: Other employees.
- Clipper, tenter frame.* (See Tenter-frame clipper.) Classified as: Tenter-frame tenders.
- Cloth-color matcher.* (See Shade matcher, cloth.) Classified as: Other employees.
- Cloth distributor* uses truck to distribute rolls or pieces of cloth to various departments where needed. Classified as: Truckers.
- Cloth inspector.* (See Inspector, cloth.) Classified as: Inspectors.
- Cloth layer-out.* (See Opener, bales, cloth.) Classified as: Openers.
- Cloth painter.* (See Touch-up man, printed cloth; also Paint-machine operator, cloth.) Classified as: Other employees.
- Cloth-roll machine tender.* (See Batcher, cloth winder.) Classified as: Batchers, cloth winders.
- Cloth stretcher.* (See Tenter-frame tender.) Classified as: Tenter-frame tenders.
- Cloth winder, bolts.* (See Winder, cloth, bolts.) Classified as: Other employees.

- Cloth winder, rolls.** (See *Batcher, cloth winder.*) Classified as: *Batchers, cloth winders.*
- Coiler tender.** (See *Coiler, warp.*) Classified as: *Other employees.*
- Coiler, warp,** watches coiling of warp as it comes over drying cans to see that it is properly coiled in a mass that can be handled without danger of being tangled, and removes it when a full warp has been coiled. At the beginning of a new warp that is coiled, a piece of burlap is placed to receive it and when coil is completed, operator ties corners of burlap over coil so it can be moved without soiling or tangling. Classified as: *Other employees.*
- Color boy, printing,** works at cloth-printing machine when several colors are used in design which is being printed. Uses dipper to refill partly empty color boxes or pans in printing machine. Care must be used to avoid mixing colors or permitting any color to run too low in pan. Classified as: *Other employees.*
- Color-box filler, printing.** (See *Color boy, printing.*) Classified as: *Other employees.*
- Color-box washer** places color soaking boxes, which are long copper pans used in cloth printing machines, into soaking tank and then uses a brush by hand to remove color which adheres. This is done when colors in machine are changed. Classified as: *Other employees.*
- Color inspector, cloth,** examines cuts of cloth to ascertain if colors and shades are in accordance with specifications. Classified as: *Inspectors.*
- Color-John washer tender** operates washing machine containing soapy water and special chemicals through which cloth dyed with colors that cannot stand the regular washing process are run to set these dyes. Classified as: *Washer tenders.*
- Color mixer** measures proper quantities of standard colors, paste, etc., as directed by colorist, to obtain correct shade and consistency required for cloth-printing room. Spreads strainer cloth over top of tub; puts in liquids which are squeezed through cloth by his helper, known as a strainer, then uses wooden paddle to mix them properly. Classified as: *Color mixers.*
- Color mixer's helper** assists color mixer in straining colors, trucks them where needed, and cleans room, working under color mixer's direction. Classified as: *Other employees.*
- Color-shop clerk.** (See *Color stockman.*) Classified as: *Other employees.*
- Color-shop laborer.** (See *Color mixer's helper.*) Classified as: *Other employees.*
- Color stockman** supervises work in color storeroom, issues prepared colors in quantities as ordered, and maintains records of quantities on hand and how and where distributed. Classified as: *Other employees.*
- Color strainer.** (See *Strainer, colors.*) Classified as: *Other employees.*
- Color weigher.** (See *Dry-drug man.*) Classified as: *Other employees.*
- Color-weigher boss.** (See *Color stockman.*) Classified as: *Other employees.*
- Colorist** is usually head of color-mixing department; prepares and writes out color formula for color mixers in accordance with plans of designing department and decides when the correct shade has been reached. Examines printed sample, a small piece of cloth called a "patch" or "swatch" after it has been steamed and soaped and gives final word to printer when color is right. Classified as: *Other employees.*
- Compensator man, warp dyeing,** manipulates compensator, which is a device designed to regulate tension of warp when going through dyeing machine. Classified as: *Other employees.*
- Cone winder.** (See *Yarn winder.*) Classified as: *Yarn winders.*
- Conroy operator** operates machine which breaks up calendered finish of cloth as it passes over specially devised rollers in which are wavy ridges, thus making cloth softer. See also *Button breakerman.* Classified as: *Other employees.*
- Continuous-steamer tender.** (See *Steamer tender.*) Classified as: *Steamer tenders.*
- Controller, mercerizing range,** starts, stops, and regulates speed of mercerizing range as directed by mercerizer. Classified as: *Other employees.*
- Conveyor man, cloth,** places cuts or pieces of cloth on conveyor belt for transfer to some other department or removes them from conveyor. Classified as: *Other employees.*
- Copper, repairing,** drives up hoops to tighten barrels, tubs, etc., in which dyes and dye stocks are kept, and does other repair work on these containers. Classified as: *Other employees.*
- Copper-roller handler, printing.** (See *Jackman, printing.*) Classified as: *Jackmen, printing.*
- Cottage-steamer tender.** (See *Steamer tender.*) Classified as: *Steamer tenders.*

- Cotton-finishing washer tender.* (See Washer tender.) Classified as: Washer tenders.
- Cutter, samples.* (See Sample cutter.) Classified as: Other employees.
- Cuttler, warp dyeing,* tends to delivery or plaiting end of warp-splitting machine, and keeps yarn in position by adjusting automatic guides. See also Splitter, warp. Classified as: Other employees.
- Dampener operator.* (See Sprinkler tender.) Classified as: Sprinkler tenders.
- Delivery-end tender, calender,* works at the rear of calender to see that cloth comes from machine properly. See also Calender tender. Classified as: Calender tenders.
- Die cutter.* (See Die maker.) Classified as: Die makers.
- Die maker* is a highly skilled workman who engraves by hand one repeat of a given design on a small solid cylindrical roller of softened steel. Uses graver to cut design in similar manner as that done by the engraver, hand; uses a magnifying glass most of the time, since the work is so fine it cannot be seen without one. It must be so accurate that it will fit perfectly when several repeats are made on roller. Die makers bring out shaded effects by a scheme of dotting, known as "stippling." While this merely requires punching of small dots it is in practice an extremely delicate and difficult operation, as dots must be properly spaced and of exact depth. Classified as: Die makers.
- Die turner.* (See Steel turner.) Classified as: Other employees.
- Diez-machine tender, dyeing,* operates a dyeing machine known as the "Diez" machine. See also Dyeing-machine tender. Classified as: Dyeing-machine tenders.
- Distributor, cloth.* (See Cloth distributor.) Classified as: Truckers.
- Doubler, cloth,* runs a doubling and winding machine which is similar to machines used in folding department to wind cuts of cloth in bolts. Distinguishing feature is special device or guide called "knife", which is placed so as to divide or fold cloth in middle with one edge drawn over to meet the other, thus forming cloth into a double sheet. Guide device on machine then carries this doubled cloth to winding, device of machine where it is wound on boards for trade in regular manner. Operator usually pastes a sticker on each wound bolt of cloth showing yardage which is automatically recorded by machine. Classified as: Other employees.
- Doubler operator, cloth winding.* (See Doubler, cloth.) Classified as: Other employees.
- Doubling and winding machine operator, cloth.* (See Doubler, cloth.) Classified as: Other employees.
- Drawing-machine operator* operates machine for drawing threads out of material for decorative hemstitching. Classified as: Other employees.
- Drier boss, working.* (See Working foreman.) Classified as: Other employees.
- Drier feeder, cloth.* (See Drier tender.) Classified as: Drier tenders.
- Drier foreman, working.* (See Working foreman.) Classified as: Other employees.
- Drier, skein yarn.* (See Skein-yarn drier.) Classified as: Other employees.
- Drier tender* runs a set of drying cans, large hollow copper cylinders 2 or 3 feet in diameter, and wide enough to carry 1 or 2 widths of cloth as desired. A number of these cans, from 6 to 30 according to particular needs, are arranged horizontally in tiers suited to space occupied, and are so geared that they will all turn together. Cans are filled with live steam, and cloth is guided around cans so that it will touch as much surface of each as is possible in order to be thoroughly dried. Drying cans are found in various departments. Classified as: Drier tenders.
- Drier, warp.* (See Dry-can man, warp.) Classified as: Other employees.
- Drug weigher.* (See Dry-drug man.) Classified as: Other employees.
- Dry-box tender.* (See Skein-yarn drier.) Classified as: Other employees.
- Dry-can feeder.* (See Drier tender.) Classified as: Drier tenders.
- Dry-can feeder's helper.* (See Piler.) Classified as: Pilers.
- Dry-can man, cloth.* (See Drier tender.) Classified as: Drier tenders.
- Dry-can man, warp,* watches warp yarn running over drying cans. These cans are filled with live steam, and strands of warp are directed several times around each can so they will be thoroughly dried. Stops machine if warp tangles occur or ends break, and calls second hand to fix it; when a ball of warp runs out he sets a new one on rack and ties end of new one to old one so there is a continuous strand running over cans all the time machine is in operation. Classified as: Other employees.
- Dry-can operator, cloth.* (See Drier tender.) Classified as: Drier tenders.

- Dry-drug man* supervises work in room where dry drugs, starches, gums, and chemical stocks are stored, opens sacks, weighs out and issues these in quantities as needed in various departments. Classified as: Other employees.
- Dumper* examines cloth after it comes off drier and before it is sent to printing department. Looks for "reverses", that is, cuts of cloth that were sewed in roll with face side down or reverse of other cuts in roll. It is essential that face of every piece be matched, either up or down, otherwise pattern would be printed in face of one piece and on back of another. Stands at a bench and examines every seam; when he finds a piece reversed, cuts it out and sews it in properly. Classified as: Other employees.
- Dye feeder.* (See Dyeing-machine tender.) Classified as: Dyeing-machine tenders.
- Dye maker.* (See Kettleman, color mixing.) Classified as: Kettleman, color mixing.
- Dye maker's helper.* (See Kettleman's helper.) Classified as: Kettleman's helpers.
- Dye mixer* uses prescribed formula to prepare liquid dye by mixing specified pigments or other ingredients used in dye vats. Classified as: Other employees.
- Dye-tub tender.* (See Vat tender, warp dyeing.) Classified as: Other employees.
- Dyer, cloth.* (See Dyeing-machine tender.) Classified as: Dyeing-machine tenders.
- Dyer, foreman, working.* (See Working foreman.) Classified as: Other employees.
- Dyer, skein yarn,* handles rods, or sticks on which skeins of yarn are suspended, works skeins back and forth in dye tanks, and turns them on the rods, thereby causing color to penetrate uniformly. Classified as: Other employees.
- Dyer, warp.* (See Vat tender, warp dyeing.) Classified as: Other employees.
- Dyeing-machine tender* runs one of many types of dyeing machines, as "spiral dye beck", "jigger", "padder", etc. Machine consists of a trough or vat to hold liquor, guide rollers over which cloth runs in and out of liquor, and squeeze rollers to press out excess liquor before removing. Tender threads up machine, operates valves to admit or cut off dye or liquor, watches the passage of the cloth to eliminate tangling or overlapping, regulates speed of machine and adjusts it for the prescribed number of dips a particular piece of cloth is to receive to get correct shade. Also oils and cleans machine and washes out vats after each batch. Classified as: Dyeing-machine tenders.
- Dyeing-machine tender's helper* helps dyeing-machine tender load and unload dye machine, or does any other work as directed by tender. Classified as: Other employees.
- Edge sawyer, shipping-case parts.* (See Sawyer, shipping-case parts.) Classified as: Other employees.
- Electric trucker* operates an electric truck to convey materials from one department to another about plant. Classified as: Truckers.
- Electrician* repairs and maintains electrical wiring and attends and keeps in repair dynamos, motors, and other electrical equipment about plant. Classified as: Other employees.
- Electrician's helper* assists electrician by passing tools, or parts needed in making repairs of wiring of plant. Classified as: Other employees.
- Elevator operator* operates an elevator for hoisting or lowering product, supplies, or workmen from one floor to another. Classified as: Other employees.
- Endless-steamer tender.* (See Steamer tender.) Classified as: Steamer tenders.
- Engraved-roller inspector.* (See Roller inspector.) Classified as: Other employees.
- Engraved-roller storer.* (See Shell-room man, engraved rollers.) Classified as: Other employees.
- Engraver, hand,* is a highly skilled worker who uses a small steel instrument known as graver, by hand, to cut accurate designs on copper rollers which are used for printing cloth. A sketch or photograph of design is made and outlines of each color are drawn with some substance like lamp black and oil, which, when held against surface of roller and slightly dampened, will leave an imprint of design on roller. Guided by this imprint, engraver cuts lines out of copper with small steel instrument ground off at an angle with a very sharp cutting edge, which is mounted in a short rounded wooden handle which fits into the palm of engraver's hand while the steel is held between forefinger and thumb. Is able to follow very accurately lines of design, cutting a groove of the proper depth and uniform throughout. Also uses punches of various sizes and designs, and light hammers. Works at a bench with rollers supported in bearings. Keeps design in color before him and must be very careful to



- engrave the lines of only one color on a roller. It is fine and exacting work. Classified as: Engravers, hand.
- Engraver, machine*, operates machine used for transferring specific design from small steel mill to large copper roller used in printing cloth. Fits mill accurately in machine, using care to have roller and mill exactly parallel and their axes in perfect vertical alinement with each other. Engraver must know how much pressure to apply on mill and when to apply it. Machine has many regulatory attachments and is equipped to be run by power or hand according to whether the running is to be constant or intermittent. When a very small figure is to be engraved it is done by turning the roller back and forth by hand, a process known as "bumping." When design is on the whole circumference of mill, it is transferred by running mill and roller in frictional contact continuously in same direction until impression on rollers is sufficiently deep. Circumference of roller is an exact multiple of that of mill; thus repeats of design will be engraved around entire roller. Wherever mill makes depressions, copper pressed out rises above surface, making burs. These must be removed by polishing and, after inspection, roller is ready for printing machine. Classified as: Engravers, machine.
- Errand boy* carries repair parts, supplies, orders, or instructions to and from various departments as directed by second hand or section men. Classified as: Other employees.
- Etcher* subjects the varnished surface of copper roller after design has been cut by pantographer to acid bath and thus etches design into copper. Uses wash box or basin about as wide as roller is long and divided into a front and back section. In one section is solution of nitric acid and in the other water. Roller to be etched is supported on bearings or arms so adjusted that it can be swung by hand wheel from front to back compartment. Roller is adjusted so that only surface of it touches acid, else copper on ends of rollers would be eaten away. Since "varnish" put on roller is not affected by acid, only such lines as have been cut through varnish by pantographer are etched; that is, chemically eaten out. Etcher regulates strength of acid and must be able to tell when roller is etched sufficiently. When etching is completed, varnish is washed off. Etcher is responsible for etching, varnishing, and washing, and is assisted by various helpers. After being inspected and polished, the roller is ready for printing machine. Classified as: Etchers.
- Etcher's helper* lifts heavy copper rollers, moves them about, as directed by etcher, places them in supports to be varnished, etched, or washed; turns roller in etching bath, uses caustic solution to wash varnish off rollers after they are etched, etc. Classified as: Other employees.
- Examiner, cloth defects.* (See Inspector, cloth.) Classified as: Inspectors.
- Examiner, cloth reverses.* (See Dumper.) Classified as: Other employees.
- Fan tender.* (See Swing tender.) Classified as: Swing tenders.
- Feed-end tender, calender*, tends front or feed end of calender to see that cloth enters properly and is being fed evenly. See also Calender tender. Classified as: Calender tenders.
- Feed-end tender, mangle*, tends front or feed end of mangle to see that cloth enters properly and is being fed evenly. See also Mangle tender. Classified as: Mangle tenders.
- Feeder, mercerizing range*, tends front of mercerizing machine to see that cloth enters properly and is being fed evenly. See also Mercerizer. Classified as: Mercerizers.
- Feeder, tenter frame*, tends front of tentering machine to see that cloth enters properly and is being fed evenly. See also Tenter-frame tender. Classified as: Tenter-frame tenders.
- Feeder, washing machine*, tends front of washing machine to see that cloth enters properly and is being fed evenly. See also Washer tender. Classified as: Washer tenders.
- Filter operator* operates pumping machinery which filters water before it is used in washing, bleaching, or dyeing processes. Classified as: Other employees.
- Filter plant tender.* (See Filter operator.) Classified as: Other employees.
- Finish mizer.* (See Size maker.) Classified as: Other employees.
- Finisher, skein yarn*, takes out tangles from skeins of yarn, straightens them after they have been dyed, and twists 3 or 4 skeins into one bundle. Classified as: Other employees.
- Finishing-machine tender, cloth.* (See Mangle tender.) Classified as: Mangle tenders.

- Fixer, general,** does repair work on various machines and appliances about plant and keeps them in proper running condition. Classified as: Other employees.
- Floorman** assists wherever there is any heavy lifting to be done, as handling rollers for engravers and printers, setting up heavy rolls of cloth for female operators, etc. When not assisting in heavy work, he is kept busy cleaning up, oiling machinery, and trucking. Classified as: Floormen.
- Flyer operator** operates a combination dry can and stretcher which stretches cloth lengthwise only. *See also* Drier tender; Tenter-frame tender. Classified as: Other employees.
- Folded-cloth tacker.** (*See* Knotter.) Classified as: Knotters.
- Folded-cloth taper.** (*See* Paper taper, folded cloth.) Classified as: Other employees.
- Folder, cloth, hand,** takes cloth, after it has been folded by hooker machine and after it has been inspected, and doubles entire pile over by hand two or three times and in different ways depending on what the trade desires, to make a neat package easy to handle and attractive in appearance. Cloth is then ready to be packed for shipment. Also folds, by hand, sheets and pillowcases for trade. Classified as: Folders.
- Folder, cloth, machine.** (*See* Hooker-machine tender.) Classified as: Measurers.
- Folder, mangle.** (*See* Mangle folder.) Classified as: Folders.
- Forcing-machine operator, printing.** (*See* Jackman, printing.) Classified as: Jackmen, printing.
- Foreman, assistant.** (*See* Assistant foreman.) Classified as: Other employees.
- Foreman, working.** (*See* Working foreman.) Classified as: Other employees.
- Frame clipper.** (*See* Tenter-frame clipper.) Classified as: Tenter-frame tenders.
- Frame feeder.** (*See* Tenter-frame tender.) Classified as: Tenter-frame tenders.
- Frame operator.** (*See* Tenter-frame tender.) Classified as: Tenter-frame tenders.
- Frame tender.** (*See* Tenter-frame tender.) Classified as: Tenter-frame tenders.
- Friction-calender operator.** (*See* Calender tender.) Classified as: Calender tenders.
- Front tender, dyeing machine,** tends front of dyeing machine to see that cloth enters properly and is being fed evenly. *See also* Dyeing-machine tender. Classified as: Dyeing-machine tenders.
- Front tender, soaper,** tends front of soaping machine to see that cloth enters properly and is being fed evenly. *See also* Soaper tender. Classified as: Soaper tenders.
- Frost-calender operator** operates a machine known as the "Frost" calender. *See also* Calender tender. Classified as: Calender tenders.
- Gas singer.** (*See* Singer.) Classified as: Singers.
- General laborer** does all kinds of unskilled work in various departments of the plant, such as sweeping, cleaning, washing windows, trucking, etc. Classified as: Other employees.
- General utility man.** (*See* Utility man.) Classified as: Other employees.
- Grader, cloth,** examines pieces of cloth thrown out by inspectors for various reasons and classifies them into groups such as "firsts", "seconds", etc. Classified as: Other employees.
- Gray ager tender.** (*See* Ager tender.) Classified as: Ager tenders.
- Gray-cloth boy** helps back gray tender at back of cloth printing machine; also piles and trucks gray cloth where needed. Classified as: Other employees.
- Gray-cloth-room man** looks after delivery of gray goods to bleach house as needed. Classified as: Other employees.
- Gray-cloth tender, printing.** (*See* Back tender, printing.) Classified as: Back tenders, printing.
- Gray-roll man, trucking.** (*See* Trucker.) Classified as: Truckers.
- Gray washer, cloth.** (*See* Washer tender.) Classified as: Washer tenders.
- Grinder, paint.** (*See* Paint grinder.) Classified as: Other employees.
- Gum maker.** (*See* Size maker.) Classified as: Other employees.
- Gum mixer.** (*See* Size maker.) Classified as: Other employees.
- Hand engraver.** (*See* Engraver, hand.) Classified as: Engravers, hand.
- Hand-frame tender.** (*See* Tenter-frame clipper.) Classified as: Tenter-frame tenders.
- Hand painter, defects, printed cloth.** (*See* Touch-up man, printed cloth.) Classified as: Other employees.
- Hand trucker.** (*See* Trucker.) Classified as: Truckers.

- Hanger man, yarn mercerizing*, hangs skeins of yarn on arms of mercerizing device, where it is subjected to one or more chemical treatments necessary in this process. Classified as: Other employees.
- Head cloth inspector, working*, has supervision over cloth inspection force. See also Working foreman. Classified as: Other employees.
- Hemmer, sheets*. (See Sheet sewer.) Classified as: Sewers.
- Hermatite-machine operator, water proofing*, tends machine which waterproofs cloth with hermatite. See also Padding-machine tender. Classified as: Dyeing-machine tenders.
- Hooker-machine tender* operates machine which automatically measures cloth as it is arranged into folds, usually of 1 or 1½ yard lengths. It consists essentially of a table hinged in the middle, with iron jaws projecting over each end, and springs to hold table up against jaws. Cloth is threaded over slats to give it a little tension and ends are caught under one jaw. Machine is then started by throwing a lever and cloth is guided by a blade which is made to swing back and forth, hooking cloth under jaw at each end. When a seam comes along showing end of cut, machine is stopped and seam ripped out or cloth cut near it. A foot lever depresses table enough to remove measured cloth. Classified as: Measurers.
- Hoop puller* places and adjusts hoops or steel tie bands on bales of cloth after they have been reduced to correct size in a press and fastens them securely. Classified as: Other employees.
- Hot-frame tender*. (See Tenter-frame tender.) Classified as: Tenter-frame tenders.
- Hot-frame tender's helper* assists tenter-frame tender in placing rolls of cloth on unwinding spindle, and any other general work where needed. Classified as: Other employees.
- Indigo dyer* operates dyeing machine in which indigo-dye liquor is used to dye cloth. See also Dyeing-machine tender. Classified as: Dyeing-machine tenders.
- Indigo-machine repairer*. (See Fixer, general; also Millwright.) Classified as: Other employees.
- Indigo-machine tender, cloth*. (See Indigo vat tender, cloth.) Classified as: Dyeing-machine tenders.
- Indigo mixer*. (See Color mixer.) Classified as: Color mixers.
- Indigo-vat tender, cloth*, tends an indigo vat which is a large tank about 4 feet deep, 10 feet long, and about 3 feet wide. Rollers to guide cloth are placed wherever needed to give the proper immersion. Cloth is led in over a rack, and after being immersed in dye is run between a pair of squeeze rollers and over a number of guide rollers to expose it fully to the air so as to allow the indigo to oxidize. See also Dyeing-machine tender. Classified as: Dyeing-machine tenders.
- Indigo-vat tender, warp*, tends machine used for indigo dyeing of yarn in chain form. See also Vat tender, warp dyeing. Classified as: Other employees.
- Inspector, acid strength*. (See Acid-strength inspector.) Classified as: Other employees.
- Inspector, cloth*, uses a small microscope and measuring instruments to examine cloth after it is opened and before it is put through any process. Measures specific dimensions of cloth, counts warp and filling threads to determine weave; examines yarn for size and tests strength of cloth; and in general determines if cloth is of type and standard represented. Also examines each cut of finished cloth by turning each fold first one side then the other so that the whole length is exposed to view and looks for imperfections of color, stains, etc., which developed in dyeing or finishing processes. May make minor repairs or cut out imperfect pieces if near end of cut. Cloth is then ready for folders who prepare it for market. Classified as: Inspectors.
- Inspector, cloth colors*. (See Color inspector, cloth.) Classified as: Inspectors.
- Inspector, engraved rollers*. (See Roller inspector.) Classified as: Other employees.
- Inspector, samples*, looks over work of sample maker, passing upon it and keeping a record as to the neatness, efficiency, and accuracy. Classified as: Other employees.
- Inspector's helper, cloth*, assists inspector, cloth, in handling cloth, helping to spread it out, removing it when inspected, and making himself generally useful; may assist in simple tests. Classified as: Other employees.

*Instructor, sample card making*, instructs employees in method of making up cloth sample cards. Classified as: Other employees.

*Ironer, hand, sheets and pillowcases*, uses an electric hand iron to smooth out hems on sheets and pillow cases. Classified as: Other employees.

*Jacker, cloth rolls*, conveys, by hand, cloth roll through which a long iron rod runs with room at each end for a hand-hold, so that two men, one at each end, carry it from one department to another as desired. Classified as: Other employees.

*Jackman, printing*, puts copper rollers on mandrils and otherwise handles rollers and mandrils, lifting them onto trucks, moving them about, putting them together with forcing jack, using care not to weaken or break them, trucking them to printing machine, and setting them into bearings on machine. Bulk of work is merely heavy manual labor. Classified as: Jackmen, printing.

*Jackman's helper* assists jackman, under his direction, in handling rollers and mandrils, trucking them where needed. Classified as: Other employees.

*Jig-dyeing machine tender* tends dyeing machine, which consists essentially of a vat to hold liquor, with guide rollers near top and near bottom. Above vat are two pairs of arms or supports and the necessary gears for driving. Roll of cloth to be dyed is placed in open form on one pair of arms and the end directed around guide rollers in vat so it will be conveyed down and up through dye liquor. After it passes out of liquor it is wound on a roller on other pair of arms. After running cloth through once, gear can be shifted so as to wind cloth back on first roller. It may be run through as many times as is necessary to get correct shade. *See also* Dyeing-machine tender. Classified as: Dyeing-machine tenders.

*Kaumagraph operator, cloth stamping*, operates a machine used for stamping trade mark in selvage of cloth. *See also* Stamper, cloth, trade mark. Classified as: Other employees.

*Kettleman, color mixing*, supervises preparation of standard colors and "reducing" paste in accordance with orders and formulas received from chief colorist. Directs work of helpers who go for dry drugs; sees that they put these into proper kettle, that proper amount of water is added, and that steam is kept up to proper temperature; tells them when to turn it off and when to remove the color; and looks after the storage of these colors in hogsheads or other containers for future use; also sees that the floors and kettles are kept clean. Kettles used for this purpose are made of copper and usually hold 50 to 60 gallons, with a steam jacket between the inner and outer surface which allows the mixture to be boiled. The kettles are supported between two uprights, which allows them to be tipped to pour out contents. Classified as: Kettle-men, color mixing.

*Kettleman's helper* works under direction of kettleman on any work incident to preparation of standard colors and reducing paste. Uses truck to convey dry drugs and chemicals from drug room to kettles, puts them into kettles, turns steam on and off as needed, pours out color or paste into tubs, trucks color or paste and dumps it into proper hogshead, washes and cleans tubs and kettles thoroughly between each batch, and washes floors around kettles with a hose at least once a day. Classified as: Kettlemen's helpers.

*Kier boiler* prepares kiers for boiling and looks after boiling. Directs filling of kier with cloth and opens and closes valves admitting liquor and those admitting steam whenever necessary. Watches from time to time to see that liquor is circulating as it should and keeps track of length of time each batch is in. As boiling continues throughout 24 hours of each day, it is necessary that some employees work at night. Kier is a large iron receptacle with a false bottom raised several inches to keep cloth off steam pipes, and is used for treating or bleaching cloth that requires a long period of time. It is usually located below level of floor, with manhole through which workers enter. Classified as: Kier boilers.

*Kier boiler's helper* assists kier boiler in preparing boiler for cloth, working under his direction. Classified as: Other employees.

*Kier packer.* (*See* Plaiter.) Classified as: Plaiters.

*Kier piler.* (*See* Plaiter.) Classified as: Plaiters.

*Kier plaiter.* (*See* Plaiter.) Classified as: Plaiters.

*Knoller* uses strong needle with heavy thread or string to put stitches (usually two) through selvages of top and bottom plies at each end of folded cloth, each stitch binding top fold to bottom one. These stitches hold ends of cloth so that it remains as folded. Classified as: Knotters.

- Label-machine operator.** (*See* Label sewer.) Classified as: Other employees.
- Label sewer** operates a sewing machine to stitch cotton labels which show style number, quality, etc., on sheets and pillowcases. *See also* Ticketer. Classified as: Other employees.
- Labeler, cloth boards,** uses brush to spread paste on labels and sticks them over ends of boards on which cloth is to be wound. These labels contain style number, trade name, etc. Classified as: Other employees.
- Laboratory tester** makes tests of colors and finished products for fastness of color. Classified as: Other employees.
- Laborer, general.** (*See* General laborer.) Classified as: Other employees.
- Lathe hand.** (*See* Roller turner.) Classified as: Roller turners.
- Layer-out, cloth.** (*See* Opener, bales, cloth.) Classified as: Openers.
- Leader** is a minor supervisory employee who regularly works with others and sets the pace for the group in which he is employed. Classified as: Other employees.
- Lime-kier boiler.** (*See* Kier boiler.) Classified as: Kier boilers.
- Limeing washer tender, cloth.** (*See* Washer tender.) Classified as: Washer tenders.
- Long John washing-machine tender.** (*See* Color-John washer tender.) Classified as: Washer tenders.
- Long-steamer tender.** (*See* Steamer tender.) Classified as: Steamer tenders.
- Long tenter-frame tender.** (*See* Tenter-frame tender.) Classified as: Tenter-frame tenders.
- Loose-starch man.** (*See* Dry-drug man.) Classified as: Other employees.
- Lot chaser** watches to see that different lots of cloth which belong together are kept together as they go through various operations of plant. Classified as: Other employees.
- Machine cutter, samples.** (*See* Sample cutter.) Classified as: Other employees.
- Machine engraver.** (*See* Engraver, machine.) Classified as: Engravers, machine.
- Machine engraver's helper.** (*See* Bumper.) Classified as: Other employees.
- Machinist** operates such machines as drill presses, lathe, milling, etc., in machine shop, to make or repair broken parts of productive machines. Classified as: Other employees.
- Machinist's helper** assists machinist by passing tools or parts used in repair of machines. Classified as: Other employees.
- Maintenance man** looks after general maintenance of buildings, trucks, windows, etc., to see that they are kept in good operating condition. Classified as: Other employees.
- Maker-up, folding.** (*See* Folder, cloth, hand.) Classified as: Folders.
- Mandril-press hand.** (*See* Jackman, printing.) Classified as: Jackmen, printing.
- Mangle feeder.** (*See* Mangle tender.) Classified as: Mangle tenders.
- Mangle folder** folds sheets and pillowcases by hand for trade as they come from mangle ironer. They are then ready to be packed for shipment. Classified as: Folders.
- Mangle tender** operates a mangle consisting of a series of two or more cylinders placed one on top of the other so their centers will be in the same vertical plane and so the "nip" between any two can be regulated as to pressure. At feed end of machine is an "expander" designed to stretch cloth to a desired width. Most mangles have a box or trough beneath bowls containing liquor in which cloth is immersed before mangling, and are usually designated by kind of liquor in box, such as water mangle, starch mangle, etc. Primary purpose of the mangle is to wet cloth and press it out smoothly, but by manipulating cloth between the bowls it is possible to assist in giving it different "finishes." Mangle is usually operated in connection with either a set of dry cans or tenter frame. Tender regulates supply of water, starch, or other material in box connected with mangle; regulates "nip" or pressure on bowls; guides cloth as it enters, keeping it straight and smooth; cleans and oils machine; washes out starch box and keeps machine threaded with a band of strong cloth called "listing" when the machine is not running. Classified as: Mangle tenders.
- Marker, cloth.** (*See* Ticketer; *also* Label sewer.) Classified as: Other employees.
- Marker, shipments.** (*See* Stenciler.) Classified as: Other employees.
- Mason** uses stone or brick and mortar to form or repair walls, foundation, walks, etc., around plant. Classified as: Other employees.
- Matcher, cloth reverser.** (*See* Dumper.) Classified as: Other employees.
- Matcher, shades.** (*See* Shade matcher, cloth.) Classified as: Other employees.

**Measurer** operates hooker or other measuring machine to determine length of cloth for each job to be run through dyeing or finishing plant. Also after finishing processes again measures this cloth to determine number of yards in each cut, either by counting folds by hand or running it through hooker-folding machine. Record of yards is entered on tag and attached to each piece. Classified as: Measurers.

**Measurer boss, working.** (See Straw boss; also Working foreman.) Classified as: Other employees.

**Mercerizer** operates machine known as mercerizing range. By this process cloth is given a luster similar to that of silk. Cloth is led through a water mangle, trough of which contains solution of strong caustic soda, from here it goes to a tentering frame which holds it out to proper width. In its passage it is sprayed with water and on emerging at other end, it runs through two water mangles, the trough of the first containing dilute sulphuric acid and that of the second containing water. It is then plaited down on trucks and conveyed to a set of dry cans to be dried. See also Mangle tender; Tenter-frame tender; Drier tender; Swing tender. Classified as: Mercerizers.

**Messenger.** (See Errand boy.) Classified as: Other employees.

**Mill turner.** (See Steel turner.) Classified as: Other employees.

**Millwright** installs or moves machines in plant, puts up and maintains shafting, pulleys, etc., in correct working condition. Classified as: Other employees.

**Mixer, ammonia solution.** (See Ammonia-solution preparer.) Classified as: Other employees.

**Mixer, bath.** (See Bath mixer.) Classified as: Bath mixers.

**Mixer, caustic soda.** (See Bath mixer.) Classified as: Bath mixers.

**Mixer, chemicals.** (See Bath mixer.) Classified as: Bath mixers.

**Mixer, colors.** (See Color mixer.) Classified as: Color mixers.

**Mixer, soap.** (See Soap mixer.) Classified as: Soap mixers.

**Moistening-machine operator.** (See Sprinkler tender.) Classified as: Sprinkler tenders.

**Nailer, cases.** (See Nailer, packing boxes.) Classified as: Other employees.

**Nailer, packing boxes,** uses hammer and nails to fasten covers on boxes which are packed ready for shipment. May also construct these boxes. See also Box maker. Classified as: Other employees.

**Napper tender** operates machine for raising nap or fuzz evenly over surface of cloth, giving it a woolly appearance. Finished product is called "flannelette." Operator threads cloth over and around a cylinder whose surface is densely studded with little steel wires or barbs. This cylinder rotates in opposite direction from others, thus drawing out a multitude of little ends of fibers over surface of cloth, giving it desired "fuzzy" effect. Classified as: Other employees.

**Net-drier tender** runs a drier in which a net supports cloth and keeps it off hot cans while it is being dried. See also Drier tender. Classified as: Drier tenders.

**Numberer, tickets.** (See Ticketer.) Classified as: Other employees.

**Oil-spot washer** washes out oil or grease spots from woven goods, using a hand brush or a cloth rubber (a piece of wood corrugated on bottom with a handle on top), a board, soap and water, or prepared chemicals. Classified as: Other employees.

**Open soaper.** (See Soaper tender.) Classified as: Soaper tenders.

**Open stockman, cloth.** (See Stockman, cloth.) Classified as: Other employees.

**Opener, bales, cloth,** opens up bales of cloth as they are received at converting plant or are brought in from storeroom; removes tie bands and burlap from bales, cuts stitches binding pieces and places them in position for inspector or lays out and distributes to other workers; may also pull out ends for sewer. Classified as: Openers.

**Opener, cloth, from rope form.** (See Scutcher tender.) Classified as: Scutcher tenders.

**Opener, hand, cloth, from rope form.** (See Scutcher tender.) Classified as: Scutcher tenders.

**Order clerk.** (See Shipping clerk.) Classified as: Other employees.

**Order packer.** (See Packer.) Classified as: Packers.

**Packer** puts specific number of cuts of folded cloth into packing cases and nails on covers; also trucks cases to shipping or storage departments. Classified as: Packers.

- Packing-box maker.** (See Box maker.) Classified as: Other employees.
- Padding-machine tender** tends machine used for impregnating cloth with mordants, waterproofing materials, etc., which is essentially same as the jig-dyeing machine, except that cloth passes through a pair of squeeze rollers to press out excess liquor before being wound. See also Jig-dyeing machine tender; Dyeing-machine tender. Classified as: Dyeing-machine tenders.
- Paint grinder** operates machine which grinds lumps of paint materials to powder form. Also feeds these materials into hopper of machine. Classified as: Other employees.
- Paint-machine operator, cloth,** operates machine consisting of a large cylinder with a number of bristle brushes around its circumference, used for painting special designs on cloth as it is guided through machine under its rotating cylinder. Classified as: Other employees.
- Painter, cloth.** (See Touch-up man, printed cloth; also Paint-machine operator, cloth.) Classified as: Other employees.
- Palmer operator** operates "Palmer" machine used to press finished cloth. It consists of 1 large heated drum and 3 or 4 smaller rollers. A blanket in form of a belt is threaded over large drum and over small rollers, cloth is run between blanket and heated drum, thus giving cloth its finish pressing. See also Calender tender. Classified as: Calender tenders.
- Pantograph setter** sets up pantograph machine for purpose of transferring design from flat zinc plate to curved surface of copper roller. By this method design may be copied on same scale as original, or on an enlarged or a reduced scale. Various parts of machine are supported in an iron frame near table to which zinc tracing plate is attached and above table is supported "varnisher" roller in which design is to be traced. Tracing point is stylus at end of one of the sides of pantograph. Reproducing points are very small diamonds supported on a rigid bar which is given a horizontal motion; "repeats" to cover width of roller can be made by attaching necessary number of diamond points to this bar. Complicated systems of levers make up back part of machine. Setter must have complete knowledge of machine and considerable skill and accuracy in adjusting various parts, levers, and mechanisms. He sets in rollers, adjusts levers to reproduce design in desired size, adjusts diamond points so they will cut roller in proper places, fastens zinc plate firmly in proper position, and keeps machine oiled and in repair. Classified as: Other employees.
- Pantographer** runs a pantograph machine after pantograph setter has completely set and adjusted it for work desired. Traces all lines of one color on zinc plate. Stylus has a sharp point which fits into grooves cut in plate by plate cutter. Operator sits at table and manipulates stylus with both hands and in addition operates a foot lever which brings the diamond points into contact with roller or releases them. While foot is held on lever, every movement of the stylus causes diamond points to cut a corresponding line in varnish on roller. Operator must be careful to trace only one color on a roller, as a separate roller is used for each different color. Lines cut in error, if discovered, may be painted over. It is possible to set tools so that several repeats around roller as well as those lengthwise of it can be made in one operation. Classified as: Other employees.
- Paper boy** keeps wrapper of cloth bolts supplied with paper and may stick on pasters, or do similar work. Classified as: Other employees.
- Paper taper, folded cloth,** puts paper bands on both ends of folded cloth; may also put on ticket giving name and color of cloth and number of yards. See also Bander, cloth, bolts; Ticketer. Classified as: Other employees.
- Paperer, cloth.** (See Wrapper, cloth.) Classified as: Other employees.
- Paperer, cloth boards.** (See Labeler, cloth boards.) Classified as: Other employees.
- Passer, cloth cuts,** works in cloth room as helper to other workers, performing such duties as passing cuts of cloth from inspector to folder. Classified as: Other employees.
- Paste-board paperer.** (See Labeler, cloth boards.) Classified as: Other employees.
- Paster, cloth boards.** (See Labeler, cloth boards.) Classified as: Other employees.
- Patch boy.** (See Patch-process man.) Classified as: Other employees.
- Patch drier.** (See Patch-process man.) Classified as: Other employees.
- Patch-process man** puts first yard of cloth of new design through all processes and returns it to printer for his inspection and approval. Classified as: Other employees.

- Patch-steamer tender* takes samples of cloth and puts them through steamer processes in usual manner. *See also* Steamer tender. Classified as: Steamer tenders.
- Photo-engraver, cloth designs*, photographs, prints, and etches designs or patterns of cloth onto specially prepared zinc plates which will in turn be reproduced and engraved on copper cylinders. Classified as: Other employees.
- Photographer, cloth designs*, takes photograph, develops negative, makes film, prints, and etches designs on zinc plates. Classified as: Other employees.
- Piece-drier tender*. (*See* Drier tender.) Classified as: Drier tenders.
- Piece dyeing-machine tender* tends machine that dyes cloth goods in open or rope form as distinguished from yarn, skeins, warp, etc. *See also* Spiral dye-beck tender; Dyeing-machine tender. Classified as: Dyeing-machine tenders.
- Piece-goods packer*. (*See* Packer.) Classified as: Packers.
- Piece-goods receiving opener*. (*See* Opener, bales, cloth.) Classified as: Openers.
- Piece-goods washer*. (*See* Washer tender.) Classified as: Washer tenders.
- Piler* watches cloth as it comes from back of any machine where swing folding attachment is used. Keeps it packed down and properly arranged as it falls loosely on truck and removes truck, replacing it with an empty one. Classified as: Pilers.
- Pillowcase cleaner*. (*See* Oil-spot washer.) Classified as: Other employees.
- Pillowcase cloth tearer*. (*See* Tearer, cloth for sheets.) Classified as: Other employees.
- Pillowcase folder*. (*See* Mangle folder.) Classified as: Folders.
- Pillowcase sewer*. (*See* Sheet sewer.) Classified as: Sewers.
- Pillowcase stamper*. (*See* Stamper, cloth, trade mark.) Classified as: Other employees.
- Pillowcase straightener*. (*See* Pillowcase turner.) Classified as: Other employees.
- Pillowcase turner* turns pillowcases right side out by hand, after seaming; may also straighten out seams and make them ready to be pressed. Classified as: Other employees.
- Pillowcase wrapper*. (*See* Wrapper, cloth.) Classified as: Other employees.
- Pipe fitter* cuts and fits new pipe where needed. Repairs and maintains steaming, drying, dyeing, and draining systems. Also may look after sanitary plumbing about plant. Classified as: Other employees.
- Pipe fitter's helper* assists pipe fitter in cutting and fitting steam and other pipe used about plant. Classified as: Other employees.
- Plain calender tender*. (*See* Calender tender.) Classified as: Calender tenders.
- Plaiter* plaits down rope of cloth either in a pit or bin or in a large iron receptacle known as a kier for purpose of bleaching. A wince overhead draws cloth and it falls down into pit or kier. Plaiter directs fall of cloth with wooden stick, causing cloth to lie in laps, forming uniform layers, so it will not tangle when coming out and, if in a kier, so liquor can readily circulate through it. Classified as: Plaiters.
- Plaiter-down*. (*See* Swing tender.) Classified as: Swing tenders.
- Plate cutter, cloth designs*, takes the zinc plate with pencil design drawn on it by sketch maker and with a graver similar to those used by engraver, hand, cuts a slight depression in the zinc plate along pencil lines. This is very exacting work, as lines must be cut to a uniform depth and joints made clean and accurate. Must also keep cutting tools sharp. Classified as: Other employees.
- Plate painter* uses small brush to paint in different colors of design on zinc plate for guidance of pantographer. All of any one color in original must be one color on plate as pantographer traces lines of only one color on a given roller. Classified as: Other employees.
- Plate reloucher, cloth designs*, uses graving instrument by hand to retrace designs on plates that may be imperfect. Classified as: Other employees.
- Polisher, metal*, places copper roller which is to be polished on supports of machine, which permits roller to turn in trough of water; operator holds polishing stone against roller while it rotates in water. Considerable strength is required in placing roller in position and some skill in manipulation of polishing stone; also judgment to determine when roller is sufficiently polished. Classified as: Polishers, metal.
- Polisher, rollers*. (*See* Polisher, metal.) Classified as: Polishers, metal.
- Preparing mangle tender*. (*See* Mangle tender.) Classified as: Mangle tenders.
- Pressman, cloth baling*. (*See* Baler, cloth.) Classified as: Balers.
- Pressure-steamer tender*. (*See* Steamer tender.) Classified as: Steamer tenders.
- Printer, cloth*. (*See* Printing-machine tender.) Classified as: Printing-machine tenders.



- Printer, tickets**, operates small printing press to print tickets, tags, and pasters upon which the style number, yardage, etc., of products are shown. May also print record cards or do other similar work for plant office. Classified as: Other employees.
- Printing-machine tender** operates machine to print designs of one or more colors on cloth together with its dry cans and other appurtenances. Is responsible for proper printing of cloth; adjusts machine and keeps it in repair; starts, stops, and regulates its speed. Watches cloth for imperfections as it is printed and takes immediate steps to correct cause of any defects. For every color in the pattern there is a separate engraved roller and these rollers must be exactly fitted. This work is termed "pitching pattern." Is assisted by back tender, spare hand, and sometimes color boy. Below each copper roller and in contact with it is another roller of wood or a stiff brush called "furnisher" which revolves so that lower part is submerged in the color liquor contained in a pan beneath it and upper part in contact with copper roller, thus furnishing the color to it. Between furnisher and pressure bowl is a sharp, smooth, steel blade called a "doctor" designed to scrape all color off surface and leave it only in engraved parts. Behind printing machine are supports for holding rolls of cloth known as "back greys" and white cloth which is to be printed. Cloth is guided around pressure bowl and between it and several engraved rollers. Each prints its color design on cloth in its proper place to make pattern as designed. Cloth is then guided to dry cans and from these it is swung into folds on truck. Classified as: Printing-machine tenders.
- Printing-machine tender's helper**. (See Spare hand, cloth printing.) Classified as: Other employees.
- Printing-press feeder, tickets**. (See Printer, tickets.) Classified as: Other employees.
- Proctor-drier tender** operates a drier known as the "Proctor." See also Drier tender. Classified as: Drier tenders.
- Process checker**. (See Checker, processes.) Classified as: Other employees.
- Pumper, acid solutions**. (See Acid-pump man.) Classified as: Other employees.
- Pumper, bleaching solutions**. (See Acid-pump man.) Classified as: Other employees.
- Pumper, water**, operates pumps which supply fresh water to washing machines and other places where needed. Classified as: Other employees.
- Pure comb-mangle tender**. (See Mangle tender.) Classified as: Mangle tenders.
- Pure range-mangle tender**. (See Mangle tender.) Classified as: Mangle tenders.
- Push-box man**. (See Trucker.) Classified as: Truckers.
- Quill winder**. (See Yarn winder.) Classified as: Yarn winders.
- Quiller tender**. (See Yarn winder.) Classified as: Yarn winders.
- Rag man** collects defective pieces of cloth cut out by inspectors and other similar waste and places it in sacks or baling press to be sold later as waste. Classified as: Other employees.
- Rag-table sorter**. (See Remnant man.) Classified as: Other employees.
- Range feeder, cloth**, runs a combination dyeing machine and dry can used to dye cloth and then dry it. See also Dyeing-machine tender; Drier tender. Classified as: Dyeing-machine tenders.
- Ranger, dyeing machines**. (See Dyeing-machine tender.) Classified as: Dyeing-machine tenders.
- Ranger, mangle**. (See Mangle tender.) Classified as: Mangle tenders.
- Rear-end man, dry cans**. (See Piler.) Classified as: Pilers.
- Receiving opener, bales, cloth**. (See Opener, bales, cloth.) Classified as: Openers.
- Reclaimer, caustic soda**. (See Caustic-soda reclaimer.) Classified as: Other employees.
- Reclaimer, soap**. (See Soap reclaimer.) Classified as: Other employees.
- Recovery man, chemicals**. (See Caustic-soda reclaimer; also Soap reclaimer.) Classified as: Other employees.
- Red dyeing-machine tender**. (See Dyeing-machine tender.) Classified as: Dyeing-machine tenders.
- Red machine-washer tender**. (See Washer tender.) Classified as: Washer tenders.
- Reed washer tender**. (See Washer tender.) Classified as: Washer tenders.
- Reel winder** operates machine which transfers yarn from spools or bobbins to skeins for purpose of dyeing in skeins. Classified as: Yarn winders.

- Rehandler, folded cloth*, takes regular order of folded cloth from stock and refolds, stamps, and tickets it in special manner as ordered by customer. Classified as: Other employees.
- Remnant man* works in cloth room sorting and bundling short pieces of cloth which may be defective or short pieces cut from regular lengths of cloth by inspectors. Perfect pieces are sorted by lengths and assembled into bundles of 100 yards for sale as remnants. Defective pieces, known as "rags", are later placed in bales and sold as waste. Classified as: Other employees.
- Remnant sorter*. (See Remnant man.) Classified as: Other employees.
- Repairer, machines*. (See Fixer, general.) Classified as: Other employees.
- Return-goods handler* returns poorly processed cloth to various departments for reprocessing. Classified as: Other employees.
- Rewinder, cloth*, rewinds rolls of cloth, cuts out stitches between various cuts, and pastes these ends together thus forming a smooth even surface where these cuts join, which is necessary before running cloth through such machines as calendering, printing, etc., machines. Classified as: Other employees.
- Rewinder, yarn*. (See Yarn winder.) Classified as: Yarn winders.
- Rodman* loads and unloads pressure steamer, a large room-like apparatus used for steaming cloth when a longer period of treatment is required than is possible with ager; in its bottom are steam pipes and at one end is a large door which closes hermetically. On a false bottom are two rails which can be extended outside chamber when door is opened so that carriage or rack which supports cloth can be moved in an out to load and unload. Three rodmen usually work together and look after three steamers. Prior to loading, 3 or 4 pieces of cloth are drawn together and swung off onto a truck as one sheet. Rodmen hang all pieces as one over wooden rods or pins of cloth carriage so as to get as many up and down stretches as possible. When loaded, rodmen push carriage into chamber and close door. After cloth has been treated sufficiently steam is turned off, rodmen pull out carriage, remove rods and pile cloth on a truck and send it to swing tender to separate pieces and swing-plait cloth. Classified as: Rodmen.
- Rodney Hunt washer operator* operates washer known as a "Rodney Hunt." See also Washer tender. Classified as: Washer tenders.
- Roll calender tender*. (See Calender tender.) Classified as: Calender tenders.
- Roll hauler cloth*, removes rolls of cloth from machine and hauls them to packing and shipping department. Classified as: Truckers.
- Roll-off machine operator*. (See Swing tender.) Classified as: Swing tenders.
- Roll pusher*. (See Trucker.) Classified as: Truckers.
- Roller handler, printing*. (See Jackman, printing.) Classified as: Jackmen, printing.
- Roller inspector* works at bench like engraver, hand; examines engraved roller very carefully. If lines are missing, cuts them in with a graver. If lines are engraved where they should not be, fills them up with copper, by laying in piece of copper wire, cut to proper length to fill groove, then pounds this in with a light hammer and rubs it over with a burnishing steel to smooth it. This is fine and exacting work, as failure to find mistakes will cause much trouble later. This work is sometimes done by engraver, hand. Classified as: Other employees.
- Roller painter* uses small brush by hand to cover with varnish certain parts of roller that have been indicated by some mark as not to be etched. Care must be exercised to put varnish only where directed and to make varnish edge clear cut. Classified as: Other employees.
- Roller polisher*. (See Polisher, metal.) Classified as: Polishers, metal.
- Roller storer, engravings*. (See Shell-room man, engraved rollers.) Classified as: Other employees.
- Roller turner* operates specially devised lathe to turn copper rollers down to proper size, also turns designs off discarded rollers. Operator centers and fastens stock in position on machine, turns power on and off, also makes adjustments of machinery during its operation. After roller is turned down to proper size, may burnish it by holding smooth piece of steel against it. Classified as: Roller turners.
- Roller varnisher* coats copper rollers for pantographing with an acid-resisting substance called in the trade "varnish." After it has been polished roller is placed in a turning machine and quantity of varnish is dabbed in it with a brush; roller is then turned by power while varnisher presses a smooth strip of wood against it to spread varnish evenly over roller, which is then taken out, stood on end and boiling water poured into it, thus heating roller and

- melting varnish just enough to make it absolutely smooth. Roller is then allowed to cool and is ready for pantographing. May also mix and boil varnish. Classified as: Other employees.
- Rollerman, engraving.* (See Engraver, hand.) Classified as: Engravers, hand.
- Rope soaper tender.* (See Soaper tender.) Classified as: Soaper tenders.
- Salvager, bagging,* sorts and reclaims usable burlap which has been removed from incoming bales of goods, and places them in bundles or sacks; straightens out metal tie-bands, and may repaint them by dipping for use on shipments. Classified as: Other employees.
- Sample card man.* (See Sample maker.) Classified as: Other employees.
- Sample checker* compares samples of cloth on card with cloth and order for same. Classified as: Other employees.
- Sample cutter* cuts samples out of cloth along lines indicated by swatch folder. Sometimes uses a die or punch, which he hits on the head with a mallet, or an automatic knife. When the latter is used, cloth is held firm by operator with a foot lever and knife is guided by hand. These employees sometimes do swatch folding, card and bookmaking, and mailing. Classified as: Other employees.
- Sample maker* uses a small brush to spread paste by hand on samples of cloth, which have been cut to specific size and sticks them in proper position on cards prepared for them. Sometimes binds several of these cards together to make a book of samples. See also Sample cutter; and swatch folder. Classified as: Other employees.
- Sample steamer.* (See Patch-steamer tender.) Classified as: Steamer tenders.
- Sanforize tester* determines by tests how much cloth goods should be shrunk both as to width and length so that future laundering of the cloth will not shrink it any more. Classified as: Other employees.
- Sanforizer, cloth,* operates special machine used for shrinking cloth in similar manner to that described under "shrinking-machine operator, cloth," except that in sanforizing method machine is specially arranged so that cloth is shrunken to its fullest extent. Classified as: Other employees.
- Saturating-machine tender.* (See Washer tender.) Classified as: Washer tenders.
- Sawyer, shipping-case parts,* operates power saw to trim boards to proper sizes for making shipping cases for product. Classified as: Other employees.
- Schreiner tender* operates a machine that imparts a wavy appearance to cloth. In this finishing operation cloth is passed between rolls covered with great number of finely engraved lines cut in wavy formation. When put under pressure of about 4,500 pounds, these ridges of rolls are pressed into fabric thus producing wavy effect, with result that flat surface of cloth is broken up into little planes that reflect light in special manner. Heating of rolls makes this reflected luster more lasting. Mercerized cotton in Schreiner finish rivals silk in appearance. Classified as: Calender tenders.
- Scrubber* washes floors in plant either by hand, using a brush, mop, and water, or a machine with a rotating device which causes brushes to move in a circular motion thus cleaning floor. Classified as: Other employees.
- Scutcher tender* tends a scutcher machine which is designed to open cloth to its full width after it has been bleached, dyed, or otherwise processed in rope form. Machine consists of a beater and scrimp rail and a pair of drag rollers. It is supported near ceiling with a considerable stretch between it and the last pot-eye through which cloth passes. This arrangement permits cloth to open up as much as possible before reaching scutcher, and prevents twisting and tangling. Cloth is drawn by drag rollers of scutcher first coming in contact with beater which revolves against direction of cloth and thus opens it to width. As cloth passes over scrimp rail, it is stretched out and freed of creases. Cloth can now be swung onto a truck or led to another machine. As scutcher machines require little attention, their operators also often tend other machines, such as mangles, or swing folders. Classified as: Scutcher tenders.
- Second hand* assists overseers, work being more or less of a supervisory nature. Is responsible for having work come from machines according to specifications; sees that employees are doing their work and doing it properly; issues orders; and makes or supervises the making of important changes or repairs of machinery. Classified as: Other employees.
- Seconds sorter* arranges seconds of sheets and pillowcases in proper size and grade. Classified as: Other employees.
- Section hand* occupies a supervisory position directly under second hand. Has charge of certain sections in which he must supervise workers and see that

- work comes off machines properly; makes repairs and changes in machinery; and sees that machines are properly oiled and cleaned. Classified as: Other employees.
- Serging-machine operator* operates sewing machine to stitch row of binding stitches at end of cloth to prevent raveling. See also Sewer. Classified as: Sewers.
- Sewer* sews together, in various departments, cuts or pieces of cloth or ends of rolls to make a continuous run of cloth of desired length. Sewer uses an ordinary sewing-machine head fastened in a small portable iron frame about 3 feet high. It can be operated with a pedal or by motor; leading end of piece of cloth is lapped over tail end of another and sewed together. Stitches are usually large and loose and can be easily ripped out. May also sew and hem sheets and pillowcases. Classified as: Sewers.
- Shearing-machine operator.* (See Sewer.) Classified as: Sewers.
- Shade-cloth paperer.* (See Wrapper, cloth.) Classified as: Other employees.
- Shade grader, cloth.* (See Shade matcher, cloth.) Classified as: Other employees.
- Shade matcher, cloth,* matches shades or colors of various pieces of dyed cloth, placing them on trucks for shipment or storage, grouped according to color. Classified as: Other employees.
- Shader, cloth.* (See Shade matcher, cloth.) Classified as: Other employees.
- Shearer, cloth.* (See Shearing-machine operator.) Classified as: Other employees.
- Shearing-machine operator* operates machine which shears off protruding fiber from one side of cloth as it passes through, leaving an even and smooth surface. Classified as: Other employees.
- Sheet cleaner.* (See Oil-spot washer.) Classified as: Other employees.
- Sheet-cloth picker* selects rolls of cloth from stock room which are to be made into sheets. Classified as: Other employees.
- Sheet-cloth tearer.* (See Tearer, cloth for sheets.) Classified as: Other employees.
- Sheet folder:* (See Mangle folder.) Classified as: Folders.
- Sheet hemmer.* (See Sheet sewer.) Classified as: Sewers.
- Sheet inspector.* (See Inspector, cloth.) Classified as: Inspectors.
- Sheet-metal worker* uses hand tools or may operate special machines to cut, punch, or bend cold plate or sheet metal into various sizes or shapes for use about finishing plant. Classified as: Other employees.
- Sheet sewer* operates sewing machine to put hems in sheets and pillowcases. See also Sewer. Classified as: Sewers.
- Sheet stamper.* (See Stamper, cloth, trade mark.) Classified as: Other employees.
- Sheet wrapper.* (See Wrapper, cloth.) Classified as: Other employees.
- Shell-room man, engraved rollers,* uses hand truck to convey copper rollers from storage room to engraving department and from engraving department to printing department; maintains records of rollers being used, and stores them on racks when not in use. Classified as: Other employees.
- Shipping clerk* directs work of packing and marking bales and packages for shipment, may assist in loading cars and trucks, and maintains records of all shipments. Classified as: Other employees.
- Short tenter-frame tender.* (See Tenter-frame tender.) Classified as: Tenter-frame tenders.
- Shrinking-machine operator, cloth,* operates a machine used to shrink cloth. It consists principally of a long trough containing boiling water, with straps or belts along side edges, pins protruding from these belts. Racks are on each end of the trough to support the rolls of cloth as they are unwound and wound again. Cloth is placed on rack on one end of trough and fed through an automatic feeder device which hooks the edges of cloth on the pins protruding from the belts along each edge of the trough in such a manner that there is a slight gathering between each pin, this gathering being governed by the amount cloth is to be shrunk. Cloth is carried over steam arising from boiling water thus causing it to shrink, and is wound onto a roll on other end of machine. Classified as: Other employees.
- Silicate-washer tender.* (See Washer tender.) Classified as: Washer tenders.
- Singer* runs a singeing machine which burns nap off cloth. Operator watches cloth, as it runs through very rapidly, to see that it goes smoothly and flat and that it comes off properly singed and not scorched. Keeps plates at proper temperature and feeds fuel, or if a gas machine, must regulate flame. Machine must be run constantly, for slightest stop is sure to burn cloth. When not running, machine is left threaded with a leader. There are two types of machines—plate and gas. Plate type consists of two curved copper plates

X9(M7:4):9570295273

- set in fire clay over fire box in which coke or oil is burned. Cloth is led in open width into machine from back, passes under guide rollers over hot plates, through water mangle and out. While passing over plates, nap is burned off. Gas type has two long rows of Bunsen burners slightly longer than width of cloth. Cloth in open width is led first through one flame, around three or four guide rollers, then through other flame, then through water mangle and out. Classified as: Singers.
- Straw boss, working.* (See Straw boss; also Working foreman.) Classified as: Other employees.
- Singeing-machine tender.* (See Singer.) Classified as: Singers.
- Single piler.* (See Piler.) Classified as: Pilers.
- Size hauler.* (See Trucker.) Classified as: Truckers.
- Size maker* mixes together and boils materials necessary to make preparation known as "size" used for starching or filling cloth goods to give it body and weight. Classified as: Other employees.
- Skein-goods packer.* (See Packer.) Classified as: Packers.
- Skein-goods receiving opener* opens up bales of skein yarn received at converting plant for dyeing, etc.; checks contents and distributes it to proper department. Classified as: Openers.
- Skein winder.* (See Reel winder.) Classified as: Yarn winders.
- Skein-yarn boiler-off.* (See Boil-off man, skein yarn.) Classified as: Other employees.
- Skein-yarn drier* places skeins of yarn on a pole and lays a number of poles on a rack. Rolls entire rack into drying oven. Classified as: Other employees.
- Skein-yarn dyer.* (See Dyer, skein yarn.) Classified as: Other employees.
- Skein-yarn finisher.* (See Finisher, skein yarn.) Classified as: Other employees.
- Skein-yarn mercerizer.* (See Hanger man, yarn mercerizing.) Classified as: Other employees.
- Sketch maker* uses sketch camera to make enlarged sketches of cloth patterns prepared by designer. This camera consists of lenses, reflector, and strong electric light. Design is put into camera and when light is turned on reflection of design is thrown on a flat surface or table. Instrument can be adjusted so as to throw an image increased any number of times size of original (5 times being usual). Sketch maker places on table flat sheet of zinc, usually about a foot square, the surface of which is painted white. When room is darkened, enlargement of design is reflected very clearly on this white surface. Sketch maker traces design in pencil on zinc, then takes zinc plate back to drawing table where he smooths out lines and corrects imperfections that are brought out in enlargement. Also outlines every different color and shade; may even rearrange repeats of design on approval of overseer. Plate is then ready for plate cutter. Classified as: Other employees.
- Skying watcher, warp oxidizing,* watches warp while it is being oxidized, after it has been through dye vat, to detect any break or other accident. Classified as: Other employees.
- Soap mixer* fills large mixing tanks with water and measures in definite quantities of powdered soap, soda ash, and other ingredients, as directed by foreman. Tanks are mechanically agitated and mixer has control of this mechanism. Soap solution when ready is drawn off by gravity. Classified as: Soap mixers.
- Soap-mixer boss, working.* (See Straw boss; also Working foreman.) Classified as: Other employees.
- Soap reclaimer* uses chemicals to reclaim soap from solutions that have been used in finishing processes of cloth. Classified as: Other employees.
- Soaper tender* runs an open soaper machine in which cloth is soaped, washed, and treated with a "fixing" agent after it is printed. Tender fills becks with proper liquor, starts and stops machine, sees that cloth is running through smoothly, and oils, cleans, and repairs machine. Machine consists of a series of 5 or 6 vats called "becks" set fairly close together and just wide enough to give one width of cloth a thorough immersion. On back edge of each beck is a pair of bowls, one brass and the other of rubber, used to squeeze out the liquor before it goes to the next, and inside each beck are guide rollers and a beater to agitate the liquor and throw it against cloth. Contents of becks vary with kind of work, but usually fixing agent is in first, water in second, soap in third and fourth, and water in fifth and sixth. Steam can be injected to heat liquor if necessary. Cloth goes through in a continuous sheet from one beck to the next, being squeezed between each and finally passes to a set of dry cans where it is dried and plaited down on trucks. Classified as: Soaper tenders.
- Sorter, cloth stock.* (See Assorter, cloth stock; also Seconds sorter.) Classified as: Other employees.

- Sorter, remnants.* (See Remnant man.) Classified as: Other employees.
- Sour-bleaching plaiter.* (See Plaiter.) Classified as: Plaiters.
- Spare hand, cloth printing,* acts as a general all-round assistant to printer, doing heavy and dirty work connected with cloth printing. Assists back tender to set up rolls of cloth and to take down color boxes and brushes at night. Rubs excess color off brushes into proper pans, empties colors into tubs, and trucks pans and brushes out to be washed. Washes floor around machine each night. Classified as: Other employees.
- Spare hand, general,* is a general worker with considerable experience on various kinds of work who fills in for absent workers or performs extra work wherever needed. May do heavy lifting, trucking, etc. Classified as: Other employees.
- Spare piler.* (See Piler.) Classified as: Pilers.
- Spiral dye-beck tender* runs a spiral dye-beck machine with curved bottom trough or beck, usually about 5 or 6 feet long. Machine is used to dye cloth in rope form. It is led in at one end and passes in a spiral to the other end, receiving as many dips as are necessary. Surplus cloth is left in bottom as it passes through to allow for a longer immersion. Cloth is run through squeeze rollers to remove the excess dye. See also Dyeing-machine tender. Classified as: Dyeing-machine tenders.
- Splitter, warp,* separates or splits ends of warp after it has been dyed, by grouping a certain number of threads or ends together according to pattern as required for each loom beam on which it is wound. Classified as: Other employees.
- Spool winder.* (See Yarn winder.) Classified as: Yarn winders.
- Spot washer.* (See Oil-spot washer.) Classified as: Other employees.
- Sprinkler tender* operates cloth-winding machine equipped with a dewing or sprinkling device which sprays cloth with water as it is being wound on rolls. Sprinkling is an important step, since it is essential that cloth has proper amount of moisture to receive desired finish at calender. Rolls of wound cloth, after sprinkling, are allowed to stand a specified time before being set up to calender machine. See also Batcher, cloth winder. Classified as: Sprinkler tenders.
- Stamper, cloth, trade mark,* uses a woodcut or other stamping device with ink-pad to print trade mark or emblems on top fold of each cut of cloth, taking care to place it in proper position, or may use inkpot, brush, and stencil for this purpose. Classified as: Other employees.
- Standard color maker.* (See Color mixer.) Classified as: Color mixers.
- Starch boiler.* (See Size maker.) Classified as: Other employees.
- Starch maker.* (See Size maker.) Classified as: Other employees.
- Starch mangle drier.* (See Mangle tender.) Classified as: Mangle tenders.
- Starch mangle tender.* (See Mangle tender.) Classified as: Mangle tenders.
- Starch mixer.* (See Size maker.) Classified as: Other employees.
- Starch mixer boss, working.* (See Straw boss; also Working foreman.) Classified as: Other employees.
- Starch pourer* watches starch box of mangle and keeps it filled with proper amount of starch solution. Classified as: Other employees.
- Steamer boss, working.* (See Straw boss; also Working foreman.) Classified as: Other employees.
- Steamer tender* has charge of the pressure steamers, which are large cylindrical iron chambers used for steaming cloth for longer periods than required by ager. Keeps accurate check on time that each batch of cloth is in steamer; maintains steam to certain pressure; every 15 minutes must operate device on outside of each steamer which turns over rods on inside of cylinder on which cloth is loaded, thus avoiding "rod marking" of cloth. Cloth is loaded into this steamer by rodmen. Cloth is steamed from 1 to 2 hours. Classified as: Steamer tenders.
- Steel-cylinder turner.* (See Steel turner.) Classified as: Other employees.
- Steel turner* operates specially devised lathe to turn steel dies and mills down to proper size, and also to turn off steel surface on mill outside design to make design stand out clearly. Operator places steel stock in lathe, adjusts cutting tools, and turns power on and off. After piece is turned down to a given size, may also smooth its surface. Classified as: Other employees.
- Stenciler* uses inkpot and stencil cut-out forms to print on each bale, box, or case for shipment its contents, name and address of shipper, as well as to whom consigned. Classified as: Other employees.
- Stitcher, cloth pieces,* sews together the ends of successive packs of cloth in various departments, or stitches strings to cloth on which tags are hung. See also Sewer. Classified as: Sewers.

- Stock opener, cloth.* (See Opener, bales, cloth.) Classified as: Openers.
- Stockman, cloth,* supervises work in cloth storeroom, maintains records of quantity on hand and how distributed, and sees that it is segregated according to style, color, weight, etc., looks after filling of orders or making up cases and may assist in this work. Classified as: Other employees.
- Stockman, colors.* (See Color stockman.) Classified as: Other employees.
- Stockman, dry drugs.* (See Dry-drug man.) Classified as: Other employees.
- Stockman, engraved rollers.* (See Shell-room man, engraved rollers.) Classified as: Other employees.
- Stockman, supplies,* supervises work of unpacking supplies, such as brooms, brushes, machine parts, etc., storing them in bins or other specified places; looks after their distribution, maintaining records of stocks on hand and how distributed, and may also assist in this work. Classified as: Other employees.
- Storekeeper.* (See Stockman, supplies.) Classified as: Other employees.
- Strainer, colors,* squeezes through cloth strainer into tubs colors, paste, etc., which were measured out by color mixer. This is done by twisting end of cloth, forcing liquor through. Usually strains only a few dipperfuls at a time but sometimes a tubful is strained at once by means of a screw device which forces liquor through small eye by turning hand crank. Cloth is fastened to end of screw. Liquor is strained to remove lumps or hard substances of any kind. Classified as: Other employees.
- Straw boss* is responsible for correct performance of work done by specific group of employees and regularly works with them. Classified as: Other employees.
- Stretcher, cloth.* (See Tenter-frame tender.) Classified as: Tenter-frame tenders.
- Supply man.* (See Stockman, supplies.) Classified as: Other employees.
- Swatch folder* marks and folds a piece of cloth so that sample cutter can get greatest number of samples out of it with least possible waste. Sample cutters sometimes do this work. Classified as: Other employees.
- Sweeper* uses brush or broom to gather up waste and dirt from floors of plant and places it in receptacle for removal. Classified as: Other employees.
- Swing-folder tender.* (See Swing tender.) Classified as: Swing tenders.
- Swing tender* watches cloth, keeps it packed down and properly arranged as it comes from back of any machine where swing-folding attachment is used, thus folding it loosely on truck; moves each full truck away and replaces it with an empty one, tearing off cloth to start a new batch. Machine consists of drag and guide rollers and arms that swing back and forth as cloth is delivered to truck. Classified as: Swing tenders.
- Table worker* does wrapping, tagging, marking, etc., of cuts of cloth, making them ready for shipment. See also Wrapper, cloth; Ticketer; Stamper, cloth trade mark. Classified as: Other employees.
- Tacker, folded cloth.* (See Knotter.) Classified as: Knotters.
- Tagger, cloth.* (See Ticketer.) Classified as: Other employees.
- Taper, folded cloth.* (See Paper taper, folded cloth.) Classified as: Other employees.
- Tearer, cloth for sheets,* tears by hand from rolls of cloth pieces of specified length or size for sheets or pillowcases which are to be hemmed. Classified as: Other employees.
- Tenter feeder.* (See Tenter-frame tender.) Classified as: Tenter-frame tenders.
- Tenter-frame boss, working.* (See Working foreman.) Classified as: Other employees.
- Tenter-frame clipper* operates tenter frame that has hand clips in place of automatic clips. This feeder closes clips by hand on the selvage of the cloth. This type of machine requires two employees working together. (See also Tenter-frame tender. Classified as: Tenter-frame tenders.
- Tenter-frame feeder.* (See Tenter-frame tender.) Classified as: Tenter-frame tenders.
- Tenter-frame foreman, working.* (See Working foreman.) Classified as: Other employees.
- Tenter-frame tender* feeds cloth into tentering machine, which stretches it by means of pins or clips on two endless chains, which grip selvage of cloth and operate along each side of machine, beginning narrow and diverging as they move along, gradually stretching cloth to desired width, and keeps it thus stretched while it is being dampened and dried after dyeing or starching. Tender sets roll of cloth on unwinding spindle, threads end of cloth through tension rollers, over endless band of clips or pins and so to delivery end of

- machine where clips are automatically released; assists by hand engagement of edge of cloth by pins or clips (some machines are equipped with automatic guides, and may also be equipped with special mechanical movement of clip chains to restore warp and filling to its correct shape); adjusts by screws position of pins or clips to determine width of cloth; sometimes also regulates passage of steam through drying pipes or temperature in hot-air drying chamber. Classified as: Tenter-frame tenders.
- Tenter-machine tender* removes trucks loaded with rolls of finished cloth from delivery end of the tentering machine and replaces them with empty ones. Classified as: Other employees.
- Tester, cloth shrinking*, puts samples of shrunken cloth through laundry and returns them to shrinking-machine tender for his inspection and approval. See also Sanforize tester. Classified as: Other employees.
- Tester, laboratory.* (See Laboratory tester.) Classified as: Other employees.
- Tester, sanforizing.* (See Sanforize tester.) Classified as: Other employees.
- Third hand* is a general utility man who assists second hand in supervising work which is being done by other employees. Classified as: Other employees.
- Throw-outs handler.* (See Grader, cloth.) Classified as: Other employees.
- Ticket maker.* (See Ticketer.) Classified as: Other employees.
- Ticket printer.* (See Printer, tickets.) Classified as: Other employees.
- Ticketer* uses rubber stamp and ink-pad to stamp style number, yardage, quality, etc., on tags and pasters and pastes them on cloth or sews a tag onto selvage. Each cut of cloth must be properly marked before it goes to packing room. Classified as: Other employees.
- Tie-band painter* cleans metal tie-bands which were cut from incoming bales of cloth, and dips them in vats of paint so that they may again be used. Classified as: Other employees.
- Tie-band salvager.* (See Salvager, bagging; also Tie-band painter.) Classified as Other employees.
- Tommy Dodd mangle tender* operates a mangle known as "Tommy Dodd." See also Mangle tender. Classified as: Mangle tenders.
- Touch-up man, printed cloth*, uses brush by hand with paints of various colors to touch up and correct defects in printed designs on cloth. Classified as: Other employees.
- Transfer man, trucking.* (See Trucker.) Classified as: Truckers.
- Transfer operator.* (See Pantographer.) Classified as: Other employees.
- Trimmer, window shades.* (See Window-shade trimmer.) Classified as: Other employees.
- Truck operator.* (See Electric trucker.) Classified as: Truckers.
- Truck operator's helper* rides power truck to and from various departments of plant to help operator load and unload supplies, colors, chemicals, cloth rolls, etc. Classified as: Other employees.
- Trucker* uses hand or power truck to convey colors, chemicals, supplies, materials, or rolls or cuts of cloth from one department to another or from one section of department to another. Classified as: Truckers.
- Tub cleaner.* (See Tub washer.) Classified as: Tub washers.
- Tub washer* uses hand brush with warm water in large sink to wash color and other substances from wooden tubs used for color liquors in mixing and printing rooms. Classified as: Tub washers.
- Tube handler* is stationed at each end of a continuous steamer. One puts brass tubes from which cloth is suspended in steamer in proper place so they will drop into position automatically; the other picks them up as they are discharged at other end of steamer, and puts them on conveyor which carries them back to going-in end. Atmosphere around machine is hot and humid and tubes are hot. Men wear asbestos packs to protect their hands. Classified as: Other employees.
- Turner-steam tender.* (See Steamer tender.) Classified as: Steamer tenders.
- Two-end pier.* (See Plier.) Classified as: Pliers.
- Tying-machine operator, cloth, bolts*, places each bolt or hand-folded parcel of cloth on a tying machine where a tape is automatically wrapped around it and tied to hold cloth in shape folded. See also Bander, cloth, bolts. Classified as: Other employees.
- Typesetter* sets type on small press mold used for printing numbers on samples. See also Printer, tickets. Classified as: Other employees.
- Utility man* does general work about plant, such as relieving operators, helping others, etc., working under the direction of foremen or their assistants. Classified as: Other employees.



- Varnisher, rollers.** (See Roller varnisher.) Classified as: Other employees.
- Vat tender, warp dyeing,** operates mechanical devices used for dyeing warp yarn; starts and stops machines, opens and closes valves which supply dye liquids, water, etc., to vats; watches warp to see that it is running properly through vats and various squeeze rollers, and if it tangles or end breaks, must stop machine and call section hand to fix it. When warp is completely run through, takes it off warp racks and places it on truck and shifts empty warp rollers to balling apparatus and starts new warp. When warp or chain yarn is started through, it must be run until finished. Classified as: Other employees
- Wagon roller.** (See Trucker.) Classified as: Truckers.
- Warehouseman, bale opening, cloth.** (See Opener, bales, cloth.) Classified as: Openers.
- Warp boiler.** (See Box tender, warp boiling.) Classified as: Other employees.
- Warp coiler.** (See Coiler, warp.) Classified as: Other employees.
- Warp drier.** (See Dry-can man, warp.) Classified as: Other employees.
- Warp dyer.** (See Vat tender, warp dyeing.) Classified as: Other employees.
- Washer boss, working.** (See Straw boss; also Working foreman.) Classified as: Other employees.
- Washer, brushes.** (See Brush washer.) Classified as: Other employees.
- Washer, color-bag strainer.** (See Bag washer, color straining.) Classified as: Other employees.
- Washer, color boxes.** (See Color-box washer.) Classified as: Other employees.
- Washer feeder.** (See Washer tender.) Classified as: Washer tenders.
- Washer, oil spots.** (See Oil-spot washer.) Classified as: Other employees.
- Washer tender** runs washing machine or saturating tank to wet cloth in preparation for bleaching or to wash out chemicals or other foreign substances after various processes. Keeps machine threaded with a leader and ties cloth to it when ready to start. Turns on liquor in machine and draws it off when through. Has control over starting and stopping and looks after oiling and cleaning of machine; sees that cloth is running through smoothly and stops machine or otherwise takes care of the situation if anything goes wrong. Machine consists of a vat or tub to hold liquor with various sets of rollers to draw cloth through and squeeze out excess liquor. Cloth is guided into and out of liquor in successive dips and excess liquor is squeezed out between each dip. Classified as: Washer tenders.
- Washer, tubs.** (See Tub washer.) Classified as: Tub washers.
- Waste collector.** (See Rag man.) Classified as: Other employees.
- Waste man, bagging.** (See Salvager, bagging.) Classified as: Other employees.
- Watcher, steamer windows,** watches attentively through a glass window in side of large continuous cloth steamer to see that cloth folds over rods properly. One watcher is stationed at going-in end of steamer, to see that rods go in and cloth folds start correctly. Another is stationed at other end to see that they come out properly. Each man watches at one end of two steamers. If anything goes wrong, he calls second hand's attention to it. Classified as: Other employees.
- Water boxman, washing.** (See Washer tender.) Classified as: Washer tenders.
- Water-mangle tender.** (See Mangle tender.) Classified as: Mangle tenders.
- Water proofer** runs machine which uses waterproofing liquid instead of dye for impregnating cloth. See also Padding-machine tender. Classified as: Dyeing-machine tenders.
- Water pumper.** (See Pumper, water.) Classified as: Other employees.
- Weighman, cloth,** piles cuts or rolls of cloth that are to be nailed, packed, or burlapped, onto scales in various departments, weighs them and calls off weight and number of yards in each to an adding-machine operator, booker, or record clerk. Classified as: Other employees.
- Weighman, dry drugs.** (See Dry-drug man.) Classified as: Other employees.
- Wet finisher, cloth.** (See Shrinking-machine operator, cloth.) Classified as: Other employees.
- Water out.** (See Washer tender.) Classified as: Washer tenders.
- White-roll man, trucking.** (See Trucker.) Classified as: Truckers.
- White sowing washer, cloth.** (See Washer tender.) Classified as: Washer tenders.
- White-washer piler.** (See Piler.) Classified as: Pilers.
- Winder, boiling off.** (See Batcher, cloth winder.) Classified as: Batchers, cloth winders.

### Industrial accidents and hygiene—Continued

- \*No. 179. Industrial poisons used in the rubber industry. [1918.]
- No. 188. Report of British departmental committee on the danger in the use of lead in the painting of buildings. [1916.]
- \*No. 201. Report of the committee on statistics and compensation insurance costs of the International Association of Industrial Accident Boards and Commissions. [1916.]
- No. 209. Hygiene of the printing trades. [1917.]
- \*No. 219. Industrial poisons used or produced in the manufacture of explosives. [1917.]
- No. 221. Hours, fatigue, and health in British munition factories. [1917.]
- No. 230. Industrial efficiency and fatigue in British munition factories. [1917.]
- \*No. 231. Mortality from respiratory diseases in dusty trades (inorganic dusts). [1918.]
- \*No. 234. The safety movement in the iron and steel industry, 1907 to 1917.
- \*No. 236. Effects of the air hammer on the hands of stonecutters. [1918.]
- \*No. 249. Industrial health and efficiency. Final report of British Health of Munitions Workers Committee. [1919.]
- \*No. 251. Preventable death in the cotton-manufacturing industry. [1919.]
- No. 256. Accidents and accident prevention in machine building. [1919.]
- No. 267. Anthrax as an occupational disease. [1920.]
- No. 276. Standardization of industrial accident statistics. [1920.]
- \*No. 280. Industrial poisoning in making coal-tar dyes and dye intermediates. [1921.]
- \*No. 291. Carbon monoxide poisoning. [1921.]
- No. 293. The problem of dust phthisis in the granite-stone industry. [1922.]
- No. 298. Causes and prevention of accidents in the iron and steel industry, 1910-1919.
- No. 392. Survey of hygienic conditions in the printing trades. [1925.]
- No. 406. Phosphorus necrosis in the manufacture of fireworks and in the preparation of phosphorus. [1926.]
- No. 427. Health survey of the printing trades, 1922 to 1925.
- No. 428. Proceedings of the Industrial Accident Prevention Conference, held at Washington, D.C., July 14-16, 1926.
- No. 460. A new test for industrial lead poisoning. [1928.]
- No. 466. Settlement for accidents to American seamen. [1928.]
- No. 488. Deaths from lead poisoning, 1925-1927.
- No. 490. Statistics of industrial accidents in the United States to the end of 1927.
- No. 507. Causes of death, by occupation. [1930.]
- No. 581. Occupation hazards and diagnostic signs: A guide to impairments to be looked for in hazardous occupations. [1922.]

### Industrial relations and labor conditions

- No. 237. Industrial unrest in Great Britain. [1917.]
- \*No. 240. Chinese migrations, with special reference to labor conditions. [1928.]
- No. 249. Industrial relations in the West Coast lumber industry. [1923.]
- \*No. 261. Labor relations in the Fairmont (W. Va.) bituminous-coal field. [1924.]
- No. 280. Postwar labor conditions in Germany. [1925.]
- No. 283. Works council movement in Germany. [1925.]
- No. 284. Labor conditions in the shoe industry in Massachusetts, 1920-1924.
- No. 299. Labor relations in the lace and lace-curtain industries in the United States. [1926.]
- No. 534. Labor conditions in the Territory of Hawaii, 1920-1930.

### Labor laws of the United States (including decisions of courts relating to labor)

- No. 211. Labor laws and their administration in the Pacific States. [1917.]
- No. 229. Wage payment legislation in the United States. [1917.]
- No. 268. Minimum wage laws of the United States: Construction and operation. [1921.]
- No. 321. Labor laws that have been declared unconstitutional. [1922.]
- No. 343. Laws providing for bureaus of labor statistics, etc. [1923.]
- No. 370. Labor laws of the United States with decisions of courts relating thereto. [1926.]
- No. 408. Laws relating to payment of wages. [1926.]
- No. 548. Decisions of courts and opinions affecting labor, 1920-1930.
- No. 552. Labor legislation, 1930.
- No. 581. Laws relating to employment agencies in the United States as of January 1, 1930.

### Proceedings of annual conventions of the Association of Governmental Officials in Industry of the United States and Canada. (Name changed in 1928 from Association of Governmental Labor Officials of the United States and Canada)

- \*No. 266. Seventh, Seattle, Wash., July 12-15, 1920.
- No. 307. Eighth, New Orleans, La., May 2-6, 1921.
- \*No. 323. Ninth, Harrisburg, Pa., May 22-26, 1922.
- \*No. 352. Tenth, Richmond, Va., May 1-4, 1923.
- \*No. 389. Eleventh, Chicago, Ill., May 19-23, 1924.
- \*No. 411. Twelfth, Salt Lake City, Utah, August 13-15, 1925.
- \*No. 429. Thirteenth, Columbus, Ohio, June 7-10, 1926.
- \*No. 455. Fourteenth, Paterson, N.J., May 31 to June 3, 1927.
- \*No. 480. Fifteenth, New Orleans, La., May 21-24, 1928.
- No. 506. Sixteenth, Toronto, Canada, June 4-7, 1929.
- No. 530. Seventeenth, Louisville, Ky., May 20-23, 1930.
- No. 563. Eighteenth, Boston, Mass., May 18-22, 1931.
- No. 577. Nineteenth, Columbus, Ohio, September 26-29, 1932.

### Proceedings of annual meetings of the International Association of Industrial Accident Boards and Commissions

- No. 210. Third, Columbus, Ohio, April 25-28, 1916.
- No. 243. Fourth, Boston, Mass., August 21-25, 1917.
- No. 264. Fifth, Madison, Wis., September 24-27, 1918.
- \*No. 273. Sixth, Toronto, Canada, September 23-26, 1919.
- No. 281. Seventh, San Francisco, Calif., September 20-24, 1920.
- No. 304. Eighth, Chicago, Ill., September 19-23, 1921.
- No. 333. Ninth, Baltimore, Md., October 9-13, 1922.
- \*No. 369. Tenth, St. Paul, Minn., September 24-26, 1923.
- No. 384. Eleventh, Halifax, Nova Scotia, August 26-28, 1924.

**Proceedings of annual meetings of the International Association of Industrial Accident Boards and Commissions—Continued**

- No. 395. Index to proceedings, 1914-1924.
- No. 406. Twelfth, Salt Lake City, Utah, August 17-20, 1925.
- No. 432. Thirteenth, Hartford, Conn., September 14-17, 1926.
- No. 456. Fourteenth, Atlanta, Ga., September 27-29, 1927.
- \*No. 485. Fifteenth, Paterson, N. J., September 11-14, 1928.
- No. 511. Sixteenth, Buffalo, N. Y., October 5-11, 1929.
- No. 536. Seventeenth, Wilmington, Del., September 22-25, 1930.
- No. 564. Eighteenth, Richmond, Va., October 5-8, 1931.

**Proceedings of annual meetings of the International Association of Public Employment Services**

- No. 192. First, Chicago, December 19 and 20, 1913; second, Indianapolis, September 24 and 25, 1914; third, Detroit, July 1 and 2, 1915.
- \*No. 220. Fourth Buffalo, N. Y., July 20 and 21, 1916.
- No. 311. Ninth, Buffalo, N. Y., September 7-9, 1921.
- No. 337. Tenth, Washington, D. C., September 11-13, 1922.
- No. 355. Eleventh, Toronto, Canada, September 4-7, 1923.
- No. 400. Twelfth, Chicago, Ill., May 19-23, 1924.
- No. 414. Thirteenth, Rochester, N. Y., September 15-17, 1925.
- No. 478. Fifteenth, Detroit, Mich., October 25-28, 1927.
- No. 501. Sixteenth, Cleveland, Ohio, September 18-21, 1928.
- No. 538. Seventeenth, Philadelphia, September 24-27, 1929; eighteenth, Toronto, Canada, September 9-12, 1930.

**Productivity of labor**

- No. 356. Productivity costs in the common-brick industry. [1924.]
- No. 390. Time and labor costs in manufacturing 100 pairs of shoes, 1923.
- No. 407. Labor cost of production and wages and hours of labor in the paper box-board industry. [1926.]
- \*No. 412. Wages, hours, and productivity in the pottery industry, 1924.
- No. 441. Productivity of labor in the glass industry. [1927.]
- No. 474. Productivity of labor in merchant blast furnaces. [1928.]
- No. 475. Productivity of labor in newspaper printing. [1929.]
- No. 550. Cargo handling and longshore labor conditions. [1932.]
- No. 585. Productivity of labor in the automobile tire industry. (In press.)

**Retail prices and cost of living**

- \*No. 121. Sugar prices, from refiner to consumer. [1913.]
- \*No. 130. Wheat and flour prices, from farmer to consumer. [1913.]
- \*No. 164. Butter prices, from producer to consumer. [1914.]
- No. 170. Foreign food prices as affected by the war. [1915.]
- No. 337. Cost of living in the United States. [1924.]
- No. 369. The use of cost-of-living figures in wage adjustments. [1925.]
- No. 495. Retail prices, 1890 to 1923.

**Safety codes**

- No. 336. Safety code for the protection of industrial workers in foundries.
- No. 350. Rules governing the approval of headlighting devices for motor vehicles.
- \*No. 351. Safety code for the construction, care, and use of ladders.
- No. 375. Safety code for laundry machinery and operations.
- \*No. 382. Code of lighting school buildings.
- No. 410. Safety code for paper and pulp mills.
- \*No. 430. Safety code for power presses and foot and hand presses.
- No. 447. Safety code for rubber mills and calendars.
- No. 451. Safety code for forging and hot-metal stamping.
- No. 453. Safety code for mechanical power-transmission apparatus—first revision.
- No. 509. Textile safety code.
- No. 512. Code for identification of gas-mask canisters.
- No. 519. Safety code for woodworking plants, as revised 1930.
- No. 527. Safety code for the use, care, and protection of abrasive wheels, as revised 1930.
- No. 556. Code of lighting: Factories, mills, and other work places. (Revision of 1930.)
- No. 562. Safety codes for the prevention of dust explosions.

**Vocational and workers education**

- \*No. 153. Short-unit courses for wage earners, and a factory school experiment. [1915.]
- \*No. 162. Vocational education survey of Richmond, Va. [1915.]
- \*No. 190. Vocational education survey of Minneapolis, Minn. [1917.]
- No. 271. Adult working-class education in Great Britain and the United States. [1920.]
- No. 450. Apprenticeship in building construction. [1928.]

**Wages and hours of labor**

- \*No. 146. Wages and regularity of employment and standardization of piece rates in the dress and waist industry of New York City. [1914.]
- \*No. 147. Wages and regularity of employment in the cloak, suit, and skirt industry. [1914.]
- No. 161. Wages and hours of labor in the clothing and cigar industries, 1911 to 1913.
- No. 163. Wages and hours of labor in the building and repairing of steam railroad cars, 1907 to 1913.
- \*No. 190. Wages and hours of labor in the cotton, woolen, and silk industries, 1907 to 1914.
- No. 204. Street-railway employment in the United States. [1917.]
- No. 218. Wages and hours of labor in the iron and steel industry, 1907 to 1915: With a glossary of occupations.
- \*No. 225. Wages and hours of labor in the lumber, millwork, and furniture industries, 1915.
- No. 265. Industrial survey in selected industries in the United States, 1919.
- No. 297. Wages and hours of labor in the petroleum industry, 1920.
- No. 356. Productivity costs in the common-brick industry. [1924.]
- No. 358. Wages and hours of labor in the automobile-tire industry, 1923.
- No. 360. Time and labor costs in manufacturing 100 pairs of shoes, 1923.
- No. 365. Wages and hours of labor in the paper and pulp industry, 1923.

## Wages and hours of labor—Continued

- No. 407. Labor cost of production and wages and hours of labor in the paper box-board industry. [1926.]
- \*No. 412. Wages, hours, and productivity in the pottery industry, 1925.
- No. 418. Hours and earnings in anthracite and bituminous coal mining, 1922 and 1934.
- No. 484. Wages and hours of labor of common street laborers, 1928.
- No. 469. History of wages in the United States from colonial times to 1928.
- No. 502. Wages and hours of labor in the motor-vehicle industry, 1928.
- No. 504. Wages and hours of labor in the hosiery and underwear industries, 1907 to 1928.
- No. 514. Pennsylvania Railroad wage data. From Report of Joint Fact Finding Committee in the wage negotiations in 1927.
- No. 516. Hours and earnings in bituminous-coal mining, 1929.
- No. 523. Hours and earnings in the manufacture of airplanes and aircraft engines, 1929.
- No. 525. Wages and hours of labor in the Portland cement industry, 1929.
- No. 532. Wages and hours of labor in the cigarette manufacturing industry, 1930.
- No. 534. Labor conditions in the Territory of Hawaii, 1929-1930.
- No. 537. Wages and hours of labor in the dyeing and finishing of textiles, 1930.
- No. 539. Wages and hours of labor in cotton-goods manufacturing, 1910 to 1930.
- No. 546. Wages and hours in rayon and other synthetic textile manufacturing, 1930.
- No. 547. Wages and hours of labor in the cane-sugar refining industry, 1930.
- No. 557. Wages and hours of labor in the men's clothing industry, 1911 to 1930.
- No. 560. Wages and hours of labor in the lumber industry in the United States, 1930.
- No. 566. Union scales of wages and hours of labor, May 15, 1931.
- No. 567. Wages and hours of labor in the iron and steel industry, 1931.
- No. 568. Wages and hours of labor in the manufacture of silk and rayon goods, 1931.
- No. 570. Wages and hours of labor in foundry and machine shops, 1931.
- No. 571. Wages and hours of labor in the furniture industry, 1910 to 1931.
- No. 573. Wages and hours of labor in metalliferous mines, 1924 to 1931.
- No. 575. Wages and hours of labor in air transportation, 1931.
- No. 576. Wages and hours of labor in the slaughtering and meat-packing industry, 1931.
- No. 578. Wages and hours of labor in gasoline-filling stations and motor-vehicle repair garages, 1931.
- No. 579. Wages and hours of labor in the boot and shoe industry, 1910 to 1932.
- No. 580. Wages and hours of labor in the bakery industry—bread and cake departments, 1932.
- No. 584. Wages and hours of labor in woolen and worsted goods manufacturing, 1932.
- No. 565. Wages and hours of labor in the lumber industry in the United States, 1932. (In press.)
- No. 587. Wages and hours of labor in rayon and other synthetic yarn manufacturing, 1932. (In press.)

## Welfare work

- \*No. 123. Employers' welfare work. [1913.]
- \*No. 222. Welfare work in British munition factories. [1917.]
- \*No. 250. Welfare work for employees in industrial establishments in the United States. [1919.]
- No. 458. Health and recreation activities in industrial establishments, 1926.

## Wholesale prices

- \*No. 294. Index numbers of wholesale prices in the United States and foreign countries. [1921.]
- No. 453. Revised index numbers of wholesale prices, 1923 to July 1927.
- No. 577. Wholesale prices, 1931.

## Women and children in industry

- \*No. 116. Hours, earnings, and duration of employment of wage-earning women in selected industries in the District of Columbia. [1913.]
- \*No. 117. Prohibition of night work of young persons. [1913.]
- \*No. 118. Ten-hour maximum working-day for women and young persons. [1913.]
- No. 119. Working hours of women in the pea canneries of Wisconsin. [1913.]
- \*No. 122. Employment of women in power laundries in Milwaukee. [1913.]
- \*No. 160. Hours, earnings, and conditions of labor of women in Indiana mercantile establishments and garment factories. [1914.]
- \*No. 167. Minimum-wage legislation in the United States and foreign countries. [1915.]
- \*No. 178. Summary of the report on condition of woman and child wage earners in the United States. [1915.]
- \*No. 176. Effect of minimum-wage determinations in Oregon. [1915.]
- No. 180. The boot and shoe industry in Massachusetts as a vocation for women. [1915.]
- \*No. 182. Unemployment among women in department and other retail stores of Boston, Mass. [1915.]
- No. 193. Dressmaking as a trade for women in Massachusetts. [1916.]
- No. 215. Industrial experience of trade-school girls in Massachusetts. [1917.]
- \*No. 217. Effect of workmen's compensation laws in diminishing the necessity of industrial employment of women and children. [1917.]
- \*No. 223. Employment of women and juveniles in Great Britain during the war. [1917.]
- No. 263. Women in the lead industries. [1919.]
- No. 467. Minimum wage legislation in various countries. [1928.]
- No. 558. Labor conditions of women and children in Japan. [1931.]

## Workmen's insurance and compensation (including laws relating thereto)

- \*No. 101. Care of tuberculous wage earners in Germany. [1912.]
- \*No. 102. British national insurance act, 1911.
- \*No. 103. Sickness and accident insurance law in Switzerland. [1912.]
- No. 107. Law relating to insurance of salaried employees in Germany. [1913.]
- \*No. 156. Compensation for accidents to employees of the United States. [1914.]
- \*No. 212. Proceedings of the conference on social insurance called by the International Association of Industrial Accident Boards and Commissions, Washington, D.C., December 5-9, 1916.
- \*No. 243. Workmen's compensation legislation in the United States and foreign countries, 1917 and 1918.
- No. 301. Comparison of workmen's compensation insurance and administration. [1922.]
- No. 312. National health insurance in Great Britain, 1911 to 1921.
- No. 379. Comparison of workmen's compensation laws of the United States as of January 1, 1926.
- No. 477. Public-service retirement systems, United States and Europe. [1929.]
- No. 496. Workmen's compensation legislation of the United States and Canada as of January 1, 1929. (With text of legislation enacted in 1927 and 1928.)
- No. 528. Workmen's compensation legislation of the Latin American countries. [1930.]

Miscellaneous series

- \*No. 174. Subject index of the publications of the United States Bureau of Labor Statistics up to May 1, 1915.
- No. 208. Profit sharing in the United States. [1916.]
- No. 242. Food situation in central Europe, 1917.
- No. 254. International labor legislation and the society of nations. [1919.]
- No. 258. Historical survey of international action affecting labor. [1920.]
- No. 282. Mutual relief associations among Government employees in Washington, D.C. [1921.]
- No. 319. The Bureau of Labor Statistics: Its history, activities, and organization. [1922.]
- No. 320. Methods of procuring and computing statistical information of the Bureau of Labor Statistics. [1923.]
- No. 342. International Seaman's Union of America: A study of its history and problems. [1923.]
- No. 346. Humanity in government. [1923.]
- No. 372. Convict labor in 1923.
- No. 386. Cost of American almshouses. [1925.]
- No. 398. Growth of legal-aid work in the United States. [1926.]
- No. 401. Family allowances in foreign countries. [1926.]
- No. 451. Labor organizations in Chile. [1923.]
- No. 452. Park recreation areas in the United States. [1928.]
- No. 455. Beneficial activities of American trade-unions. [1928.]
- No. 479. Activities and functions of a State department of labor. [1928.]
- No. 483. Conditions in the shoe industry in Haverhill, Mass., 1923.
- No. 489. Care of aged persons in United States. [1929.]
- No. 506. Director of homes for the aged in the United States. [1929.]
- No. 506. Handbook of American trade-unions: 1929 edition.
- No. 515. Personnel research agencies: 1930 edition.
- No. 541. Handbook of labor statistics: 1931 edition.
- No. 553. Labor conditions of women and children in Japan. [1931.]
- No. 561. Public old-age pensions and insurance in the United States and foreign countries. [1932.]
- No. 565. Park recreation areas in the United States, 1930.

