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WAGES AND HOURS OF LABOR
IN THE BOOT AND SHOE
INDUSTRY: 1907 TO 1916



MAY, 1918

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

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BOOT AND SHOE MANUFACTURING.

INTRODUCTION AND SUMMARY.

Rates of wages per hour, hours of labor per week, and full-time and actual weekly earnings in the year 1916 in the boot and shoe industry of the United States are presented in this report. Comparable figures for 1914, and summaries for each year from 1907 to 1916, except 1915, are also shown. Data were not collected for 1915.¹

The average full-time weekly earnings of the employees in this industry in 1916 were 6 per cent higher than in 1913 and 1914, 15 per cent higher than in 1912, 14 per cent higher than in 1911, and 16 per cent higher than in 1910.

The average full-time hours of labor per week in 1916 were the same as in 1914, 1 per cent lower than in 1913, 2 per cent lower than in 1912, and 3 per cent lower than in 1911 or 1910.

The average rate of wages (or earnings) per hour in 1916 was 6 per cent higher than in 1914, 8 per cent higher than in 1913, 16 per cent higher than in 1912 and 1911, and 19 per cent higher than in 1910. Owing to the reduction of hours, the increase in full-time weekly earnings between 1910 and 1916 was not quite so much as in rates of wages per hour.

In 1916 the average full-time weekly earnings of male employees in the selected occupations shown varied from \$16.02 for assemblers for the pulling-over machine to \$28.50 for Goodyear welters.

The full-time weekly earnings of female employees varied from \$9.93 for treers or ironers to \$13.66 for vampers.

A summary of the rates of wages and hours of labor in 1913, 1914, and 1916 in the principal occupations of the industry is presented in Table 1 which follows:

¹Previous investigations of wages and hours of labor in boot and shoe manufacturing have been made and published by the Bureau, as follows: Nineteenth Annual Report, covering 1890 to 1903; Bulletin No. 59 (July, 1905), covering 1903 and 1904; Bulletin No. 65 (July, 1906), covering 1904 and 1905; Bulletin No. 71 (July, 1907) covering 1905 and 1906; Bulletin No. 77 (July, 1908), covering 1906 and 1907; Bulletin No. 134 (August, 1913), covering 1907 to 1912; Bulletin No. 154 (May, 1914), covering 1912 and 1913; and Bulletin No. 178 (August, 1915), covering 1913 and 1914.

TABLE 1.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS, 1913, 1914, AND 1916.

[The figures opposite each group of years are for identical establishments. When a second line is shown for 1916 it contains all data secured for 1916 whether or not comparable data for 1914 were available.]

Occupation, sex, and number of establishments.	Year.	Number of employ-ees.	Average full-time hours per week.	Per cent of employees whose full-time hours per week were—				Average rate of wages per hour.	Per cent of employees whose rates of wages per hour were—					Average full-time weekly earnings.	
				Under 54.	54.	Over 54 and under 57.	57 and under 60.		60 and over.	Under 20 cts.	20 and under 30 cts.	30 and under 40 cts.	40 and under 50 cts.		50 cts. and over.
CUTTING DEPARTMENT.															
Cutters, vamp and whole shoe, hand, male: 68 establishments...	1913	1,923	54.5	23	42	18	15	3	\$0.352	2	22	53	18	6	\$19.10
	1914	1,757	53.8	38	23	27	10	2	.368	3	17	49	21	10	19.70
69 establishments...	1914	1,667	54.1	35	24	26	12	3	.366	3	16	52	20	9	19.70
	1916	1,790	54.1	33	27	26	11	3	.379	1	16	47	26	10	20.42
113 establishments. Cutters, vamp and whole shoe, machine, male:	1916	2,355	53.9	35	27	26	10	3	.375	1	17	46	27	9	20.12
	1913	528	55.5	11	34	24	24	7	.322	6	32	52	7	3	17.70
35 establishments...	1914	568	55.1	14	23	40	22	1	.328	6	32	48	10	3	17.96
	1914	600	55.5	10	22	42	26	1	.323	6	33	50	8	3	17.84
36 establishments...	1916	728	55.4	8	24	46	21	1	.325	9	34	31	24	3	17.86
	1916	1,059	54.9	14	22	47	15	2	.331	6	30	39	22	3	18.07
67 establishments... Skivers, upper, machine, male:	1913	123	54.3	9	71	15	5	.....	.300	11	31	48	8	2	16.26
	1914	107	54.2	9	70	18	3	.....	.304	10	18	62	9	1	16.47
19 establishments...	1914	93	54.1	11	76	10	3	.....	.318	3	16	69	11	1	17.21
	1916	92	54.1	12	76	9	3	.....	.331	2	17	66	9	5	17.87
32 establishments... Skivers, upper, machine, female:	1916	124	54.6	9	65	13	12	1	.311	7	24	57	7	4	16.93
	1913	439	54.6	10	52	25	13	.....	.207	48	45	7	1	.....	11.29
65 establishments...	1914	402	54.0	22	48	25	5	.....	.211	47	44	7	1	.....	11.35
	1914	418	54.1	22	45	27	6	.....	.207	50	43	6	1	.....	11.16
72 establishments...	1916	466	54.2	18	52	25	5	.....	.205	49	42	9	1	(1)	11.09
	1916	591	54.0	21	52	24	4	.....	.209	49	40	10	1	1	11.26
SOLE-LEATHER DEPARTMENT.															
Cutters, outsole, male: 38 establishments...	1913	186	55.2	9	45	23	24	.....	.304	2	35	60	3	.....	16.75
	1914	175	54.8	6	50	33	6	5	.313	3	30	66	1	.....	17.12
38 establishments...	1914	205	55.0	2	42	43	6	5	.304	2	41	57	(1)	.....	16.71
	1916	219	55.0	3	43	41	8	5	.310	.....	36	64	.....	(1)	17.02
64 establishments... Chanelers, insole and outsole, male:	1916	345	54.7	11	32	47	6	4	.307	.....	41	57	1	(1)	16.74
	1913	190	55.4	9	37	20	21	4	.335	2	32	47	16	3	18.48
69 establishments...	1914	194	55.0	15	25	43	15	2	.337	3	29	47	17	4	18.51
	1914	202	55.1	16	24	39	17	4	.328	4	31	48	15	2	18.02
70 establishments...	1916	197	55.2	15	24	39	18	5	.336	5	26	52	13	4	18.51
	1916	255	55.0	16	26	38	15	4	.340	4	26	51	13	5	18.69

¹Less than 1 per cent.

TABLE 1.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS, 1913, 1914, and 1916—Continued.

Occupation, sex, and number of establishments.	Year.	Number of employ-ees.	Average full-time hours per week.	Per cent of employees whose full-time hours per week were—						Average rate of wages per hour.	Per cent of employees whose rates of wages per hour were—					Average full-time weekly earnings.
				Under 54.	54.	Over 54 and under 57.	57 and under 60.	60 and over.	Under 12 cts.		12 and under 16 cts.	16 and under 20 cts.	20 and under 30 cts.	30 cts. and over.		
FITTING OR STITCHING DEPARTMENT.																
Tip stitchers, female:																
75 establishments...	1913	329	54.6	11	52	24	13	.....	\$0.218	4	17	23	42	14	\$11.91
	1914	328	54.1	17	55	23	4	.....	.218	6	13	22	45	14	11.82
75 establishments...	1914	326	54.2	17	52	25	5	.....	.218	6	13	23	45	13	11.81
	1916	326	54.2	18	55	22	5	.....	.226	4	11	22	49	15	12.24
124 establishments... Backstay stitchers, female:	1916	442	54.0	20	58	18	5	.....	.231	3	11	21	48	17	12.45
73 establishments...	1913	379	54.6	6	54	30	10	.....	.192	6	24	31	33	7	10.49
	1914	399	54.2	13	57	26	4	.....	.196	8	23	25	39	5	10.59
72 establishments...	1914	381	54.3	14	50	31	5	.....	.198	8	21	25	40	6	10.72
	1916	405	54.2	13	58	23	6	.....	.207	8	15	26	43	8	11.23
125 establishments... Lining makers, female:	1916	575	54.0	18	57	20	5	.....	.213	7	15	23	44	11	11.47
76 establishments...	1913	833	54.5	9	55	24	12	.....	.190	13	21	25	36	6	10.31
	1914	804	53.9	23	51	22	4	.....	.188	12	21	27	35	5	10.15
76 establishments...	1914	796	54.1	23	46	25	6	.....	.190	12	20	28	36	5	10.24
	1916	769	54.1	19	53	20	7	.....	.200	11	18	24	39	8	10.78
126 establishments... Closers-on, female:	1916	1,004	53.9	21	56	17	6	.....	.198	10	19	25	39	7	10.69
69 establishments...	1913	337	54.4	9	60	22	9	.....	.191	8	27	25	35	5	10.39
	1914	325	53.8	25	52	19	3	.....	.193	10	21	26	40	4	10.36
51 establishments...	1914	259	53.8	25	48	23	4	.....	.195	8	20	27	40	5	10.51
	1916	249	53.8	22	61	12	4	.....	.199	8	20	26	42	4	10.69
83 establishments... Top stitchers or under-trimmers, female:	1916	360	53.6	26	63	8	3	.....	.204	8	19	21	47	5	10.95
77 establishments...	1913	1,033	54.5	12	54	23	11	.....	.211	4	20	23	45	8	11.46
	1914	1,005	54.1	21	52	22	5	.....	.211	5	17	24	45	9	11.39
77 establishments...	1914	1,004	54.1	21	51	23	6	.....	.212	5	16	25	45	9	11.46
	1916	1,101	54.1	18	56	21	5	.....	.214	5	16	23	47	9	11.55
128 establishments... Button fasteners, female:	1916	1,427	54.0	20	58	18	4	.....	.220	4	15	22	48	11	11.87
66 establishments...	1913	221	54.7	13	57	10	21	.....	.196	11	25	28	26	10	10.70
	1914	198	53.7	29	53	13	5	.....	.197	11	21	30	28	9	10.57
60 establishments...	1914	189	53.7	30	49	15	5	.....	.192	11	22	30	28	8	10.32
	1916	142	53.9	30	46	18	7	.....	.209	10	14	25	39	12	11.28
94 establishments... Buttonhole makers, female:	1916	195	53.8	33	47	14	6	.....	.211	9	16	23	38	14	11.32
71 establishments...	1913	489	54.6	10	62	14	15	.....	.192	13	25	23	31	8	10.50
	1914	477	53.8	30	48	15	6	.....	.200	10	24	24	34	8	10.76
73 establishments...	1914	484	53.9	30	46	16	8	.....	.196	11	25	24	33	7	10.55
	1916	369	54.0	28	52	12	7	.....	.213	9	12	27	39	12	11.50
113 establishments... Vampers, male:	1916	466	53.8	31	52	11	6	.....	.217	8	13	26	41	13	11.65
57 establishments...	1913	531	54.7	16	42	29	12	1	.320	.....	2	6	32	60	17.44
	1914	515	54.5	18	38	36	7	(1)	.315	1	2	6	37	55	17.13	
53 establishments...	1914	479	54.5	20	39	31	8	1	.311	1	2	6	37	54	16.95	
	1916	496	54.7	16	41	29	11	2	.332	.....	1	6	30	63	18.12
82 establishments...	1916	624	54.6	17	39	34	9	1	.333	.....	1	5	29	65	18.14

1 Less than 1 per cent.

TABLE 1.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS, 1913, 1914, and 1916—Continued.

Occupation, sex, and number of establishments.	Year.	Number of employ-ees.	Average full-time hours per week.	Per cent of employees whose full-time hours per week were—						Average rate of wages per hour.	Per cent of employees whose rates of wages per hour were—					Average full-time weekly earnings.
				Under 54.	54.	Over 54 and under 57.	57 and under 60.	60 and over.	Under 12 cts.		12 and under 16 cts.	16 and under 20 cts.	20 and under 30 cts.	30 cts. and over.		
															Under 20 cts.		20 and under 30 cts.	30 and under 40 cts.	40 and under 50 cts.	50 cts. and over.
FITTING OR STITCHING DEPARTMENT—concl'd.																
Vampers, female:																
77 establishments...	1913	1,052	54.6	8	59	21	12	.....	\$0.246	1	8	18	53	20	\$13.40
	1914	1,037	53.9	25	49	20	5	.....	.244	2	9	19	49	21	13.13
75 establishments...	1914	1,027	54.0	25	46	24	5	.....	.242	2	9	20	49	20	13.06
	1916	1,065	54.1	22	54	17	7	.....	.252	2	7	16	50	25	13.61
121 establishments...	1916	1,383	53.9	26	54	14	6	.....	.254	2	6	15	51	25	13.66
LASTING DEPARTMENT.																
Assemblers, for pulling-over machine, male:																
54 establishments...	1913	597	55.4	8	41	27	19	5	.272	17	49	25	8	(1)	15.01	
	1914	646	55.2	15	29	32	23	2	.281	17	41	33	7	2	15.45	
56 establishments...	1914	659	55.5	11	28	32	25	4	.276	18	44	30	6	2	15.24	
	1916	538	55.1	15	34	27	18	6	.300	14	38	35	12	2	16.50	
97 establishments...	1916	801	55.0	13	34	34	15	4	.291	15	42	31	10	2	16.02	
Pullers-over, hand, male:																
47 establishments...	1913	907	55.1	7	39	36	17	1	.334	2	32	47	17	2	18.42	
	1914	729	54.9	9	29	50	11	1	.350	3	27	42	21	6	19.24	
30 establishments...	1914	537	54.8	10	32	48	10	.....	.357	3	25	44	20	8	19.52
	1916	429	54.8	14	34	38	14	.....	.353	1	25	48	23	4	19.33
46 establishments...	1916	543	54.8	12	35	41	11	.....	.347	1	28	46	20	4	18.99
Pullers-over, machine, male:																
59 establishments...	1913	421	55.4	6	43	27	18	6	.352	3	23	48	22	5	19.45	
	1914	396	55.3	11	27	39	20	3	.360	3	23	43	25	7	19.87	
63 establishments...	1914	410	55.6	9	26	37	23	4	.353	3	26	42	23	6	19.56	
	1916	421	55.3	12	28	35	19	5	.382	3	21	33	30	14	21.08	
116 establishments...	1916	640	55.0	13	27	43	14	4	.377	2	21	38	28	12	20.70	
Side lasters, hand, male:																
20 establishments...	1913	224	54.2	43	27	24	6	.....	.303	6	46	39	8	2	16.40
	1914	237	54.0	50	19	27	4	(1)	.308	10	35	45	9	2	16.59	
16 establishments...	1914	217	53.6	61	3	28	6	1	.304	12	37	37	12	3	16.20	
	1916	179	54.2	55	4	30	8	3	.315	4	42	40	9	4	17.02	
40 establishments...	1916	358	54.1	37	29	27	5	1	.325	6	37	38	13	6	17.57	
Side lasters, machine, male:																
16 establishments...	1913	155	56.1	.....	41	22	34	4	.323	6	39	35	17	3	18.23
	1914	167	54.3	19	35	32	11	4	.343	5	29	38	25	4	18.54	
17 establishments...	1914	153	55.0	5	52	29	9	5	.341	5	27	44	20	4	18.69	
	1916	158	54.8	6	52	32	8	3	.338	3	28	47	20	3	18.48	
45 establishments...	1916	291	54.9	12	33	43	9	4	.339	3	29	48	16	4	18.53	

¹ Less than 1 per cent.

TABLE 1.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS, 1913, 1914, and 1916—Continued.

Occupation, sex, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Per cent of employees whose full-time hours per week were—				Average rate of wages per hour.	Per cent of employees whose rates of wages per hour were—					Average full-time weekly earnings.
				Under 54.	54.	Over 54 and under 57.	57 and under 60.		60 and over.	Under 20 cts.	20 and under 30 cts.	30 and under 40 cts.	40 and under 50 cts.		50 cts. and over.
LASTING DEPARTMENT—concluded.														
Bed-machine operators, male:														
60 establishments...	1913	1,185	55.1	10	42	29	15	3	\$0.331	3	35	45	14	3
	1914	1,117	54.9	15	32	39	12	2	.322	5	34	46	13	3
64 establishments...	1914	1,113	55.0	15	32	36	13	3	.319	5	36	45	12	2
	1916	1,092	55.1	18	28	36	13	5	.351	4	26	44	21	6
93 establishments...	1916	1,336	55.0	17	31	37	12	4	.349	3	28	43	20	6
Hand-method lasting-machine operators, male:														
35 establishments...	1913	402	55.2	3	44	34	13	6	.355	2	23	49	20	5
	1914	418	55.2	10	16	51	20	3	.349	3	28	42	19	8
32 establishments...	1914	372	55.9	7	12	47	31	3	.342	2	28	48	17	5
	1916	372	55.4	6	27	41	23	3	.354	2	27	42	21	9
66 establishments...	1916	556	55.1	10	24	47	17	2	.361	2	24	44	23	8
Turn lasters, hand, male:														
26 establishments...	1913	499	55.0	28	24	13	30	5	.307	5	40	48	4	1
	1914	630	54.4	29	11	47	8	5	.322	8	37	35	17	4
29 establishments...	1914	681	54.4	29	10	48	8	5	.325	7	37	35	17	4
	1916	733	54.9	23	12	45	19	1	.354	2	33	34	21	10
42 establishments...	1916	974	54.3	21	16	44	17	1	.365	2	30	33	24	12
Turn sewers, machine, male:														
17 establishments...	1914	48	53.9	29	8	56	6	.....	.401	.....	4	50	25	21
	1916	52	53.9	31	6	58	6	.....	.408	2	38	15	21	23
29 establishments...	1916	81	54.4	23	17	47	12	.....	.442	1	26	15	25	33
BOTTOMING DEPARTMENT.														
Goodyear welters, male:														
66 establishments...	1913	458	55.2	10	41	30	16	3	.503	.....	5	17	26	52
	1914	418	55.0	11	35	40	12	1	.508	(1)	5	16	28	51
67 establishments...	1914	417	55.1	12	35	37	14	3	.506	(1)	5	16	29	51
	1916	410	55.1	15	33	35	13	4	.519	1	7	12	25	55
89 establishments...	1916	467	54.9	14	34	33	12	4	.520	1	7	13	24	56
Rough rounders, male:														
67 establishments...	1913	261	55.2	10	38	32	17	3	.497	(1)	6	22	27	44
	1914	240	54.9	14	30	43	11	2	.506	.....	5	18	29	48
67 establishments...	1914	243	55.1	14	30	39	13	4	.500	.....	5	19	30	45
	1916	245	55.1	16	29	38	13	4	.503	1	9	20	24	46
91 establishments...	1916	296	54.9	18	31	35	12	4	.491	1	9	21	24	44
Goodyear stitchers, male:														
67 establishments...	1913	633	55.1	9	42	29	17	2	.398	1	20	38	23	18
	1914	569	54.9	13	33	41	12	1	.413	1	17	35	27	21
65 establishments...	1914	559	55.0	13	34	37	13	2	.412	1	17	35	27	20
	1916	557	55.0	15	34	36	12	4	.433	(1)	13	29	31	26
97 establishments...	1916	656	54.8	17	35	33	12	3	.437	(1)	12	28	33	27

¹Less than 1 per cent

10 WAGES AND HOURS OF LABOR, 1907 TO 1916—BOOTS AND SHOES.

TABLE 1.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS, 1913, 1914, and 1916—Continued.

Occupation, sex, and number of establishments.	Year.	Number of employ-ees.	Average full-time hours per week.	Per cent of employees whose full-time hours per week were—					Average rate of wages per hour.	Per cent of employees whose rates of wages per hour were—					Average full-time weekly earnings.
				Under 54.	54.	Over 54 and under 57.	57 and under 60.	60 and over.		Under 20 cts.	20 and under 30 cts.	30 and under 40 cts.	40 and under 50 cts.	50 cts. and over.	
BOTTOMING DEPARTMENT—continued.															
McKay sewers, male: 32 establishments...	1913	128	55.5	4	27	49	16	3	\$0.319	7	37	37	17	2	\$17.68
	1914	130	55.5	12	5	57	24	3	.343	9	28	37	17	9	19.00
30 establishments...	1914	123	55.7	12	6	64	14	4	.327	10	28	43	14	5	18.17
	1916	136	55.7	13	17	38	24	9	.341	3	32	41	20	4	18.91
61 establishments... Heelers, male: 72 establishments...	1916	210	55.2	14	20	42	18	6	.349	3	27	42	20	8	19.51
	1913	291	55.3	7	42	30	19	3	.424	1	17	29	22	31	23.32
1914	293	55.1	15	24	41	16	3	.400	2	23	29	21	24	21.98	
76 establishments... Heel trimmers or shavers, male: 77 establishments...	1914	305	55.3	15	24	38	19	5	.403	2	22	28	23	24	22.22
	1916	323	55.3	15	25	36	18	6	.429	2	15	36	20	28	23.66
130 establishments... 77 establishments...	1916	440	55.0	18	26	37	15	5	.430	2	15	35	20	29	23.59
	1913	271	55.3	11	33	33	20	3	.443	3	17	26	20	35	24.46
1914	262	55.1	16	19	47	15	2	.439	3	13	28	30	27	24.14	
75 establishments... 121 establishments... Heel breasters, male: 73 establishments...	1914	258	55.2	17	20	43	17	3	.428	3	14	31	29	23	23.54
	1916	284	55.0	19	23	39	14	5	.454	2	14	26	24	34	24.92
1916	367	54.9	20	24	40	12	4	.449	2	15	26	25	33	24.55	
73 establishments...	1913	167	55.4	10	34	32	19	4	.310	16	35	30	14	5	17.10
	1914	161	55.2	14	22	45	17	2	.306	15	38	30	13	4	16.81
70 establishments... 111 establishments... Edge trimmers, male: 77 establishments...	1914	157	55.3	14	22	41	20	3	.300	16	38	31	12	3	16.51
	1916	176	54.9	17	24	42	11	6	.314	15	27	40	16	3	17.30
1916	232	54.8	17	25	43	10	5	.319	14	30	37	14	5	17.50	
77 establishments...	1913	815	55.3	6	39	35	17	4	.411	1	16	31	32	18	22.66
	1914	839	55.0	14	26	43	15	2	.404	2	15	36	29	18	22.18
77 establishments... 129 establishments... Edge setters, male: 77 establishments...	1914	827	55.1	14	27	41	16	3	.398	2	16	38	28	16	21.90
	1916	835	55.1	15	28	39	15	3	.426	2	13	31	29	25	23.38
1916	1,081	54.9	16	29	40	12	3	.423	2	13	32	30	24	23.16	
77 establishments...	1913	826	55.3	8	36	33	19	3	.411	1	13	34	33	19	22.70
	1914	827	55.1	16	23	44	15	2	.410	1	11	37	35	15	22.54
78 establishments... 131 establishments... Heel scourers, male: 76 establishments...	1914	819	55.1	17	23	40	16	4	.405	1	12	38	36	14	22.27
	1916	770	55.1	17	25	39	15	4	.413	1	13	36	29	21	22.65
1916	966	54.9	18	27	39	13	3	.414	1	12	38	28	21	22.62	
76 establishments...	1913	360	55.4	10	34	34	18	5	.313	12	38	33	14	3	17.29
	1914	345	55.2	15	23	44	17	2	.312	11	42	29	10	8	17.18
76 establishments... 125 establishments... Heel burnishers, male: 75 establishments...	1914	351	55.0	15	22	41	18	4	.305	10	45	31	8	7	16.84
	1916	384	55.2	17	25	37	16	5	.342	5	33	32	25	4	18.84
1916	504	55.0	18	26	39	13	4	.346	6	32	33	23	6	18.94	
75 establishments...	1913	280	55.5	5	39	32	20	4	.317	12	34	36	16	2	17.54
	1914	261	55.3	11	23	45	18	3	.323	7	40	35	12	7	17.85
75 establishments... 127 establishments...	1914	262	55.5	11	23	46	15	5	.315	7	41	37	11	3	17.47
	1916	261	55.5	13	26	35	20	7	.331	8	35	33	20	4	18.32
1916	367	55.2	13	27	30	25	5	.325	8	39	32	17	4	17.84	

¹ Less than 1 per cent.

TABLE 1.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS, 1913, 1914, and 1916—Concluded.

Occupation, sex, and number of establishments.	Year.	Number of employ-ees.	Average full-time hours per week.	Per cent of employees whose full-time hours per week were—					Average rate of wages per hour.	Per cent of employees whose rates of wages per hour were—					Average full-time weekly earnings.
				Under 54.	54.	Over 54 and under 57.	57 and under 60.	60 and over.		Under 20 cts.	20 and under 30 cts.	30 and under 40 cts.	40 and under 50 cts.	50 cts. and over.	
BOTTOMING DEPARTMENT—concluded.															
Buffers, male:															
72 establishments...	1913	358	55.3	6	35	37	17	5	\$0.318	8	37	39	13	3	
	1914	370	55.2	13	20	49	16	2	.310	12	34	40	11	4	
	1916	359	55.2	12	23	46	16	4	.324	5	36	41	16	3	
129 establishments...	1916	535	54.9	13	27	46	12	3	.327	6	37	39	16	3	
FINISHING DEPARTMENT.															
Treers or ironers, hand, male:															
70 establishments...	1913	1,100	55.3	11	37	29	19	4	.282	15	46	32	5	1	
	1914	1,109	55.1	14	29	39	15	2	.281	17	44	31	5	2	
67 establishments...	1914	1,095	55.3	14	30	35	17	3	.279	18	44	31	5	2	
	1916	1,038	55.1	18	33	31	15	3	.295	10	46	34	6	3	
109 establishments...	1916	1,307	55.0	18	33	33	12	3	.297	10	45	35	7	3	
Treers or ironers, hand, female:															
12 establishments...	1913	110	54.6	18	55	.....	26	.....	.158	86	12	2	.....	8.56
	1914	112	52.2	72	21	6	.....	.....	.174	71	29	.....	.....	9.06
11 establishments...	1914	107	52.1	76	18	7	.....	.....	.175	71	28	1	.....	9.06
	1916	111	52.9	59	31	11	.....	.....	.183	59	41	1	.....	9.66
15 establishments...	1916	144	53.1	55	37	8	.....	.....	.188	55	44	1	.....	9.93
OTHER EMPLOYEES (ALL DEPARTMENTS).															
Male:															
81 establishments...	1914	19,667	55.1	16	24	40	17	4	.223	10	16	18	36	19	
	1916	19,001	55.1	16	29	35	16	4	.242	9	13	16	36	26	
135 establishments...	1916	24,010	55.0	17	29	37	13	4	.243	9	13	16	36	26	
Female:															
80 establishments...	1914	11,502	54.0	23	53	17	6	(1)	.167	25	25	23	24	3	
	1916	11,556	54.0	23	53	17	7	.....	.176	22	24	22	28	5
134 establishments...	1916	14,851	53.8	24	55	16	5	.....	.179	20	23	23	28	5

¹ Less than 1 per cent.

As wages and hours differ in different establishments, the inclusion or exclusion of any establishment in a group may raise or lower the average for the group, so that exact comparisons can not be made between the actual wages shown for different years unless the data

for the several years are from identical establishments. To illustrate: In the last column of Table 1, under cutters, vamp and whole shoe, machine, it will be seen that the full-time weekly earnings of employees in 35 establishments increased from \$17.70 in 1913 to \$17.96 in 1914. In 36 establishments the earnings were \$17.84 in 1914 and \$17.86 in 1916. Thus by the addition of one establishment, the average for 1914 was changed from \$17.96 to \$17.84. Therefore it would not be a correct comparison to state that the earnings had increased from \$17.70 in 1913 to \$17.86 in 1916.

To aid in making comparisons where the establishments change more or less from year to year, relative or index numbers have been computed for full-time hours per week, rates of wages per hour, and full-time weekly earnings for each occupation and for the industry, for the years 1910 to 1916, inclusive. These relative numbers, which are based on the averages shown in General Table A, are presented in Table 2, and are simply percentages in which the figures for 1916 are taken as the base, or 100 per cent. Thus the facts for each preceding year are brought into direct comparison with the facts for the latest year available, namely, 1916. The index numbers for the industry as a whole appear at the end of Table 2.

TABLE 2.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1916, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, IN THE PRINCIPAL OCCUPATIONS, AND THE INDUSTRY.

Occupation, sex, and year.	Hours per week.		Wages per hour.			Weekly earnings.		
	Relative full-time hours per week (1916=100).	Per cent of increase (+) or decrease (-) in—	Relative rate of wages per hour (1916=100).	Per cent of increase (+) or decrease (-) in—		Relative full-time weekly earnings (1916=100).	Per cent of increase (+) or decrease (-) in—	
				1916 as compared with each specified year.	Each specified year as compared with year preceding.		1916 as compared with each specified year.	Each specified year as compared with year preceding.
CUTTING DEPARTMENT.								
Cutters, vamp and whole shoe, hand, male:								
1910.....	104	-4	83	+20	86	+16		
1911.....	104	-4	82	+22	86	+16	(1)	
1912.....	102	-2	85	+18	86	+16	(1)	
1913.....	101	-1	82	+9	94	+6		+9
1914.....	100	(1)	97	+3	96	+4		+2
1916.....	100		100		100			+4
Cutters, vamp and whole shoe, machine, male:								
1910.....	106	-6	93	+8	98	+2		
1911.....	105	-5	93	+8	97	+3		-1
1912.....	102	-2	95	+5	96	+4		-1
1913.....	101	-1	98	+2	98	+2		+2
1914.....	100	(1)	99	+1	100	(1)		+2
1916.....	100		100		100			(1)

¹ No change.

TABLE 2.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1916, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, IN THE PRINCIPAL OCCUPATIONS, AND THE INDUSTRY—Continued.

Occupation, sex, and year.	Hours per week.			Wages per hour.			Weekly earnings.		
	Relative full-time hours per week (1916=100).	Per cent of increase (+) or decrease (-) in—		Relative rate of wages per hour (1916=100).	Per cent of increase (+) or decrease (-) in—		Relative full-time weekly earnings (1916=100).	Per cent of increase (+) or decrease (-) in—	
		1916 as compared with each specified year.	Each specified year as compared with year preceding.		1916 as compared with each specified year.	Each specified year as compared with year preceding.		1916 as compared with each specified year.	Each specified year as compared with year preceding.
CUTTING DEPARTMENT—concluded.									
Skivers, upper, machine, male:									
1910.....	101	-1		83	+20	+1	84	+19	
1911.....	101	-1	(1)	90	+11	+8	92	+9	+10
1912.....	101	-1	(1)	89	+12	-1	90	+11	-2
1913.....	100	(1)	-1	95	+5	+7	95	+5	+6
1914.....	109	(1)	(1)	96	+4	+1	96	+4	+1
1916.....	100		(1)	100		+4	100		+4
Skivers, upper, machine, female:									
1910.....	105	-5		84	+19		88	+14	
1911.....	105	-5	(1)	84	+19	(1)	88	+14	(1)
1912.....	102	-2	-3	92	+9	+10	93	+8	+6
1913.....	101	-1	-1	99	+1	+8	100	(1)	+8
1914.....	100	(1)	-1	101	-1	+2	101	-1	+1
1916.....	100		(1)	100		-1	100		-1
SOLE-LEATHER DEPARTMENT.									
Cutters, outsole, male:									
1910.....	103	-3		85	+18		87	+15	
1911.....	103	-3	(1)	88	+16	+1	89	+12	+2
1912.....	102	-2	-1	88	+14	+2	91	+10	+2
1913.....	101	-1	-1	95	+5	+8	96	+4	+5
1914.....	100	(1)	-1	98	+2	+3	98	+2	+2
1916.....	100		(1)	100		+2	100		+2
Channelers, insole and outsole, male:									
1910.....	103	-3		82	+22		84	+19	
1911.....	103	-3	(1)	85	+18	+4	87	+15	+4
1912.....	101	-1	-2	87	+15	+2	88	+14	+1
1913.....	101	-1	(1)	97	+3	+11	97	+3	+10
1914.....	100	(1)	-1	98	+2	+1	97	+3	(1)
1916.....	100		(1)	100		+2	100		+3
FITTING OR STITCHING DEPARTMENT.									
Tip stitchers, female:									
1911.....	102	-2		87	+15		89	+12	
1912.....	101	-1	-1	92	+9	+6	92	+9	+3
1913.....	101	-1	(1)	96	+4	+4	97	+3	+5
1914.....	100	(1)	-1	96	+4	(1)	96	+4	-1
1916.....	100		(1)	100		+4	100		+4
Backstay stitchers, female:									
1910.....	104	-4		87	+15		90	+11	
1911.....	104	-4	(1)	88	+14	+1	92	+9	+2
1912.....	102	-2	-2	90	+11	+2	92	+9	(1)
1913.....	101	-1	-1	94	+6	+4	95	+5	+3
1914.....	100	(1)	-1	96	+4	+2	95	+5	(1)
1916.....	100		(1)	100		+4	100		+5
Lining makers, female:									
1910.....	105	-5		84	+19		87	+15	
1911.....	105	-5	(1)	83	+20	-1	86	+16	-1
1912.....	102	-2	-3	86	+16	+4	87	+15	+1
1913.....	101	-1	-1	96	+4	+12	96	+4	+10
1914.....	100	(1)	-1	95	+5	-1	95	+5	-1
1916.....	100		(1)	100		+5	100		+5

¹ No change.

TABLE 2.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1916, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, IN THE PRINCIPAL OCCUPATIONS, AND THE INDUSTRY—Continued.

Occupation, sex, and year.	Hours per week.			Wages per hour.			Weekly earnings.		
	Relative full-time hours per week (1916=100).	Per cent of increase (+) or decrease (-) in—		Relative rate of wages per hour (1916=100).	Per cent of increase (+) or decrease (-) in—		Relative full-time weekly earnings (1916=100).	Per cent of increase (+) or decrease (-) in—	
		1916 as compared with each specified year.	Each specified year as compared with year preceding.		1916 as compared with each specified year.	Each specified year as compared with year preceding.		1916 as compared with each specified year.	Each specified year as compared with year preceding.
FITTING OR STITCHING DEPARTMENT—concluded.									
Closers-on, female:									
1910.....	106	-6		90	+11		95	+5	
1911.....	108	-6	(1)	90	+11	(1)	95	+5	(1)
1912.....	102	-2	-4	93	+8	+3	95	+5	(1)
1913.....	101	-1	-1	97	+3	+4	99	+1	+4
1914.....	100	(1)	-1	98	+2	+1	98	+2	-1
1916.....	100		(1)	100		+2	100		+2
Top stitchers or under-trimmers, female:									
1910.....	105	-5		90	+11		94	+6	
1911.....	105	-5	(1)	92	+9	+2	95	+5	+1
1912.....	101	-1	-4	93	+8	+1	94	+6	-1
1913.....	101	-1	(1)	99	+1	+6	100	(1)	+6
1914.....	100	(1)	-1	99	+1	(1)	99	+1	-1
1916.....	100		(1)	100		+1	100		+1
Button fasteners, female:									
1911.....	103	-3		70	+43		72	+39	
1912.....	102	-2	-1	81	+23	+16	83	+20	+15
1913.....	101	-1	-1	91	+10	+12	93	+8	+12
1914.....	100	(1)	-1	92	+9	+1	91	+10	-2
1916.....	100		(1)	100		+9	100		+10
Buttonhole makers, female:									
1911.....	104	-4		80	+25		82	+22	
1912.....	102	-2	-2	82	+22	+3	83	+20	+1
1913.....	101	-1	-1	88	+14	+7	89	+12	+7
1914.....	100	(1)	-1	92	+9	+5	92	+9	+3
1916.....	100		(1)	100		+9	100		+9
Vampers, male:									
1910.....	101	-1		89	+12		90	+11	
1911.....	101	-1	(1)	92	+9	+3	94	+6	+4
1912.....	100	(1)	-1	91	+10	-1	91	+10	-3
1913.....	100	(1)	(1)	95	+5	+4	95	+5	+4
1914.....	100	(1)	(1)	94	+6	-1	94	+6	-1
1916.....	100		(1)	100		+6	100		+6
Vampers, female:									
1910.....	105	-5		93	+8		97	+3	
1911.....	104	-4	-1	93	+8	(1)	97	+3	(1)
1912.....	102	-2	-2	91	+10	-2	92	+9	-5
1913.....	101	-1	-1	97	+3	+7	98	+2	+7
1914.....	100	(1)	-1	96	+4	-1	96	+4	-2
1916.....	100		(1)	100		+4	100		+4
LASTING DEPARTMENT.									
Assemblers, for pulling-over machine, male:									
1911.....	103	-3		84	+19		86	+16	
1912.....	102	-2	-1	81	+23	-4	82	+22	-5
1913.....	101	-1	-1	89	+12	+10	90	+11	+10
1914.....	101	-1	(1)	92	+9	+3	92	+9	+2
1916.....	100		-1	100		+9	100		+9
Pullers-over, hand, male:									
1910.....	102	-2		84	+19		86	+16	
1911.....	102	-2	(1)	90	+11	+7	91	+10	+6
1912.....	100	(1)	-2	92	+9	+2	92	+9	+1
1913.....	100	(1)	(1)	96	+4	+4	97	+3	+5
1914.....	100	(1)	(1)	101	-1	+5	101	-1	+4
1916.....	100		(1)	100		-1	100		-1

1 No change.

TABLE 2.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1916, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, IN THE PRINCIPAL OCCUPATIONS, AND THE INDUSTRY—Continued.

Occupation, sex, and year.	Hours per week.			Wages per hour.			Weekly earnings.		
	Relative full-time hours per week (1916=100).	Per cent of increase (+) or decrease (-) in—		Relative rate of wages per hour (1916=100).	Per cent of increase (+) or decrease (-) in—		Relative full-time weekly earnings (1916=100).	Per cent of increase (+) or decrease (-) in—	
		1916 as compared with each specified year.	Each specified year as compared with year preceding.		1916 as compared with each specified year.	Each specified year as compared with year preceding.		1916 as compared with each specified year.	Each specified year as compared with year preceding.
LASTING DEPARTMENT—concluded.									
Pullers-over, machine, male:									
1910.....	104	-4		84	+19		87	+15	
1911.....	102	-2	-2	84	+19	(1)	85	+18	-2
1912.....	101	-1	1	80	+25	-5	81	+23	-5
1913.....	101	-1	(1)	90	+11	+13	91	+10	+12
1914.....	101	-1	(1)	92	+9	+2	93	+8	+2
1916.....	100		-1	100		+9	100		+8
Side lasters, hand, male:									
1913.....	99	+1		95	+5		94	+6	
1914.....	99	+1	(1)	97	+3	+2	95	+5	+1
1916.....	100		+1	100		+3	100		+5
Side lasters, machine, male:									
1913.....	104	-4		95	+5		99	+1	
1914.....	100	(1)	-4	101	-1	+6	101	-1	+2
1916.....	100		(1)	100		-1	100		-1
Bed-machine operators, male:									
1910.....	103	-3		86	+16		88	+14	
1911.....	102	-2	-1	90	+11	+5	91	+10	+3
1912.....	101	-1	-1	85	+18	-6	86	+16	-5
1913.....	100	(1)	-1	93	+8	+9	93	+8	+8
1914.....	100	(1)	(1)	91	+10	-2	91	+10	-2
1916.....	100		(1)	100		+10	100		+10
Hand-method lasting-machine operators, male:									
1910.....	104	-4		86	+16		90	+11	
1911.....	104	-4	(1)	87	+15	+1	91	+10	+1
1912.....	102	-2	-2	89	+12	+2	91	+10	(1)
1913.....	101	-1	-1	98	+2	+10	99	+1	+9
1914.....	101	-1	(1)	97	+3	-1	97	+3	-2
1916.....	100		-1	100		+3	100		+3
Turn lasters, hand, male:									
1912.....	101	-1		78	+28		78	+28	
1913.....	100	(1)	-1	88	+14	+13	87	+15	+12
1914.....	99	+1	-1	92	+9	+5	90	+11	+3
1916.....	100		+1	100		+9	100		+11
Turn sewers, machine, male:									
1914.....	100	(1)		98	+2		98	+2	
1916.....	100		(1)	100		+2	100		+2
BOTTOMING DEPARTMENT.									
Goodyear welters, male:									
1910.....	102	-2		80	+25		82	+22	
1911.....	102	-2	(1)	85	+18	+6	87	+15	+6
1912.....	101	-1	-1	86	+16	+1	87	+15	(1)
1913.....	100	(1)	-1	97	+3	+13	97	+3	+11
1914.....	100	(1)	(1)	97	+3	(1)	98	+2	+1
1916.....	100		(1)	100		+3	100		+2
Rough rounders, male:									
1910.....	103	-3		79	+27		81	+23	
1911.....	103	-3	(1)	85	+18	+8	87	+15	+7
1912.....	102	-2	-1	85	+18	(1)	87	+15	(1)
1913.....	101	-1	-1	98	+2	+15	98	+2	+13
1914.....	100	(1)	-1	99	+1	+1	100	(1)	+2
1916.....	100		(1)	100		+1	100		(1)

¹ No change.

TABLE 2.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1916, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, IN THE PRINCIPAL OCCUPATIONS, AND THE INDUSTRY—Continued.

Occupation, sex, and year.	Hours per week.		Wages per hour.		Weekly earnings.	
	Relative full-time hours per week (1916=100).	Per cent of increase (+) or decrease (-) in—	Relative rate of wages per hour (1916=100).	Per cent of increase (+) or decrease (-) in—	Relative full-time weekly earnings (1916=100).	Per cent of increase (+) or decrease (-) in—
		1916 as compared with each specified year.		Each specified year as compared with year preceding.		1916 as compared with each specified year.	Each specified year as compared with year preceding.
BOTTOMING DEPARTMENT—continued.						
Goodyear stitchers, male:						
1910.....	102	-2	84	+19	86	+16
1911.....	102	-2	87	+15	88	+14
1912.....	102	-2	86	+16	88	+14
1913.....	100	(1)	92	+9	92	+9
1914.....	100	(1)	95	+5	95	+5
1916.....	100	(1)	100	+5	100	+5
McKay sewers, male:						
1910.....	102	-2	83	+20	84	+19
1911.....	101	-1	83	+20	83	+20
1912.....	101	-1	80	+25	81	+23
1913.....	100	(1)	89	+12	89	+12
1914.....	100	(1)	96	+4	96	+4
1916.....	100	(1)	100	+4	100	+4
Heelers, male:						
1911.....	102	-2	91	+10	93	+8
1912.....	102	-2	89	+12	90	+11
1913.....	100	(1)	100	(1)	100	(1)
1914.....	100	(1)	94	+6	94	+6
1916.....	100	(1)	100	+6	100	+6
Heel trimmers or shavers, male:						
1910.....	103	-3	88	+14	90	+11
1911.....	103	-3	89	+12	91	+10
1912.....	102	-2	89	+12	91	+10
1913.....	101	-1	95	+5	96	+4
1914.....	100	(1)	94	+6	94	+6
1916.....	100	(1)	100	+6	100	+6
Heel breasters, male:						
1911.....	103	-3	88	+14	89	+12
1912.....	102	-2	91	+10	92	+9
1913.....	101	-1	97	+3	97	+3
1914.....	101	-1	96	+4	95	+5
1916.....	100	(1)	100	+4	100	+5
Edge trimmers, male:						
1910.....	102	-2	87	+15	89	+12
1911.....	102	-2	89	+12	90	+11
1912.....	101	-1	88	+14	89	+12
1913.....	101	-1	95	+5	96	+4
1914.....	100	(1)	93	+8	94	+6
1916.....	100	(1)	100	+8	100	+6
Edge setters, male:						
1910.....	102	-2	86	+16	89	+12
1911.....	102	-2	88	+14	90	+11
1912.....	101	-1	90	+11	91	+10
1913.....	100	(1)	98	+2	99	+1
1914.....	100	(1)	98	+2	98	+2
1916.....	100	(1)	100	+2	100	+2
Heel scourers, male:						
1911.....	100	(1)	82	+22	83	+20
1912.....	101	-1	82	+22	83	+20
1913.....	100	(1)	89	+12	90	+11
1914.....	100	(1)	89	+12	89	+12
1916.....	100	(1)	100	+12	100	+12

¹ No change.

TABLE 2.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS, 1910 TO 1916, TOGETHER WITH PER CENT OF INCREASE OR DECREASE IN SPECIFIED YEARS, IN THE PRINCIPAL OCCUPATIONS, AND THE INDUSTRY.—Concluded.

Occupation, sex, and year.	Hours per week.			Wages per hour.			Weekly earnings.		
	Relative full-time hours per week (1916=100).	Per cent of increase (+) or decrease (-) in—		Relative rate of wages per hour (1916=100).	Per cent of increase (+) or decrease (-) in—		Relative full-time weekly earnings (1916=100).	Per cent of increase (+) or decrease (-) in—	
		1916 as compared with each specified year.	Each specified year as compared with year preceding.		1916 as compared with each specified year.	Each specified year as compared with year preceding.		1916 as compared with each specified year.	Each specified year as compared with year preceding.
BOTTOMING DEPARTMENT—concluded.									
Heel burnishers, male:									
1911.....	102	-2	.....	85	+13	.....	87	+15	.....
1912.....	102	-2	(1)	87	+15	+ 2	88	+14	+ 1
1913.....	100	(1)	-2	93	+ 8	+ 7	94	+ 6	+ 7
1914.....	100	(1)	(1)	95	+ 5	+ 2	95	+ 5	+ 1
1916.....	100	.....	(1)	100	.....	+ 5	100	.....	+ 5
Buffers, male:									
1911.....	102	-2	.....	84	+19	.....	85	+18	.....
1912.....	102	-2	(1)	88	+14	+ 5	89	+12	+ 5
1913.....	100	(1)	-2	97	+ 3	+10	97	+ 3	+ 9
1914.....	100	(1)	(1)	94	+ 6	- 3	94	+ 6	- 3
1916.....	100	.....	(1)	100	.....	+ 6	100	.....	+ 6
FINISHING DEPARTMENT.									
Treers or ironers, hand, male:									
1910.....	102	-2	.....	91	+10	.....	92	+ 9	.....
1911.....	102	-2	(1)	91	+10	(1)	92	+ 9	(1)
1912.....	102	-2	(1)	90	+11	- 1	91	+10	- 1
1913.....	101	-1	-1	95	+ 5	+ 6	95	+ 5	+ 4
1914.....	100	(1)	-1	95	+ 5	(1)	95	+ 5	(1)
1916.....	100	.....	(1)	100	.....	+ 5	100	.....	+ 5
Treers or ironers, hand, female:									
1910.....	110	-9	.....	79	+27	.....	86	+16	.....
1911.....	110	-9	(1)	79	+27	(1)	86	+16	(1)
1912.....	103	-3	-6	84	+19	+ 6	86	+16	(1)
1913.....	103	-3	(1)	87	+15	+ 4	89	+12	+ 3
1914.....	98	+2	-5	96	+ 4	+10	94	+ 6	+ 6
1916.....	100	.....	+2	100	.....	+ 4	100	.....	+ 6
OTHER EMPLOYEES (ALL DEPARTMENTS).									
Male:									
1914.....	100	(1)	.....	92	+ 9	.....	92	+ 9	.....
1916.....	100	.....	(1)	100	.....	+ 9	100	.....	+ 9
Female:									
1914.....	100	(1)	.....	95	+ 5	.....	95	+ 5	.....
1916.....	100	.....	(1)	100	.....	+ 5	100	.....	+ 5
THE INDUSTRY.									
1910.....	103	-3	.....	84	+19	.....	86	+16	.....
1911.....	103	-3	(1)	86	+16	+ 2	88	+14	+ 2
1912.....	102	-2	-1	86	+16	(1)	87	+15	- 1
1913.....	101	-1	-1	93	+ 8	+ 8	94	+ 6	+ 8
1914.....	100	(1)	-1	94	+ 6	+ 1	94	+ 6	(1)
1916.....	100	.....	(1)	100	.....	+ 6	100	.....	+ 6

¹ No change.

The relative number for each year preceding 1916 is the per cent that the average for that year is of the average for 1916. For example, Table 2 shows that relatively the full-time weekly earnings of outsole

cutters in 1910 were but 87 per cent of their weekly earnings in 1916. In 1911 they had increased to 89 per cent, in 1912 to 91 per cent, in 1913 to 96 per cent, and in 1914 to 98 per cent of their weekly earnings in 1916.

In addition to the relative numbers, which are shown in heavy faced type, Table 2 shows the per cent of increase or decrease in 1916 as compared with each preceding year back to 1910, and also the per cent of increase or decrease in each year as compared with the year immediately preceding.

The method used in computing the relative or index numbers may best be explained by an illustration. Take the rates of wages per hour of bed-machine operators, for example:

	Number of identical establishments.	1910	1911	1912	1913	1914	1916
Rates of wages per hour	35	\$0.311	\$0.323				
	54		.321	\$0.304			
	65			.300	\$0.330		
	60				.331	\$0.322	
	64					.319	\$0.351
Relative rates of wages per hour computed therefrom		86	90	85	93	91	100

The rate per hour for 1916 is taken as the base (100), then \$0.319 divided by \$0.351 equals 91, the relative for 1914. The ratio of 1913 to 1914 is \$0.331 to \$0.322. The relative for 1914, just determined (91), multiplied by \$0.322 and the result divided by \$0.331, equals 93, the relative for 1913. The ratio of 1912 to 1913 is \$0.300 to \$0.330. The relative for 1913, just determined (93), multiplied by \$0.300 and the result divided by \$0.330 equals 85, the relative for 1912. In like manner the relative numbers are computed for preceding years. For greater accuracy the relative numbers were carried to one decimal place in the process of computation, but are entered in the table to the nearest whole number.

The reasons for using the data for the most recent year available as the base for relative numbers are: First, the most recent data are believed to be the most accurate and representative; second, comparisons are more often made between recent years than between any others; and third, this method permits the inclusion of new or additional occupations that it may be found desirable to introduce, and the computing of relatives for such occupations for the years for which data are available, on the same base as that upon which the relatives for other occupations are computed.

Table 3 is a summary showing by States the number and per cent of employees working certain classified percentages of full time in the

representative pay period for which wage data were obtained. The length of the pay period was one week in all establishments except six having biweekly pay rolls, which establishments are omitted from the table.

TABLE 3.—NUMBER AND PER CENT OF EMPLOYEES WORKING EACH CLASSIFIED PER CENT OF FULL TIME IN ONE WEEK, BY STATES, 1916.

[This table does not include data from 6 establishments having biweekly payrolls.]

State.	Number of establishments.	Number of employees.	Number and per cent of employees working each classified per cent of full time.									
			100 per cent and over.		Under 100 per cent.		Under 75 per cent.		Under 50 per cent.		Under 25 per cent.	
			Num-ber.	Per-cent.	Num-ber.	Per-cent.	Num-ber.	Per-cent.	Num-ber.	Per-cent.	Num-ber.	Per-cent.
Illinois.....	4	2,408	1,011	42	1,397	58	337	14	92	4	27	1
Maine.....	5	2,249	993	44	1,256	56	331	15	113	5	42	2
Massachusetts.....	52	24,155	10,335	43	13,820	57	3,913	16	1,214	5	272	1
Minnesota.....	3	1,006	477	47	529	53	56	6	16	2	1	(¹)
Missouri.....	14	6,946	2,270	33	4,676	67	883	13	280	4	81	1
New Hampshire.....	11	5,884	3,339	57	2,545	43	473	8	192	3	65	1
New Jersey.....	3	683	312	46	371	54	29	4	7	1	1	(¹)
New York.....	14	7,526	4,049	54	3,477	46	790	10	238	3	55	1
Ohio.....	7	3,903	1,183	30	2,720	70	845	22	213	5	48	1
Pennsylvania.....	9	4,003	1,964	49	2,039	51	352	9	113	3	25	1
Wisconsin.....	4	1,357	502	37	855	63	149	11	52	4	19	1
Other States.....	4	1,007	419	42	588	58	76	8	30	3	8	1
Total.....	130	61,127	26,854	44	34,273	56	8,284	13	2,560	4	644	1

¹ Less than 1 per cent.

According to this table 44 per cent of the employees in the pay-roll week covered worked full time or over, and 56 per cent did not work full time. Thirteen per cent worked under 75 per cent of full time. By deduction it is seen that 43 per cent of the employees worked 75 per cent of full time but less than full time.

In addition to the foregoing table stating the extent to which employees actually worked the full time of the establishments, Table 4 is presented, summarizing Table D, page 110, showing for each occupation the average full-time hours per week of the establishments in comparison with the average hours actually worked in the pay-roll week reported, and comparing the average full-time weekly earnings with the average amount actually earned in the week with more or less time lost by some employees.

TABLE 4.—AVERAGE FULL-TIME HOURS, HOURS ACTUALLY WORKED, FULL-TIME WEEKLY EARNINGS, AND AMOUNTS ACTUALLY EARNED DURING ONE WEEK, 1916.

Occupation and sex.	Number of establishments.	Number of employees.	Average full-time hours per week of establishments.	Average hours actually worked per employee during one week.	Average full-time weekly earnings.	Average amount actually earned per employee during one week.
CUTTING DEPARTMENT.						
Cutters, vamp and whole shoe, hand, male	110	2,304	53.6	46.5	\$20.19	\$17.31
Cutters, vamp and whole shoe, machine, male	63	1,019	54.9	51.0	18.11	16.77
Skivers, upper, machine, male	32	124	54.6	47.7	16.93	14.87
Skivers, upper, machine, female	108	571	53.9	47.9	11.35	9.98
SOLE-LEATHER DEPARTMENT.						
Cutters, outsole, male	68	334	54.7	51.6	16.83	15.79
Channellers, insole and outsole, male	101	246	55.0	49.4	18.81	16.65
FITTING OR STITCHING DEPARTMENT.						
Tip stitchers, female	119	429	54.0	48.0	12.55	11.14
Backstay stitchers, female	120	555	53.9	47.2	11.50	9.99
Lining makers, female	121	967	52.8	47.1	10.76	9.38
Closers-on, female	81	353	53.5	47.2	10.99	9.67
Top stitchers or under trimmers, female	123	1,379	53.9	47.6	11.89	10.46
Button fasteners, female	89	184	53.6	47.3	11.51	10.12
Buttonhole makers, female	108	451	53.7	46.1	11.76	9.99
Vampers, male	80	609	54.6	47.1	18.23	15.65
Vampers, female	117	1,338	53.8	48.2	13.73	12.24
LASTING DEPARTMENT.						
Assemblers, for pulling-over machine, male	92	777	55.0	47.6	16.05	13.72
Pullers-over, hand, male	46	543	54.8	48.1	18.99	16.60
Pullers-over, machine, male	110	624	55.0	48.2	20.63	17.94
Side lasters, hand, male	39	356	54.1	49.7	17.53	16.05
Side lasters, machine, male	42	286	54.8	48.1	18.55	16.23
Bed-machine operators, male	88	1,310	54.9	49.5	19.07	17.15
Hand-method lasting-machine operators, male	61	527	55.1	48.7	19.91	17.52
Turn lasters, hand, male	40	942	54.9	48.1	20.12	17.46
Turn sewers, male	28	79	54.4	49.0	23.97	21.22
BOTTOMING DEPARTMENT.						
Goodyear welters, male	84	454	54.9	46.8	28.58	24.15
Rough rounders, male	86	284	54.8	47.4	27.13	23.15
Goodyear stitchers, male	91	637	54.8	48.3	24.00	20.98
McKay sewers, male	56	202	55.2	48.1	19.44	16.75
Loose-nail and standard-screw machine operators, male	22	71	55.4	49.6	17.65	15.76
Heelers, male	124	427	55.0	48.5	23.68	20.79
Heel trimmers or shavers, male	116	361	54.9	47.7	24.57	21.18
Heel breasters, male	106	226	55.1	49.7	17.56	15.77
Edge trimmers, male	123	1,048	54.8	49.6	23.25	20.94
Edge setters, male	125	935	54.8	48.8	22.70	20.14
Heel scourers, male	119	491	55.0	47.5	18.96	17.00
Heel burnishers, male	122	358	55.2	49.8	17.90	16.08
Buffers, male	123	523	54.9	49.8	17.97	16.16
FINISHING DEPARTMENT.						
Treers or ironers, hand, male	103	1,268	55.0	50.8	16.35	15.01
Treers or ironers, hand, female	14	142	53.1	47.7	9.87	8.87
Treers or ironers, machine, male	27	345	54.7	51.3	14.56	13.71
ALL DEPARTMENTS.						
Other employees, male	129	22,887	54.9	50.3	13.45	12.31
Other employees, female	128	14,361	53.8	48.4	9.67	8.70

EXPLANATION OF SCOPE AND METHOD.

This report includes establishments whose principal or only products are shoes made by the McKay, welt, or turn process, or loose-nailed or screwed shoes. Men's, women's, and children's shoes are included. Data are not included from establishments whose main or sole products are pegged shoes, or specialties such as slippers, leggings, felt boots, etc., nor from establishments doing only fitting or making sole stock. All data were secured from pay rolls of the

various establishments by the agents of the bureau. The number of establishments included or summarized in the report has varied considerably since 1907, as follows:

1907 to 1910.....	26 identical establishments.
1910 and 1911.....	60 identical establishments.
1911 and 1912.....	81 identical establishments.
1912 and 1913.....	88 identical establishments.
1913 and 1914.....	84 identical establishments.
1914 and 1916.....	82 identical establishments.

In addition to the 82 establishments from which data were secured for 1914 and 1916, data were secured from 54 establishments for 1916 only, making a total of 136 establishments from which data for 1916 are presented.

In selecting establishments from which to secure data, the bureau undertook to represent all States in which boot and shoe manufacturing is of material importance, the measure of importance being the number of employees as reported by the United States Census of Manufactures. Table 5 which follows shows, by States, the number of employees in this industry as reported by the United States Census, 1910; the number of establishments from which the bureau secured data for 1916; and the number of employees in such establishments:

TABLE 5.—TOTAL NUMBER OF EMPLOYEES IN BOOT AND SHOE MANUFACTURING AND NUMBER OF EMPLOYEES IN ESTABLISHMENTS FOR WHICH DATA ARE SHOWN FOR 1916.

State.	Number of employees reported by United States census, 1910.	Establishments and employees for which data are shown by the Bureau of Labor Statistics for 1916.	
		Number of establishments.	Number of employees.
Massachusetts.....	83,063	52	24,155
New York.....	21,627	14	7,726
Missouri.....	17,396	14	6,946
Ohio.....	16,026	8	4,979
New Hampshire.....	14,211	11	5,884
Pennsylvania.....	10,822	9	4,003
Maine.....	6,626	5	2,249
Illinois.....	5,792	6	2,713
Wisconsin.....	5,431	4	1,357
New Jersey.....	4,232	4	1,079
Virginia.....	2,711	3	719
Minnesota.....	2,664	3	1,006
Michigan.....	2,455	3	818
Other States.....	5,241	.....	.....
Total.....	198,297	136	63,634

According to the census of 1910, more than 97 per cent of the total number of employees in the industry are found in the States in which the establishments furnishing information to the Bureau of Labor Statistics are located. The number of employees for which the bureau secured 1916 data and for which detailed information for 1916 is presented in this report is more than 32 per cent of the total persons in the industry in 1910.

Full-time hours per week are the regular hours during which, under normal conditions, employees in an occupation are on duty. Full-time hours do not in any way indicate the extent of unemployment. Employees may work overtime, or broken time, or be laid off, or a temporary reduction may be made in working hours without affecting the full-time hours as here presented.

The rates of wages per hour appearing in the tables include the wages of timeworkers and the earnings of pieceworkers. All time rates not already on an hourly basis have been reduced to rates per hour, and the earnings of pieceworkers and of persons working at both time and piece rates have been reduced to rates per hour by dividing the earnings by the hours worked. Where there was no record regularly kept of the actual time worked by employees, the establishments, at the request of the bureau, kept a record for the pay-roll period selected.

The full-time weekly earnings are the earnings of employees working full time, or the earnings on broken time reduced to equivalent earnings for a full week. In addition to the full-time weekly earnings in several tables, the actual earnings of employees during one week are shown in Table D.

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

Descriptions of all the operations in the manufacture of a pair of shoes are given in Appendix A, page 133. Figures relating to wages and hours are shown in the tables for 37 of the more important occupations. Hand and machine work on the same process are presented as separate occupations. The sex of employees is shown for each occupation. Of the 37 occupations tabulated, data are shown for males alone in 27 occupations, for females alone in 7 occupations, and for both males and females in 3 occupations. The occupations, which are arranged in order of manufacture, are as follows:

Cutting department:	Fitting or stitching department—Concl'd.
Cutters, vamp and whole shoe, hand.	Buttonhole makers.
Cutters, vamp and whole shoe, machine.	Vampers.
Skivers, upper, machine.	Lasting department:
Sole-leather department:	Assemblers, for pulling-over machine.
Cutters, outsole.	Pullers-over, hand.
Channelers, insole and outsole.	Pullers-over, machine.
Fitting or stitching department:	Side lasters, hand.
Tip stitchers.	Side lasters, machine.
Backstay stitchers.	Bed-machine operators.
Lining makers.	Hand-method lasting-machine operators.
Closers-on.	Turn lasters, hand.
Top stitchers or undertrimmers.	Turn sewers.
Button fasteners.	

Bottoming department: Goodyear welters. Rough rounders. Goodyear stitchers. McKay sewers. Loose-nail and standard-screw machine operators. Heelers. Heel trimmers or shavers. Heel breasters.	Bottoming department—Concluded. Edge trimmers. Edge setters. Heel scourers. Heel burnishers. Buffers. Finishing department: Treers or ironers, hand. Treers or ironers, machine.
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All employees not shown under any of the above selected occupations are combined and shown under "Other employees."

In addition to the text tables already shown, four general tables are produced as follows:

Table A.—Average and classified full-time hours per week and rates of wages per hour, and average full-time weekly earnings, in the United States, by years, 1907 to 1916.

In this table the figures opposite each group of years are for identical establishments. When a second line is shown for 1916, it contains all data secured for 1916, whether or not comparable data for 1914 were available. Classified rates per hour are not presented prior to 1913 because of incomplete record, in many instances, of the time worked. Beginning with 1913 such records were kept in a satisfactory manner, and classified rates per hour are shown for the later years.

Table B.—Average and classified full-time hours per week and rates of wages per hour, and average full-time weekly earnings, in each State, by years, 1914 and 1916.

In this table the figures for both years are for identical establishments, and do not include data from establishments furnishing information for 1916 only.

Table C.—Average and classified full-time hours per week and rates of wages per hour, and average full-time weekly earnings, by States, 1916.

This table includes all data secured for 1916, whether or not comparable data for 1914 were available.

Table D.—Average full-time hours, hours actually worked, full-time weekly earnings, and amounts actually earned; and number of employees working each classified per cent of full time and earning each classified amount, during one week, by States, 1916.

This table includes data from all establishments from which information was secured for 1916, except 6 establishments having biweekly pay rolls. The data used are from weekly pay rolls.

The purpose of this table is to compare the time actually worked by employees with the full working time of the establishments, and the average amount actually earned, with more or less broken time of some employees, with the possible full-time earnings.

In Appendix B is a table showing the time and labor cost of making 100 pairs of welt shoes.

TABLE A.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK EARNINGS, IN THE UNITED STATES,

[The figures opposite each group of years are for identical establishments. When a second line is shown

Line No.	Occupation, sex, and number of establishments.	Year.	Number of employ-ees.	Aver- age full-time hours per week.	Aver- age rate of wages per hour.	Aver- age full-time week-ly earn-ings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

CUTTING DEPARTMENT.

	Cutters, vamp and whole shoe, hand, male:																			
1	20 establishments...	1907	919	54.9	\$0.325	\$17.84	11	157	343	252	156	-----								
2		1908	907	54.8	.332	18.19	6	175	331	283	112	-----								
3		1909	907	54.7	.340	18.60	14	159	346	286	102	-----								
4		1910	852	54.7	.345	18.87	13	176	278	291	94	-----								
5	48 establishments...	1910	1,650	56.0	.319	17.86	13	176	405	395	319	342								
6		1911	1,602	56.2	.317	17.75	14	158	425	398	311	296								
7	64 establishments...	1911	2,066	56.2	.313	17.50	-----	158	589	587	384	348								
8		1912	1,906	55.0	.322	17.63	217	162	720	272	323	212								
9	71 establishments...	1912	1,995	55.0	.322	17.58	242	162	738	297	336	220								
10		1913	1,987	54.5	.351	19.05	231	224	803	364	313	52								
11	68 establishments...	1913	1,923	54.5	.352	19.10	211	224	803	350	283	52								
12		1914	1,757	53.8	.368	19.70	354	308	405	476	183	31								
13	69 establishments...	1914	1,667	54.1	.366	19.70	271	318	393	435	195	55								
14		1916	1,790	54.1	.379	20.42	255	335	481	468	193	58								
15	113 establishments...	1916	2,355	53.9	.375	20.12	434	380	641	603	224	73								
	Cutters, vamp and whole shoe, machine, male:																			
16	17 establishments...	1910	235	57.8	.301	17.23	-----	-----	13	70	98	54								
17		1911	226	57.2	.300	17.09	-----	-----	15	75	102	34								
18	20 establishments...	1911	270	57.0	.313	17.69	-----	-----	59	69	87	55								
19		1912	300	55.5	.319	17.54	29	24	113	-----	85	49								
20	33 establishments...	1912	490	55.8	.313	17.36	29	24	186	41	124	86								
21		1913	549	55.3	.323	17.77	32	27	213	117	121	39								
22	35 establishments...	1913	528	55.5	.322	17.70	29	27	178	129	126	39								
23		1914	568	55.1	.328	17.96	58	20	133	228	124	5								
24	36 establishments...	1914	600	55.5	.323	17.84	37	20	131	253	154	5								
25		1916	728	55.4	.325	17.86	37	24	172	336	152	7								
26	67 establishments...	1916	1,059	54.9	.331	18.07	114	32	232	496	159	26								
	Skivers, upper, machine, male:																			
27	12 establishments...	1910	74	54.7	.288	15.80	-----	-----	49	13	12	-----								
28		1911	79	54.7	.314	17.15	-----	-----	52	21	6	-----								
29	28 establishments...	1911	136	54.8	.292	15.98	-----	-----	92	24	20	-----								
30		1912	146	54.6	.289	15.73	-----	10	100	11	24	1								
31	32 establishments...	1912	156	54.7	.282	15.41	-----	10	105	11	29	1								
32		1913	134	54.5	.299	16.23	-----	11	87	24	12	-----								
33	22 establishments...	1913	123	54.3	.300	16.26	-----	11	87	19	6	-----								
34		1914	107	54.2	.304	16.47	-----	10	75	19	3	-----								
35	19 establishments...	1914	93	54.1	.318	17.21	-----	10	71	9	3	-----								
36		1916	92	54.1	.331	17.87	-----	11	70	8	3	-----								
37	32 establishments...	1916	124	54.6	.311	16.93	-----	11	81	16	15	1								

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY BY YEARS, 1907 TO 1916.

for 1916 it contains all data secured for 1916, whether or not comparable data for 1914 were available.]

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

CUTTING DEPARTMENT.

Classified data for years prior to 1913 not available.													1
Classified data for years prior to 1913 not available.													2
Classified data for years prior to 1913 not available.													3
Classified data for years prior to 1913 not available.													4
Classified data for years prior to 1913 not available.													5
Classified data for years prior to 1913 not available.													6
Classified data for years prior to 1913 not available.													7
Classified data for years prior to 1913 not available.													8
					2	25	19	153	290	1,048	342	108	9
				2	2	25	19	152	262	1,015	340	108	11
				2	14	14	26	111	184	860	367	179	12
				2	14	13	17	98	168	872	328	155	13
					3	10	12	105	176	840	469	175	14
				1	6	11	16	137	274	1,077	623	210	15
Classified data for years prior to 1913 not available.													16
Classified data for years prior to 1913 not available.													17
Classified data for years prior to 1913 not available.													18
Classified data for years prior to 1913 not available.													19
				1	7	13	16	76	95	277	48	16	20
				1	6	11	14	82	89	272	38	15	22
				3	2	12	17	87	95	275	58	19	23
				3	2	12	17	95	105	301	49	16	24
			1	5	3	27	26	106	139	227	172	22	25
			1	5	3	29	29	134	181	409	232	36	26
Classified data for years prior to 1913 not available.													27
Classified data for years prior to 1913 not available.													28
Classified data for years prior to 1913 not available.													29
Classified data for years prior to 1913 not available.													30
				2	3	4	4	12	34	61	10	4	31
				2	3	4	4	5	33	59	10	3	33
				2	3	3	6	5	14	66	10	1	34
					1			2	5	10	10	1	35
								2	5	11	61	8	5
			2	3	1	1	2	11	19	71	9	5	37

TABLE A.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK EARNINGS, IN THE UNITED STATES,

Line No.	Occupation, sex, and number of establishments.	Year.	Number of employ-ees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

CUTTING DEPARTMENT—Concluded.

1	Skivers, upper, machine, female: 13 establishments...	1907	74	56.1	\$0.188	\$10.55				8	37	29	
2		1908	70	56.5	.192	10.85				7	27	36	
3		1909	79	56.3	.191	10.75				11	31	37	
4		1910	85	56.0	.195	10.92				8	35	42	
5	49 establishments...	1910	338	57.0	.175	9.94	1	30	40	81	86	100	
6		1911	314	57.3	.176	9.97	2	25	25	84	94	84	
7	60 establishments...	1911	374	57.0	.176	9.97		25	33	113	108	95	
8		1912	345	55.1	.191	10.54	9	26	158	50	91	11	
9	67 establishments...	1912	371	55.0	.193	10.58	9	26	179	59	87	11	
10		1913	439	54.6	.209	11.38	12	32	231	104	60		
11	65 establishments...	1913	439	54.6	.207	11.29	12	32	227	110	58		
12		1914	402	54.0	.211	11.35	26	64	192	99	21		
13	72 establishments...	1914	418	54.1	.207	11.16	26	64	190	111	27		
14		1916	466	54.2	.205	11.09	16	67	244	118	21		
15	113 establishments...	1916	591	54.0	.209	11.26	38	85	306	140	22		

SOLE-LEATHER DEPARTMENT.

16	Cutters, outsole, male: 10 establishments...	1907	50	54.8	\$0.314	\$17.21				38	5	7	
17		1908	47	54.5	.308	16.79				35	10	2	
18		1909	49	54.5	.307	16.73				37	10	2	
19		1910	54	54.4	.309	16.81				42	10	2	
20	31 establishments...	1910	143	56.6	.274	15.44				48	29	46	20
21		1911	129	56.5	.277	15.62				40	34	39	10
22	36 establishments...	1911	146	56.6	.278	15.70				43	43	39	21
23		1912	161	56.4	.286	16.09		2	56	34	48	21	
24	42 establishments...	1912	177	56.2	.281	15.75			2	66	39	49	21
25		1913	196	55.4	.303	16.69			16	83	46	51	
26	38 establishments...	1913	186	55.2	.304	16.75			16	83	42	45	
27		1914	175	54.8	.313	17.12		2	9	88	58	10	8
28	38 establishments...	1914	205	55.0	.304	16.71	2	3	87	89	13	11	
29		1916	219	55.0	.310	17.02	2	4	95	89	18	11	
30	64 establishments...	1916	345	54.7	.307	16.74	29	9	111	162	19	15	
31	Channelers, insole and outsole, male: 10 establishments...	1907	23	55.1	.283	15.59	4		8	2	9		
32		1908	23	55.1	.296	16.31	4		8	2	9		
33		1909	23	54.7	.306	16.74	4		10	2	7		
34		1910	23	54.7	.300	16.41	4		10	2	7		
35	44 establishments...	1910	138	56.3	.296	16.61	4	7	39	22	48	18	
36		1911	140	56.2	.306	17.12	4	7	37	31	48	13	
37	57 establishments...	1911	157	56.3	.289	16.21			7	46	38	45	21
38		1912	149	55.5	.296	16.35			12	61	30	39	7
39	75 establishments...	1912	200	55.9	.298	16.62			12	63	52	57	16
40		1913	196	55.4	.333	18.42			17	71	59	44	5
41	69 establishments...	1913	190	55.4	.335	18.48			17	70	56	40	7
42		1914	194	55.0	.337	18.51		3	26	48	84	29	4
43	70 establishments...	1914	202	55.1	.328	18.02		6	26	49	79	34	8
44		1916	197	55.2	.336	18.51		6	23	48	76	35	9
45	107 establishments...	1916	255	55.0	.340	18.69		13	28	67	98	39	10

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY BY YEARS, 1907 TO 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

CUTTING DEPARTMENT—Concluded.

Classified data for years prior to 1913 not available.													1	
													2	
													3	
													4	
													5	
													6	
													7	
													8	
													9	
		3	20	26	33	65	57	134	66	31	4			10
		3	23	30	33	64	56	131	65	30	4			11
		4	14	21	35	62	54	113	65	29	5			12
	1	4	11	22	42	74	54	119	60	27	4			13
		10	27	29	49	80	33	128	66	40	3	1		14
		10	27	41	59	102	49	157	77	62	4	3		15

SOLE-LEATHER DEPARTMENT.

Classified data for years prior to 1913 not available.													16	
													17	
													18	
													19	
													20	
													21	
													22	
													23	
						3	1	20	55	112	5			24
						3	1	19	47	111	5			25
					1	3	1	12	41	116	1			26
														27
				1	3	1		18	64	117	1			28
								26	52	140			1	29
									44	98	197	5	1	30
Classified data for years prior to 1913 not available.													31	
													32	
													33	
													34	
													35	
													36	
													37	
													38	
						2	2	18	44	94	30			39
						2	1	18	43	90	30			40
					2	1	3	19	38	91	33			41
														42
					2	3		22	40	96	31	4		43
			2	2	3	1	1	14	38	103	26	7		44
														45
			2	2	4	1	2	17	50	131	33	13		

TABLE A.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK EARNINGS, IN THE UNITED STATES,

Line No.	Occupation, sex, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.

FITTING OR STITCHING DEPARTMENT.

1	Tip stitchers, female:	1911	134	55.8	\$0.205	\$11.38														
2	36 establishments...	1912	137	55.2	.216	11.37				10	38	32	49	5						
3										12	68	17	40							
4	79 establishments...	1912	335	54.9	.208	11.36			10	17	186	48	68	6						
5		1913	337	54.7	.219	11.94			10	27	175	78	47							
6	75 establishments...	1913	329	54.6	.218	11.91			10	27	171	79	42							
7		1914	328	54.1	.218	11.82			10	47	182	75	14							
8	75 establishments...	1914	326	54.2	.218	11.81			10	47	170	82	17							
9		1916	326	54.2	.226	12.24			11	47	180	71	17							
9	124 establishments...	1916	442	54.0	.231	12.45			23	64	257	78	20							
10	Backstay stitchers, female:	1907	81	56.6	.171	9.68					15	18	48							
11	16 establishments...	1908	78	56.5	.186	10.51					13	23	42							
12		1909	91	56.3	.177	9.97					21	25	45							
13		1910	95	56.2	.179	10.06					16	25	54							
14	49 establishments...	1910	307	56.6	.177	9.95			1	32	35	88	84	67						
15		1911	299	56.6	.180	10.16			1	28	36	79	99	56						
16	67 establishments...	1911	392	56.5	.185	10.42				28	69	110	121	64						
17		1912	378	55.2	.189	10.42			11	8	203	41	97	18						
18	78 establishments...	1912	426	55.1	.187	10.31			12	8	231	48	109	18						
19		1913	389	54.7	.195	10.62			11	12	208	114	44							
20	73 establishments...	1913	379	54.6	.192	10.49			11	12	206	112	38							
21		1914	399	54.2	.196	10.59			13	39	227	104	16							
22	72 establishments...	1914	381	54.3	.198	10.72			13	39	190	119	20							
23		1916	405	54.2	.207	11.23			11	43	235	93	23							
24	125 establishments...	1916	575	54.0	.213	11.47			39	65	330	115	26							
25	Lining makers, female:	1907	124	56.2	.175	9.84					24	44	56							
26	19 establishments...	1908	112	56.1	.165	9.26					24	42	46							
27		1909	122	56.0	.173	9.69					28	46	48							
28		1910	154	55.9	.163	9.11					33	55	66							
29	53 establishments...	1910	585	56.5	.164	9.19			2	88	76	145	141	133						
30		1911	576	56.5	.162	9.08			3	81	75	162	154	101						
31	72 establishments...	1911	721	56.5	.166	9.28				81	136	190	189	125						
32		1912	706	55.0	.171	9.36			21	39	373	85	161	27						
33	80 establishments...	1912	764	55.0	.170	9.31			21	39	391	98	188							
34		1913	854	54.6	.190	10.38			29	47	469	199	110							
35	76 establishments...	1913	833	54.5	.190	10.31			29	47	457	199	101							
36		1914	804	53.9	.188	10.15			52	134	409	177	32							
37	76 establishments...	1914	796	54.1	.190	10.24			52	134	366	197	47							
38		1916	769	54.1	.200	10.78			51	97	409	155	57							
39	126 establishments...	1916	1,004	53.9	.198	10.69			91	124	561	166	62							

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY BY YEARS, 1907 TO 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	
Classified data for years prior to 1913 not available.													1
Classified data for years prior to 1913 not available.													2
	4	9	18	39	48	28	99	46	45	1			3
	4	9	19	37	47	28	95	44	45	1			4
	9	11	20	24	37	36	95	51	42	2		1	5
	8	11	21	22	37	37	93	55	39	2		1	6
	7	5	14	22	38	33	102	57	43	5			7
	7	7	15	35	45	46	129	83	69	6			8
													9
Classified data for years prior to 1913 not available.													10
Classified data for years prior to 1913 not available.													11
Classified data for years prior to 1913 not available.													12
Classified data for years prior to 1913 not available.													13
	3	21	35	57	65	55	89	39	24	1			14
	3	21	35	55	63	53	86	38	24	1			15
	10	22	46	45	48	50	99	58	21				16
	11	21	37	42	46	51	93	58	22				17
	2	7	22	21	40	55	50	118	56	31		3	18
	2	9	29	27	58	68	66	174	81	55		6	19
													20
													21
													22
													23
													24
Classified data for years prior to 1913 not available.													25
Classified data for years prior to 1913 not available.													26
Classified data for years prior to 1913 not available.													27
Classified data for years prior to 1913 not available.													28
	4	29	75	97	81	105	107	226	82	47		1	29
	5	29	74	96	79	100	105	220	79	45		1	30
	5	25	68	84	86	119	97	206	75	36		3	31
	3	26	65	74	85	115	105	211	75	34		3	32
	7	29	47	64	76	100	88	191	107	54		5	33
	11	34	57	80	108	133	119	257	130	68		6	34
													35
													36
													37
													38
													39

TABLE A.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK EARNINGS, IN THE UNITED STATES,

Line No.	Occupation, sex, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
FITTING OR STITCHING DEPARTMENT—Continued.											
1	Closers-on, female:										
2	18 establishments...	1907	104	55.3	\$0.200	\$11.06		17	25	34	28
3		1908	100	55.1	.190	10.47		20	21	41	18
4		1909	101	55.1	.207	11.41		19	19	45	18
5		1910	95	55.0	.198	10.89		23	19	34	19
5	49 establishments...	1910	262	57.1	.178	10.13	1	23	34	57	60
6		1911	277	57.1	.178	10.09	1	5	36	89	72
7	65 establishments...	1911	350	56.9	.180	10.18		5	62	108	88
8		1912	331	54.9	.187	10.21	15	16	178	36	71
9	74 establishments...	1912	344	55.0	.186	10.17	15	16	182	40	76
10		1913	349	54.4	.194	10.53	18	17	206	73	35
11	69 establishments...	1913	337	54.4	.191	10.39	14	17	203	73	30
12		1914	325	53.8	.193	10.36	28	54	170	63	10
13	51 establishments...	1914	259	53.8	.195	10.51	28	36	124	60	11
14		1916	249	53.8	.199	10.69	18	38	153	30	10
15	83 establishments...	1916	360	53.6	.204	10.95	38	54	228	30	10
16	Top stitchers or under-trimmers, female:										
17	17 establishments...	1907	151	56.3	.185	10.42			30	45	76
18		1908	144	56.3	.190	10.70			31	41	72
19		1909	156	56.3	.196	11.03			31	47	78
20		1910	164	56.0	.200	11.20			32	49	83
20	53 establishments...	1910	721	56.9	.188	10.69	3	64	111	148	192
21		1911	742	56.8	.192	10.83	4	63	109	169	232
22	73 establishments...	1911	911	56.7	.194	10.95		63	183	212	268
23		1912	950	54.9	.198	10.82	29	81	521	80	212
24	82 establishments...	1912	1,033	54.9	.198	10.81	29	81	572	96	228
25		1913	1,070	54.6	.210	11.47	25	96	573	237	139
26	77 establishments...	1913	1,033	54.5	.211	11.46	25	96	558	237	117
27		1914	1,005	54.1	.211	11.39	52	156	524	225	48
28	77 establishments...	1914	1,004	54.1	.212	11.46	56	152	500	230	57
29		1916	1,101	54.1	.214	11.55	39	162	612	235	53
30	128 establishments...	1916	1,427	54.0	.220	11.87	82	202	832	254	57
31	Button fasteners, female:										
32	26 establishments...	1911	55	56.4	.157	8.88		5	9	12	26
33		1912	70	55.9	.183	10.21		6	28	2	34
33	72 establishments...	1912	205	55.3	.177	9.78	3	15	101	19	58
34		1913	232	54.8	.199	10.95	10	17	127	22	56
35	66 establishments...	1913	221	54.7	.196	10.70	10	18	126	21	46
36		1914	198	53.7	.197	10.57	18	40	105	26	9
37	60 establishments...	1914	189	53.7	.192	10.32	18	39	93	29	10
38		1916	142	53.9	.209	11.28	11	31	65	25	10
39	94 establishments...	1916	195	53.8	.211	11.32	19	46	92	27	11

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY BY YEARS, 1907 TO 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	.50 cents and over.	

FITTING OR STITCHING DEPARTMENT—Continued.

Classified data for years prior to 1913 not available.													1
Classified data for years prior to 1913 not available.													2
Classified data for years prior to 1913 not available.													3
Classified data for years prior to 1913 not available.													4
Classified data for years prior to 1913 not available.													5
Classified data for years prior to 1913 not available.													6
Classified data for years prior to 1913 not available.													7
Classified data for years prior to 1913 not available.													8
		5	22	43	48	39	46	88	39	15	4		9
		5	22	43	49	38	45	84	34	13	4		10
	2	7	22	25	44	42	42	97	32	12			11
		5	17	20	32	32	37	77	27	12			12
	1	8	11	25	25	29	36	63	41	9	1		13
		1	11	16	33	35	36	40	101	69	17	1	14
													15
Classified data for years prior to 1913 not available.													16
Classified data for years prior to 1913 not available.													17
Classified data for years prior to 1913 not available.													18
Classified data for years prior to 1913 not available.													19
Classified data for years prior to 1913 not available.													20
Classified data for years prior to 1913 not available.													21
Classified data for years prior to 1913 not available.													22
Classified data for years prior to 1913 not available.													23
		6	38	89	124	114	131	307	176	73	12		24
		6	37	87	121	112	122	291	173	72	12		25
	2	17	36	68	100	119	124	304	144	79	11	1	26
		17	36	63	94	121	126	305	146	82	11	1	27
	2	7	47	53	119	128	129	339	178	89	9	2	28
		1	7	51	66	142	156	437	248	136	23	3	29
													30
Classified data for years prior to 1913 not available.													31
Classified data for years prior to 1913 not available.													32
	2	5	18	27	33	30	28	40	22	18	9		33
		5	18	27	29	31	30	38	19	13	9		34
	2	7	15	29	13	28	32	39	17	10	8		35
		6	15	28	14	24	33	38	15	13	3		36
	1	2	11	12	8	16	19	36	20	15	2		37
		3	14	18	13	23	21	49	26	23	4		38
	1												39

TABLE A.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK EARNINGS, IN THE UNITED STATES,

Line No.	Occupation, sex, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
FITTING OR STITCHING DEPARTMENT—Concluded.												
1	Buttonhole makers, female: 33 establishments...	1911	108	56.3	\$0.176	\$9.83	2	29	23	48	6	
2		1912	168	55.4	.180	9.96	17	79	8	64		
3	74 establishments...	1912	468	55.1	.180	9.87	12	27	257	41	111	20
4		1913	517	54.7	.194	10.60	6	41	306	70	94	
5	71 establishments...	1913	489	54.6	.192	10.50	6	41	302	69	71	
6		1914	477	53.8	.200	10.76	46	99	231	70	31	
7	73 establishments...	1914	484	53.9	.196	10.55	46	99	223	78	38	
8		1916	369	54.0	.213	11.50	26	79	193	45	26	
9	113 establishments...	1916	466	53.8	.217	11.65	44	101	242	52	27	
Vampers, male:												
10	13 establishments...	1907	167	54.9	.318	17.46	7	119	9	32		
11		1908	99	55.2	.287	15.84	18	41	15	25		
12		1909	150	54.6	.287	15.67	58	51	21	20		
13		1910	134	54.5	.294	16.02	48	46	18	22		
14	33 establishments...	1910	263	55.5	.293	16.24	48	67	63	57	28	
15		1911	249	55.7	.303	16.88	21	69	81	53	25	
16	51 establishments...	1911	343	55.5	.315	17.42	21	138	94	61	29	
17		1912	435	54.9	.310	16.97	15	56	199	57	93	15
18	66 establishments...	1912	483	55.0	.306	16.76	15	56	215	67	112	18
19		1913	554	54.8	.320	17.47	12	74	227	164	72	5
20	57 establishments...	1913	531	54.7	.320	17.44	12	74	225	153	62	5
21		1914	515	54.5	.315	17.13	6	89	195	187	36	2
22	53 establishments...	1914	479	54.5	.311	16.95	6	91	188	149	39	6
23		1916	496	54.7	.332	18.12	7	73	205	146	56	9
24	82 establishments...	1916	624	54.6	.333	18.14	16	87	243	211	58	9
Vampers, female:												
25	22 establishments...	1907	351	55.7	.246	13.70	4	54	56	105	132	
26		1908	321	55.9	.242	13.53	3	18	60	119	121	
27		1909	391	55.5	.253	14.04	5	77	66	123	120	
28		1910	366	55.5	.257	14.26	6	39	67	129	125	
29	53 establishments...	1910	863	56.9	.238	13.46	20	39	125	206	241	232
30		1911	909	56.7	.238	13.43	26	45	138	229	268	203
31	71 establishments...	1911	1,124	56.5	.238	13.46	21	45	191	291	315	261
32		1912	1,019	55.1	.233	12.84	15	66	546	107	237	48
33	79 establishments...	1912	1,088	55.1	.231	12.68	15	66	575	121	263	48
34		1913	1,072	54.7	.246	13.45	14	72	620	216	150	
35	77 establishments...	1913	1,052	54.6	.246	13.40	14	72	620	216	130	
36		1914	1,037	53.9	.244	13.13	80	181	513	209	54	
37	75 establishments...	1914	1,027	54.0	.242	13.06	80	181	468	245	53	
38		1916	1,065	54.1	.252	13.61	44	185	580	182	74	
39	121 establishments...	1916	1,383	53.9	.254	13.66	108	248	752	198	77	

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY BY YEARS, 1907 TO 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

FITTING OR STITCHING DEPARTMENT—Concluded.

Classified data for years prior to 1913 not available.													1
Classified data for years prior to 1913 not available.													2
	3	16	43	63	67	59	56	110	60	35	3	2	3
	3	16	43	62	62	58	53	99	53	35	3	2	5
	2	8	38	48	66	60	55	103	60	27	9	1	6
	2	9	41	53	68	60	58	109	50	25	8	1	7
	2	9	22	20	26	44	56	93	51	37	7	2	8
	3	9	23	26	33	53	69	121	68	49	10	2	9
Classified data for years prior to 1913 not available.													10
Classified data for years prior to 1913 not available.													11
Classified data for years prior to 1913 not available.													12
Classified data for years prior to 1913 not available.													13
Classified data for years prior to 1913 not available.													14
Classified data for years prior to 1913 not available.													15
Classified data for years prior to 1913 not available.													16
Classified data for years prior to 1913 not available.													17
				2	11	17	15	66	115	227	93	8	18
				2	11	16	15	64	107	220	88	8	19
		2	2	4	5	13	18	87	101	197	76	10	20
		2	2	4	6	12	18	79	97	186	65	8	22
				2	4	13	16	63	84	211	76	27	23
				2	4	15	17	82	101	275	97	31	24
Classified data for years prior to 1913 not available.													25
Classified data for years prior to 1913 not available.													26
Classified data for years prior to 1913 not available.													27
Classified data for years prior to 1913 not available.													28
Classified data for years prior to 1913 not available.													29
Classified data for years prior to 1913 not available.													30
Classified data for years prior to 1913 not available.													31
Classified data for years prior to 1913 not available.													32
			12	30	52	86	110	330	235	181	32	4	33
			12	29	51	84	110	325	232	173	32	4	34
	1	5	12	30	62	72	128	278	228	198	22	1	35
		5	13	31	57	76	133	282	225	183	21	1	36
		5	13	24	47	67	108	293	239	238	28	3	37
		6	17	28	61	84	130	373	334	308	37	5	38
													39

TABLE A.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK EARNINGS, IN THE UNITED STATES,

Line No.	Occupation, sex, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

LASTING DEPARTMENT.

1	Assemblers, for pulling-over machine, male: 17 establishments...	1911	218	55.4	\$0.274	\$15.14				93	69	49	7
2		1912	228	54.8	.265	14.45	31		102	37	47	11	
3	50 establishments...	1912	542	55.8	.238	13.21	31	26	174	96	131	84	
4		1913	532	55.5	.261	14.46	14	31	201	134	121	31	
5	54 establishments...	1913	597	55.4	.272	15.01	14	31	245	160	116	31	
6		1914	646	55.2	.281	15.45	44	50	188	204	146	14	
7	56 establishments...	1914	659	55.5	.276	15.24	25	50	186	211	163	24	
8		1916	586	55.1	.300	16.50	22	67	201	160	103	33	
9	97 establishments...	1916	801	55.0	.291	16.02	32	69	272	275	118	35	
10	Pullers-over, hand, male: 13 establishments...	1907	345	56.6	.256	14.49			77	73	195		
11		1908	330	56.6	.249	14.09			74	63	193		
12		1909	366	56.2	.287	16.13			111	82	173		
13		1910	384	55.9	.276	15.43			105	99	180		
14	35 establishments...	1910	784	56.4	.291	16.38	5	19	207	178	228	147	
15		1911	784	56.2	.309	17.28	7	27	204	206	234	106	
16	45 establishments...	1911	897	56.3	.312	17.50		27	263	234	219	154	
17		1912	899	55.4	.319	17.62	24	111	297	188	212	69	
18	52 establishments...	1912	1,036	55.3	.316	17.41	24	111	343	287	195	76	
19		1913	937	55.3	.333	18.37		65	342	332	190	8	
20	47 establishments...	1913	907	55.1	.334	18.42		65	354	323	157	8	
21		1914	729	54.9	.350	19.24	2	60	212	368	82	5	
22	30 establishments...	1914	637	54.8	.357	19.52	2	52	173	258	52		
23		1916	429	54.8	.353	19.33	1	60	148	161	59		
24	46 establishments...	1916	543	54.8	.347	18.99	1	63	192	225	62		
25	Pullers-over, machine, male: 31 establishments...	1910	251	57.4	.320	18.37			50	36	85	80	
26		1911	266	56.5	.319	17.95			77	91	47	51	
27	43 establishments...	1911	328	56.1	.325	18.18			110	120	52	46	
28		1912	305	55.6	.312	17.31	15	34	113	43	47	53	
29	60 establishments...	1912	402	55.8	.312	17.39	7	34	148	64	82	67	
30		1913	421	55.4	.351	19.42	5	19	183	107	82	25	
31	59 establishments...	1913	421	55.4	.352	19.45	5	19	183	112	77	25	
32		1914	396	55.3	.360	19.87	16	26	108	155	81	10	
33	63 establishments...	1914	410	55.6	.353	19.56	8	30	108	151	95	18	
34		1916	421	55.3	.382	21.08	11	40	119	148	80	23	
35	116 establishments...	1916	640	55.0	.377	20.70	29	51	173	274	89	24	
36	Side lasters, hand, male: 20 establishments...	1913	224	54.2	.303	16.40			96	60	54	14	
37		1914	237	54.0	.308	16.59			119	44	63	10	
38	16 establishments...	1914	217	53.6	.304	16.20	31	102	7	61	14	2	
39		1916	179	54.2	.315	17.02	10	88	7	54	15	5	
40	40 establishments...	1916	358	54.1	.325	17.57	10	122	104	98	19	5	

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY BY YEARS, 1907 TO 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

LASTING DEPARTMENT.

Classified data for years prior to 1913 not available.													1
Classified data for years prior to 1913 not available.													2
Classified data for years prior to 1913 not available.													3
Classified data for years prior to 1913 not available.													4
Classified data for years prior to 1913 not available.													5
Classified data for years prior to 1913 not available.													6
Classified data for years prior to 1913 not available.													7
Classified data for years prior to 1913 not available.													8
Classified data for years prior to 1913 not available.													9
Classified data for years prior to 1913 not available.													10
Classified data for years prior to 1913 not available.													11
Classified data for years prior to 1913 not available.													12
Classified data for years prior to 1913 not available.													13
Classified data for years prior to 1913 not available.													14
Classified data for years prior to 1913 not available.													15
Classified data for years prior to 1913 not available.													16
Classified data for years prior to 1913 not available.													17
Classified data for years prior to 1913 not available.													18
Classified data for years prior to 1913 not available.													19
Classified data for years prior to 1913 not available.													20
Classified data for years prior to 1913 not available.													21
Classified data for years prior to 1913 not available.													22
Classified data for years prior to 1913 not available.													23
Classified data for years prior to 1913 not available.													24
Classified data for years prior to 1913 not available.													25
Classified data for years prior to 1913 not available.													26
Classified data for years prior to 1913 not available.													27
Classified data for years prior to 1913 not available.													28
Classified data for years prior to 1913 not available.													29
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Classified data for years prior to 1913 not available.													32
Classified data for years prior to 1913 not available.													33
Classified data for years prior to 1913 not available.													34
Classified data for years prior to 1913 not available.													35
Classified data for years prior to 1913 not available.													36
Classified data for years prior to 1913 not available.													37
Classified data for years prior to 1913 not available.													38
Classified data for years prior to 1913 not available.													39
Classified data for years prior to 1913 not available.													40

TABLE A.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK EARNINGS, IN THE UNITED STATES,

Line No.	Occupation, sex, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

LASTING DEPARTMENT—Concluded.

1	Turn sewers, machine, male: 17 establishments...	1914	48	53.9	\$0.401	\$21.54	9	5	4	27	3	.....
2		1916	52	53.9	.408	21.93	10	6	3	30	3	.....
3	29 establishments...	1916	81	54.4	.442	24.00	10	9	14	38	10	.....

BOTTOMING DEPARTMENT.

4	Goodyear welters, male: 14 establishments...	1907	67	55.9	\$0.409	\$22.86	.....	.....	22	19	26	.....
5		1908	70	56.0	.409	22.90	.....	.....	23	18	29	.....
6		1909	74	55.7	.444	24.73	.....	.....	27	21	26	.....
7		1910	81	55.6	.422	23.46	.....	.....	29	20	32	.....
8	45 establishments...	1910	275	56.2	.437	24.49	2	19	79	62	61	52
9		1911	289	56.0	.464	25.88	2	27	78	79	52	51
10	60 establishments...	1911	392	56.0	.452	25.21	.....	27	132	93	77	63
11		1912	411	55.8	.454	25.27	.....	40	162	68	84	57
12	70 establishments...	1912	466	55.8	.445	24.75	.....	40	177	91	98	60
13		1913	472	55.3	.501	27.60	.....	44	188	139	85	19
14	66 establishments...	1913	458	55.2	.503	27.71	.....	44	188	136	74	16
15		1914	418	55.0	.508	27.90	.....	48	145	167	52	6
16	67 establishments...	1914	417	55.1	.506	27.85	.....	48	145	153	60	11
17		1916	410	55.1	.519	28.49	.....	63	134	143	52	18
18	89 establishments...	1916	467	54.9	.520	28.50	6	70	159	156	57	19
19	Rough rounders, male: 15 establishments...	1907	48	56.0	.387	21.67	.....	.....	13	15	20	.....
20		1908	49	56.0	.368	20.61	.....	.....	13	16	20	.....
21		1909	54	55.8	.434	24.22	.....	.....	18	16	20	.....
22		1910	56	55.5	.411	22.81	.....	.....	19	16	21	.....
23	44 establishments...	1910	165	56.7	.406	22.85	1	.....	41	40	44	39
24		1911	167	56.5	.438	24.56	1	.....	39	59	33	35
25	60 establishments...	1911	221	56.3	.436	24.44	.....	2	65	68	43	43
26		1912	248	55.9	.439	24.41	.....	23	88	50	50	37
27	69 establishments...	1912	273	55.9	.435	24.21	.....	23	93	60	56	41
28		1913	265	55.2	.497	27.37	.....	27	99	84	47	8
29	67 establishments...	1913	261	55.2	.497	27.35	.....	27	99	83	44	8
30		1914	240	54.9	.506	27.74	.....	34	73	102	26	5
31	67 establishments...	1914	243	55.1	.500	27.52	.....	34	73	95	32	9
32		1916	245	55.1	.503	27.64	.....	38	71	93	32	11
33	91 establishments...	1916	296	54.9	.491	26.89	4	48	92	104	36	12
34	Goodyear stitchers, male: 21 establishments...	1907	215	55.3	.403	22.29	.....	23	93	45	54	.....
35		1908	214	55.1	.376	20.72	.....	21	92	59	42	.....
36		1909	221	55.3	.394	21.79	.....	26	76	66	53	.....
37		1910	224	55.2	.388	21.42	.....	21	77	70	56	.....
38	45 establishments...	1910	368	56.3	.374	20.97	3	21	88	96	89	69
39		1911	398	56.0	.388	21.65	3	28	106	118	81	62
40	61 establishments...	1911	529	55.9	.387	21.56	.....	28	184	133	110	74
41		1912	562	55.9	.385	21.40	.....	38	221	103	105	95

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY BY YEARS, 1907 TO 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

LASTING DEPARTMENT—Concluded.

								1	1	24	12	10	1
							1		20	8	11	12	2
							1	1	20	12	20	27	3

BOTTOMING DEPARTMENT.

Classified data for years prior to 1913 not available.													4	
Classified data for years prior to 1913 not available.													5	
Classified data for years prior to 1913 not available.													6	
Classified data for years prior to 1913 not available.													7	
Classified data for years prior to 1913 not available.													8	
Classified data for years prior to 1913 not available.													9	
Classified data for years prior to 1913 not available.													10	
Classified data for years prior to 1913 not available.													11	
								5	21	80	125	241	12	
								5	18	78	119	238	13	
							1	5	14	66	117	215	14	
							1	5	14	66	120	211	15	
							3	11	17	49	104	225	16	
							1	3	11	17	49	104	225	17
							1	3	12	19	59	111	262	18
Classified data for years prior to 1913 not available.													19	
Classified data for years prior to 1913 not available.													20	
Classified data for years prior to 1913 not available.													21	
Classified data for years prior to 1913 not available.													22	
Classified data for years prior to 1913 not available.													23	
Classified data for years prior to 1913 not available.													24	
Classified data for years prior to 1913 not available.													25	
Classified data for years prior to 1913 not available.													26	
							1	5	12	58	72	117	27	
							1	5	11	58	71	115	28	
							3	10	10	43	70	114	29	
								3	10	47	74	109	30	
							2	1	7	14	48	60	113	31
							2	1	10	18	63	72	130	32
							2	1	10	18	63	72	130	33
Classified data for years prior to 1913 not available.													34	
Classified data for years prior to 1913 not available.													35	
Classified data for years prior to 1913 not available.													36	
Classified data for years prior to 1913 not available.													37	
Classified data for years prior to 1913 not available.													38	
Classified data for years prior to 1913 not available.													39	
Classified data for years prior to 1913 not available.													40	
Classified data for years prior to 1913 not available.													41	

TABLE A.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK EARNINGS, IN THE UNITED STATES,

Line No.	Occupation, sex, and number of establishments.	Year.	Number of employes.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
BOTTOMING DEPARTMENT—Continued.												
1	Goodyear stitchers, male—concluded.	1912	627	55.9	\$0.376	\$20.96	38	232	125	128	104	
2	70 establishments...	1913	642	55.2	.399	21.96	60	267	184	119	12	
3	67 establishments...	1913	633	55.1	.398	21.87	60	267	185	109	12	
4		1914	569	54.9	.413	22.65	73	190	231	68	7	
5	65 establishments...	1914	559	55.0	.412	22.62	73	190	208	75	13	
6		1916	557	55.0	.433	23.76	83	188	198	68	20	
7	97 establishments...	1916	656	54.8	.437	23.87	15	97	228	218	77	
8	McKay sewers, male:	1907	34	55.2	.288	15.90	14	.....	11	9	.....
9	5 establishments...	1908	25	55.3	.311	17.20	9	.....	9	7	.....
10		1909	28	55.7	.274	15.26	9	.....	8	11	.....
11		1910	26	55.2	.279	15.40	10	.....	7	9	.....
12	28 establishments...	1910	95	57.1	.290	16.46	1	10	5	24	30	
13		1911	107	56.7	.290	16.35	1	13	7	29	43	
14	30 establishments...	1911	129	56.5	.296	16.63	13	9	49	43	15	
15		1912	128	56.3	.285	16.10	3	24	40	50	11	
16	32 establishments...	1912	131	56.1	.286	16.00	3	26	42	52	8	
17		1913	136	55.6	.319	17.70	5	35	62	30	4	
18	32 establishments...	1913	128	55.5	.319	17.68	5	35	63	21	4	
19		1914	130	55.5	.343	19.00	8	7	74	31	4	
20	30 establishments...	1914	123	55.7	.327	18.17	8	7	79	17	5	
21		1916	136	55.7	.341	18.91	8	9	23	51	33	
22	61 establishments...	1916	210	55.2	.349	19.51	15	14	42	89	38	
23	Heelers, male:	1911	115	55.8	.403	22.52	10	33	26	44	2	
24	31 establishments...	1912	124	55.7	.391	21.71	8	46	25	39	6	
25	67 establishments...	1912	254	56.2	.378	21.17	9	87	49	69	40	
26		1913	269	55.4	.424	23.41	12	114	83	52	8	
27	72 establishments...	1913	291	55.3	.424	23.32	21	121	87	54	8	
28		1914	293	55.1	.400	21.98	7	38	70	120	48	
29	76 establishments...	1914	305	55.3	.403	22.22	7	38	73	116	57	
30		1916	323	55.3	.429	23.66	6	42	81	116	59	
31	130 establishments...	1916	440	55.0	.430	23.59	20	59	114	162	64	
32	Heel trimmers or shavers, male:	1907	99	55.1	.438	24.13	25	24	29	21	.....
33	23 establishments...	1908	84	55.2	.439	24.23	15	22	29	18	.....
34		1909	82	55.3	.447	24.72	12	22	28	20	.....
35		1910	91	55.2	.443	24.45	1	21	31	22	.....
36	55 establishments...	1910	189	56.6	.410	23.03	1	17	27	54	50	
37		1911	193	56.5	.415	23.34	1	16	29	59	36	
38	71 establishments...	1911	246	56.5	.415	23.32	16	47	80	60	43	
39		1912	239	56.0	.415	23.10	18	70	56	63	32	
40	81 establishments...	1912	252	56.0	.420	23.39	18	75	61	66	32	
41		1913	277	55.4	.448	24.74	30	90	91	59	7	
42	77 establishments...	1913	271	55.3	.443	24.46	30	90	89	55	7	
43		1914	262	55.1	.439	24.14	6	37	51	123	40	

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY BY YEARS, 1907 TO 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

BOTTOMING DEPARTMENT—Continued.

													1
						3	2	36	92	242	146	121	2
						3	2	38	88	239	146	117	3
						2	3	21	73	197	156	117	4
						2	3	23	71	193	153	114	5
							2	26	44	163	175	147	6
							2	26	50	186	214	178	7
													8
													9
													10
													11
													12
													13
													14
													15
						2	2	5	20	31	50	23	16
						2	2	5	18	29	47	22	17
						2		10	21	15	48	22	18
													19
						2		10	19	16	53	17	20
						1	2	1	11	32	56	27	21
													22
						1	2	3	20	36	89	42	23
													24
													25
													26
						1	1	23	22	79	60	83	27
						1	2	25	24	84	65	90	28
						2	5	36	31	86	62	71	29
													30
						2	5	34	34	86	71	73	31
						1		4	21	28	115	63	32
													33
						1							34
													35
													36
													37
													38
													39
													40
						1	1	4	2	14	30	71	41
													42
						1	1	4	2	16	30	70	43
													44
						1	1	4	1	14	20	73	45

TABLE A.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK EARNINGS, IN THE UNITED STATES,

Line No.	Occupation, sex, and number of establishments.	Year.	Number of employ-ees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
BOTTOMING DEPARTMENT—Continued.												
	Heel trimmers or shavers, male—Continued.											
1	75 establishments...	1914	258	55.2	\$0.428	\$23.54	6	37	51	111	44	9
2		1916	284	55.0	.454	24.92	6	49	64	112	40	13
3	121 establishments...	1916	367	54.9	.449	24.55	16	56	88	147	45	15
4	Heel breasters, male:											
5	35 establishments...	1911	76	56.1	.291	16.23	.....	2	20	20	31	3
		1912	77	55.7	.302	16.74	.....	8	23	19	23	4
6	75 establishments...	1912	163	55.9	.295	16.36	.....	16	48	38	40	21
7		1913	171	55.4	.313	17.27	.....	17	57	56	34	7
8	73 establishments...	1913	167	55.4	.310	17.10	.....	17	57	54	32	7
9		1914	161	55.2	.306	16.81	.....	3	20	35	73	27
10	70 establishments...	1914	157	55.3	.300	16.51	.....	2	20	35	65	4
11		1916	176	54.9	.314	17.30	.....	3	27	43	74	10
12	111 establishments...	1916	232	54.8	.319	17.50	.....	6	33	59	100	23
	Edge trimmers, male:											
13	23 establishments...	1907	283	55.3	.404	22.34	.....	46	93	67	77	.....
14		1908	302	55.1	.386	21.27	.....	48	113	79	62	.....
15		1909	287	55.2	.397	21.91	.....	46	93	83	65	.....
16		1910	305	55.0	.401	22.06	.....	58	97	83	67	.....
17	55 establishments...	1910	573	56.4	.382	21.44	.....	3	58	117	137	121
18		1911	615	56.2	.390	21.80	.....	4	55	139	175	102
19	71 establishments...	1911	765	56.1	.389	21.73	.....	55	220	200	174	116
20		1912	751	55.9	.386	21.48	.....	51	264	146	192	98
21	81 establishments...	1912	827	55.9	.380	21.15	.....	51	285	176	214	101
22		1913	838	55.4	.410	22.66	.....	49	314	285	160	30
23	77 establishments...	1913	815	55.3	.411	22.66	.....	49	314	282	140	30
24		1914	839	55.0	.404	22.18	.....	19	100	220	363	122
25	77 establishments...	1914	827	55.1	.398	21.90	.....	19	100	220	337	130
26		1916	835	55.1	.426	23.38	.....	16	109	234	325	123
27	129 establishments...	1916	1,081	54.9	.423	23.16	.....	49	126	316	427	132
	Edge setters, male:											
28	18 establishments...	1907	134	56.0	.400	22.40	.....	.....	31	50	53	.....
29		1908	142	56.2	.351	19.73	.....	.....	29	48	65	.....
30		1909	150	56.1	.381	21.37	.....	.....	35	53	62	.....
31		1910	163	55.9	.385	21.52	.....	.....	34	58	71	.....
32	54 establishments...	1910	560	56.3	.373	20.94	.....	3	72	97	142	146
33		1911	573	56.3	.380	21.31	.....	4	60	113	148	101
34	68 establishments...	1911	722	56.3	.380	21.29	.....	60	191	170	177	124
35		1912	698	55.8	.389	21.63	.....	52	257	149	142	98
36	78 establishments...	1912	789	55.8	.379	21.05	.....	52	273	190	171	103
37		1913	815	55.3	.413	22.78	.....	64	300	276	148	27
38	77 establishments...	1913	826	55.3	.411	22.70	.....	64	300	276	159	27
39		1914	827	55.1	.410	22.54	.....	20	109	187	366	127
40	78 establishments...	1914	819	55.1	.405	22.27	.....	28	109	187	331	133
41		1916	770	55.1	.413	22.65	.....	24	104	195	302	116
42	131 establishments...	1916	966	54.9	.414	22.62	.....	50	121	263	374	128

TABLE A.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK EARNINGS, IN THE UNITED STATES,

Line No.	Occupation, sex, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

BOTTOMING DEPARTMENT—Concluded.

1	Heel scourers, male:													
2	35 establishments...	1911	125	54.8	\$0.291	\$16.12	7	44	30	42	2			
		1912	154	55.5	.294	16.25	15	59	24	52	4			
3	78 establishments...	1912	342	56.0	.289	16.09	20	116	67	89	50			
4		1913	364	55.4	.314	17.35	36	123	122	66	17			
5	76 establishments...	1913	360	55.4	.313	17.29	36	123	121	63	17			
6		1914	345	55.2	.312	17.18	7	44	78	151	57	8		
7	76 establishments...	1914	351	55.0	.305	16.84	7	44	78	144	64	14		
8		1916	384	55.2	.342	18.84	4	62	96	142	60	20		
9	125 establishments...	1916	504	55.0	.346	18.94	18	73	130	195	66	22		
10	Heel burnishers, male:													
11	33 establishments...	1911	106	55.6	.306	16.97	2	42	27	34	1			
		1912	108	55.4	.313	17.31	5	45	25	30	3			
12	74 establishments...	1912	254	56.1	.292	16.31	13	84	57	63	37			
13		1913	268	55.4	.313	17.29	15	108	83	51	11			
14	75 establishments...	1913	280	55.5	.317	17.54	15	108	90	56	11			
15		1914	261	55.3	.323	17.85	4	26	59	118	46	8		
16	75 establishments...	1914	262	55.5	.315	17.47	4	26	59	121	40	12		
17		1916	261	55.5	.331	18.32	5	26	69	92	52	17		
18	127 establishments...	1916	367	55.2	.325	17.84	14	34	99	109	92	19		
19	Buffers, male:													
20	36 establishments...	1911	174	55.8	.294	16.37	5	51	49	67	2			
		1912	170	55.8	.307	17.06	5	52	48	58	7			
21	72 establishments...	1912	338	56.0	.289	16.09	21	107	67	105	38			
22		1913	354	55.3	.319	17.57	23	123	134	57	17			
23	72 establishments...	1913	358	55.3	.318	17.52	23	126	132	60	17			
24		1914	370	55.2	.310	17.06	14	33	75	181	59	8		
25	72 establishments...	1914	364	55.3	.306	16.89	14	33	74	165	66	12		
26		1916	359	55.2	.324	17.88	13	30	83	164	56	13		
27	129 establishments...	1916	535	54.9	.327	17.92	24	46	142	247	62	14		

FINISHING DEPARTMENT.

28	Trees or ironers, hand, male:												
29	17 establishments...	1907	381	54.7	\$0.305	\$16.68	107	153	72	49	.....	
30		1908	364	54.5	.294	16.02	107	132	102	23	.....	
31		1909	377	54.6	.293	16.00	105	124	113	35	.....	
		1910	444	54.5	.288	15.70	173	110	114	47	.....	
32	44 establishments...	1910	832	55.9	.259	14.42	173	140	225	150	144		
33		1911	786	56.1	.260	14.50	100	156	250	141	139		
34	63 establishments...	1911	1,006	56.0	.267	14.84	100	265	311	181	149		
35		1912	1,076	55.9	.262	14.57	115	334	239	239	149		
36	73 establishments...	1912	1,143	55.8	.266	14.76	115	385	263	220	160		
37		1913	1,110	55.3	.282	15.54	125	407	319	220	39		
38	70 establishments...	1913	1,100	55.3	.282	15.54	125	410	321	205	39		
39		1914	1,109	55.1	.281	15.45	156	327	433	170	23		
40	67 establishments...	1914	1,095	55.3	.279	15.39	155	327	385	190	38		
41		1916	1,038	55.1	.295	16.24	185	339	326	156	32		
42	109 establishments...	1916	1,307	55.0	.297	16.31	26	212	429	433	162	145	

¹ Including 11 over 60.

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY BY YEARS, 1907 TO 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

BOTTOMING DEPARTMENT—Concluded.

Classified data for years prior to 1913 not available.													Line No.
													2
			1	3	6	11	21	55	85	120	49	13	3
													4
			1	3	7	10	21	54	84	119	49	12	5
			1	5	7	12	14	70	75	99	34	28	6
			1	5	7	11	11	77	80	108	28	23	7
			4	1	3	8	5	46	79	124	97	17	8
			4	2	3	12	9	60	102	164	116	32	9
													10
													11
				3	8	6	16	41	52	95	44	3	12
													13
				2	9	6	16	42	53	102	44	6	14
			1	4	3	1	9	41	63	91	31	17	15
			1		5	3	1	9	39	69	96	30	16
			1			5	8	8	38	53	86	51	17
			1			5	11	13	58	84	117	64	18
													19
													20
			2	1	2	1	6	17	57	73	134	52	21
													22
			2	1	2	1	7	16	56	77	139	48	23
					1	9	15	19	59	65	149	40	24
				1	8	15	20	60	66	150	33	11	25
			4	5	3	1	5	45	85	146	59	6	26
			4	7	4	2	13	63	134	208	83	17	27

FINISHING DEPARTMENT.

Classified data for years prior to 1913 not available.													Line No.
													29
													30
													31
													32
													33
													34
													35
			1	21	27	55	60	245	275	353	59	14	36
													37
			2	22	28	55	60	236	270	354	59	14	38
			1	4	22	30	58	78	204	285	348	60	19
													39
			2	4	22	27	62	83	202	277	344	53	19
			1	9	10	18	24	45	204	273	353	66	40
													41
			1	14	14	21	31	46	239	351	456	93	41
													42

TABLE A.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK EARNINGS, IN THE UNITED STATES,

Line No.	Occupation, sex, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

FINISHING DEPARTMENT—Concluded.

1	Treeers or ironers, hand, female: 8 establishments....	1910	74	57.8	\$0.143	\$8.19				22		32	20
2		1911	70	57.7	.144	8.21				23		25	22
3	11 establishments...	1911	85	58.1	.145	8.32				23		25	37
4		1912	105	54.3	.154	8.35		11		67	13	14	
5	13 establishments...	1912	108	54.4	.153	8.32		11		67	13	17	
6		1913	110	54.6	.158	8.56		20		61		29	
7	12 establishments...	1913	110	54.6	.158	8.56		20		61		29	
8		1914	112	52.2	.174	9.06		41	40	24	7		
9	11 establishments...	1914	107	52.1	.175	9.06		41	40	19	7		
10		1916	111	52.9	.183	9.66		20	45	34	12		
11	15 establishments...	1916	144	53.1	.188	9.93		20	59	53	12		

OTHER EMPLOYEES (ALL DEPARTMENTS).

12	Male: 81 establishments...	1914	19,667	55.1	\$0.223	\$12.28	¹ 1,858	2,204	4,792	7,774	3,291	² 748
13		1916	19,001	55.1	.242	13.32	³ 543	2,555	5,440	6,672	2,988	⁴ 803
14	135 establishments...	1916	24,010	55.0	.243	13.35	⁵ 1,103	2,903	7,036	8,808	3,213	⁶ 947
15	Female: 80 establishments...	1914	11,502	54.0	.167	9.00	⁷ 811	1,883	6,083	2,010	708	7
16		1916	11,556	54.0	.176	9.48	⁸ 691	1,935	6,161	2,017	752	
17	134 establishments...	1916	14,851	53.8	.179	9.62	⁹ 1,237	2,328	8,177	2,306	803	

¹ Including 13 under 48 hours, and 4 at 48 hours.
² Including 34 over 60 hours.
³ Including 30 under 48 hours, and 15 at 48 hours.
⁴ Including 89 over 60 hours.
⁵ Including 63 under 48 hours, and 18 at 48 hours.

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY BY YEARS, 1907 TO 1916—Concluded.

Employees whose rates of wages per hour were—													
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	Line No.

FINISHING DEPARTMENT—Concluded.

Classified data for years prior to 1913 not available.													1
													2
													3
													4
	2	8	5	29	24	13	14	9	4	2			5
	2	8	5	29	24	13	14	9	4	2			6
	1	7	7	12	15	19	18	26	7				7
	1	7	7	11	15	17	18	23	7	1			8
	1	2	7	11	23	14	7	33	12	1			9
	1	3	8	12	27	18	10	48	16	1			10
													11

OTHER EMPLOYEES (ALL DEPARTMENTS).

39	165	481	1,350	1,459	1,689	1,942	1,609	4,002	3,174	2,908	634	215	12
30	114	445	1,192	1,247	1,311	1,695	1,326	3,518	3,259	3,376	1,038	450	13
39	134	525	1,427	1,534	1,584	2,160	1,772	4,551	4,123	4,289	1,282	590	14
66	322	976	1,509	1,484	1,391	1,466	1,196	1,902	825	318	36	11	15
57	226	728	1,485	1,442	1,300	1,399	1,197	2,167	1,031	451	58	15	16
62	289	825	1,778	1,844	1,637	1,822	1,591	2,862	1,355	673	96	17	17

⁶ Including 108, over 60 hours.

⁷ Including 14 under 48 hours, and 1 at 48 hours.

⁸ Including 17 under 48 hours, and 22 at 48 hours.

⁹ Including 81 under 48 hours, and 23 at 48 hours.

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

[The figures for both years are for identical establishments.]

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
CUTTING DEPARTMENT.											
	CUTTERS, VAMP AND WHOLE SHOE, HAND, MALE.										
1	Illinois:										
2	4 establishments....	1914	132	55.0	\$0.384	\$21.10				132	
		1916	133	54.2	.385	20.85		36		97	
3	Maine:										
4	4 establishments....	1914	63	56.3	.322	18.06		10	15		38
		1916	71	56.9	.320	18.15			19		52
5	Massachusetts:										
6	19 establishments....	1914	579	53.1	.373	19.73	95	171	276	37	
		1916	532	53.4	.403	21.48	58	166	272	36	
7	Minnesota:										
8	3 establishments....	1914	28	59.8	.316	18.92					4
		1916	43	60.0	.325	19.50					43
9	Missouri:										
10	7 establishments....	1914	125	55.1	.377	20.71			44	68	13
		1916	260	54.7	.370	20.20			120	131	9
11	New Jersey:										
12	4 establishments....	1914	66	55.0	.354	19.47					66
		1916	61	55.0	.330	18.12					61
13	New York:										
14	10 establishments....	1914	272	52.1	.368	19.15	67	137	36	32	
		1916	283	51.9	.423	21.95	86	133	35	29	
15	Ohio:										
16	6 establishments....	1914	205	53.9	.412	22.14	109			15	81
		1916	189	53.6	.373	19.86	111			7	69
17	Pennsylvania:										
18	7 establishments....	1914	135	55.9	.299	16.79			22	71	42
		1916	151	55.8	.335	18.77			35	67	49
19	Wisconsin:										
20	2 establishments....	1914	31	60.0	.297	17.80					31
		1916	17	58.8	.292	17.18				4	13
21	Other States:										
22	3 establishments....	1914	31	57.2	.300	17.06				14	17
		1916	50	56.1	.277	15.51				36	14
23	Total:										
24	69 establishments....	1914	1,667	54.1	.366	19.70	271	318	393	435	195
		1916	1,790	54.1	.379	20.42	255	335	481	468	193
	CUTTERS, VAMP AND WHOLE SHOE, MACHINE, MALE.										
25	Massachusetts:										
26	13 establishments....	1914	231	54.2	.359	19.46	21		128	82	
		1916	239	54.1	.381	20.59	22		140	77	
27	Missouri:										
28	4 establishments....	1914	84	59.0	.238	14.04					84
		1916	142	57.9	.248	14.31			30		112
29	New Hampshire:										
30	2 establishments....	1914	98	55.0	.338	18.60					98
		1916	140	55.0	.310	17.04					140
31	New York:										
32	4 establishments....	1914	68	53.2	.356	18.89	16	20		32	
		1916	96	53.8	.359	19.19	15	21		60	
33	Ohio:										
34	2 establishments....	1914	19	56.5	.292	16.33					12
		1916	23	55.9	.282	14.61					18
35	Pennsylvania:										
36	3 establishments....	1914	23	54.9	.238	13.07			3	20	
		1916	23	54.9	.239	13.10			2	21	
37	Virginia:										
38	2 establishments....	1914	28	59.0	.285	15.61					28
		1916	17	59.0	.345	20.34					17

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916.

[The figures for both years are for identical establishments.]

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

CUTTING DEPARTMENT.

							1	12	8	64	34	13	1	
							2	1	11	56	51	11	2	
							1	5	2	55			3	
							1	1	13	43	11		4	
								8	62	390	50	69	5	
							1	3	14	358	96	60	6	
													7	
									4	28			8	
										39				
						1		7	10	54	46	7	9	
					2		1	19	32	96	92	18	10	
					1		1	5	11	32	9	7	11	
							3	11	9	23	13	2	12	
							2	17	26	133	84	10	13	
								6	15	82	136	44	14	
					1			9	14	62	85	34	15	
					1			15	26	88	35	24	16	
				2	12	11	10	24	23	21	18	14	17	
					1	4	3	29	30	36	33	15	18	
							2	3	6	19	1		19	
							1	1	1	5	8	1	20	
							1						21	
							1	8	6	14	1	1	22	
							1	19	17	11	1	1		
				2	14	13	17	98	168	872	328	155	23	
					3	10	12	105	176	840	469	175	24	
								6	24	194	6	1	25	
							3	3	9	61	143	2	26	
							1	3	10	18	13		27	
				1	5	2	19	11	39	32	28	5	28	
							3	4	16	21	27	16	29	
								6	16	47	60	9	30	
				1	1				5	6	29	23	31	
									19	16	35	9	32	
					1	1	3		1	2	8	3	33	
							2	2	7	6	5	1	34	
							2	2	11	6	2		35	
					1		3	11	6	2			36	
							1	1	9	13	4		37	
									4	11	2		38	

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—												
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.							
CUTTING DEPARTMENT—Concluded.																			
	CUTTERS, VAMP AND WHOLE SHOE, MACHINE, MALE—concl'd																		
1	Other States:																		
2	6 establishments....	1914	49	58.0	\$0.308	\$17.84													
		1916	48	56.7	.310	17.56													
3	Total:	1914	600	55.5	.323	17.84													
4	36 establishments....	1916	728	55.4	.325	17.86	37	20	131	253	154	5							
							37	24	172	336	152	7							
	SKIVERS, UPPER, MACHINE, MALE.																		
5	Massachusetts:																		
6	12 establishments....	1914	72	54.0	.320	17.28				71									
		1916	71	54.0	.328	17.73				70									
7	New York:																		
8	2 establishments....	1914	12	53.3	.365	19.41				10									
		1916	13	53.2	.397	21.16				11									
9	Other States:																		
10	5 establishments....	1914	9	56.1	.244	13.65													
		1916	8	56.3	.245	13.72													
11	Total:	1914	93	54.1	.318	17.21				10									
12	19 establishments....	1916	92	54.1	.331	17.87				11	71	9	3						
											70	8	3						
13	Illinois:																		
14	3 establishments....	1914	33	55.0	.186	10.25													
		1916	33	55.0	.197	10.85													
15	Maine:																		
16	4 establishments....	1914	17	58.0	.191	11.09													
		1916	9	58.0	.228	13.20													
17	Massachusetts:																		
18	15 establishments....	1914	98	53.8	.219	11.79				26	72								
		1916	104	53.8	.236	12.71				27	77								
19	Minnesota:																		
20	3 establishments....	1914	9	54.3	.223	12.08					6	3							
		1916	20	54.0	.199	10.74					20								
21	Missouri:																		
22	8 establishments....	1914	56	53.5	.201	10.72				7									
		1916	65	54.0	.178	9.60													
23	New Hampshire:																		
24	7 establishments....	1914	41	55.0	.186	10.22													
		1916	59	55.0	.199	10.93													
25	New Jersey:																		
26	4 establishments....	1914	12	55.0	.253	13.90													
		1916	13	55.0	.180	9.92													
27	New York:																		
28	9 establishments....	1914	53	51.8	.236	12.19	19	18	9										
		1916	62	52.1	.253	13.12	16	24	22										
29	Ohio:																		
30	6 establishments....	1914	41	53.8	.195	10.46													
		1916	38	53.8	.173	9.30													
31	Pennsylvania:																		
32	7 establishments....	1914	26	54.0	.209	11.30													
		1916	34	54.1	.171	9.26													
33	Virginia:																		
34	3 establishments....	1914	10	59.0	.160	9.45													
		1916	12	59.0	.169	9.97													
35	Wisconsin:																		
36	2 establishments....	1914	15	55.0	.188	10.35													
		1916	11	55.0	.168	9.23													
37	Other States:																		
38	1 establishment....	1914	7	54.0	.188	10.15													
		1916	6	54.0	.167	9.02													
39	Total:	1914	418	54.1	.207	11.16	26	64	190	111	27								
40	72 establishments....	1916	466	54.2	.205	11.09	16	67	244	118	21								

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
SOLE-LEATHER DEPARTMENT.												
CUTTERS, OUTSOLE, MALE.												
1	Massachusetts:											
2	9 establishments....	1914	59	54.5	\$0.327	\$17.83			41	18		
		1916	60	54.6	.348	18.97			41	19		
3	Missouri:											
4	2 establishments....	1914	44	54.0	.346	18.70			44			
		1916	51	54.0	.346	18.70			51			
5	New York:											
6	7 establishments....	1914	44	54.5	.270	14.73	2	3	1	38		
		1916	50	54.6	.265	14.44	2	3	2	43		
7	Ohio:											
8	6 establishments....	1914	19	55.6	.273	15.17				16	3	
		1916	22	55.5	.272	15.11				19	3	
9	Pennsylvania:											
10	4 establishments....	1914	11	55.7	.232	12.94			1	7	3	
		1916	12	57.4	.275	15.75			1	1	10	
11	Other States:											
12	10 establishments....	1914	28	57.9	.291	16.84				10	7	
		1916	24	57.8	.283	16.37				7	5	
13	Total:											
14	38 establishments....	1914	205	55.0	.304	16.71	2	3	87	89	13	
		1916	219	55.0	.310	17.02	2	4	95	89	18	
CHANNELERS, IN SOLE AND OUTSOLE, MALE.												
15	Illinois:											
16	4 establishments....	1914	10	55.0	.327	18.01				10		
		1916	10	54.1	.333	18.02		3		7		
17	Maine:											
18	4 establishments....	1914	12	58.1	.310	18.00					12	
		1916	10	58.2	.316	18.37					10	
19	Massachusetts:											
20	17 establishments....	1914	70	54.3	.370	20.09		11	41	18		
		1916	71	54.4	.370	20.09		8	41	22		
21	Missouri:											
22	5 establishments....	1914	9	56.6	.322	18.13			2	3	4	
		1916	12	58.2	.296	17.20			2		10	
23	New Hampshire:											
24	4 establishments....	1914	11	55.0	.320	17.58				11		
		1916	12	55.0	.394	21.69				12		
25	New York:											
26	10 establishments....	1914	31	52.5	.326	17.10	6	15	3	7		
		1916	29	52.8	.340	17.98	6	12	2	9		
27	Ohio:											
28	6 establishments....	1914	18	55.9	.296	16.50				14	4	
		1916	14	55.9	.301	16.76				11	3	
29	Pennsylvania:											
30	7 establishments....	1914	15	55.7	.273	15.18			3	8	4	
		1916	19	56.3	.253	14.34			3	7	9	
31	Other States:											
32	13 establishments....	1914	26	58.1	.283	16.40				8	10	
		1916	20	57.9	.313	18.10				8	3	
33	Total:											
34	70 establishments....	1914	207	55.1	.328	18.02	6	26	49	79	34	
		1916	197	55.2	.336	18.51	6	23	48	76	35	

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

SOLE-LEATHER DEPARTMENT.

										16	43		1
										2	58		2
										5	39		3
										2	48		4
							1	9	20		14		5
								12	28		10		6
						1				2	11		7
									6		10		8
					1	2						1	9
								5	1		6		10
								1	11		16		11
								3	9		12		12
		*			1	3	1	18	64	117		1	13
								26	52	140			14
									3	6	1		15
						1			1	6	2		16
							1						
								1	3	4	1		17
									7				18
								3	8	39	16	4	19
									15	39	13	4	20
								1	2	6			21
					1			1	5	5			22
							1						
								1	5	1	3		23
									1	5	5		24
									4	3	19	5	25
									1	5	20	3	26
							1						
								2	4	10	1		27
								3	3	6	2		28
					1			1	6	6			29
			2	2	2		1		4	8			30
					1	2	1	9	4	5	4		31
								5	5	7	1	2	32
			2	2	3	3	4	22	40	96	31	4	33
						1	1	14	38	103	26	7	34

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

FITTING OR STITCHING DEPARTMENT.

TIP STITCHERS, FEMALE.										
1	Illinois:									
2	4 establishments...	1914	24	55.0	\$0.263	\$14.48				24
3		1916	19	54.1	.252	13.59		6		13
4	Maine:									
4	4 establishments...	1914	14	58.0	.213	12.35				14
5		1916	14	58.0	.236	13.66				14
5	Massachusetts:									
6	18 establishments...	1914	106	53.9	.240	12.93		19	87	
6		1916	103	53.9	.250	13.49		22	81	
7	Missouri:									
8	8 establishments...	1914	36	53.6	.190	10.17	4		32	
8		1916	42	54.0	.181	9.76			42	
9	New Hampshire:									
10	6 establishments...	1914	29	55.0	.216	11.87				29
10		1916	33	55.0	.228	12.57				33
11	New Jersey:									
12	4 establishments...	1914	10	55.0	.244	13.40				10
12		1916	12	55.0	.202	11.11				12
13	New York:									
14	10 establishments...	1914	29	52.4	.224	11.73	6	15	3	5
14		1916	32	51.8	.273	14.12	11	12	9	
15	Ohio:									
16	6 establishments...	1914	29	53.7	.192	10.32		13	16	
16		1916	19	53.9	.197	10.61		7	12	
17	Pennsylvania:									
18	7 establishments...	1914	24	54.0	.177	9.58			24	
18		1916	24	54.0	.189	10.21			24	
19	Wisconsin:									
20	2 establishments...	1914	12	55.0	.156	8.58				12
20		1916	13	55.0	.189	10.38				13
21	Other States:									
22	6 establishments...	1914	13	55.3	.200	11.02			8	2
22		1916	15	55.0	.194	10.62			12	3
23	Total:									
24	75 establishments...	1914	326	54.2	.218	11.81	10	47	170	82
24		1916	326	54.2	.226	12.24	11	47	180	71
BACKSTAY STITCHERS, FEMALE.										
25	Illinois:									
26	4 establishments...	1914	29	55.0	.221	12.14				29
26		1916	18	54.0	.260	14.08		6		12
27	Maine:									
28	4 establishments...	1914	11	58.0	.178	10.33				11
28		1916	15	58.0	.177	10.26				15
29	Massachusetts:									
30	19 establishments...	1914	114	53.9	.228	12.29		13	101	
30		1916	112	53.9	.234	12.64		14	98	
31	Minnesota:									
32	3 establishments...	1914	10	54.2	.233	12.65			8	2
32		1916	9	54.0	.252	13.63			9	
33	Missouri:									
34	7 establishments...	1914	46	53.5	.162	8.62	6		40	
34		1916	57	54.0	.168	9.06			57	
35	New Hampshire:									
36	6 establishments...	1914	54	55.0	.167	9.17				54
36		1916	60	55.0	.197	10.84				60
37	New York:									
38	8 establishments...	1914	38	52.9	.222	11.74	7	11	7	13
38		1916	35	52.0	.252	13.07	11	10	14	
39	Ohio:									
40	6 establishments...	1914	32	53.8	.171	9.20		15	17	
40		1916	34	53.9	.177	9.56		13	21	
41	Pennsylvania:									
42	6 establishments...	1914	16	54.0	.173	9.35			16	
42		1916	35	54.0	.173	9.34			35	

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

FITTING OR STITCHING DEPARTMENT.

						1							1	1
						2							2	2
						1							1	3
						1							2	4
													3	5
						2							2	6
						3							1	7
						1							3	8
						3							2	9
						1							4	10
						2							1	11
						1							1	12
						2							3	13
						2							5	14
						1							1	15
						2							1	16
						3							1	17
						2							1	18
						1							1	19
						3							2	20
						2							1	21
						1							2	22
						8							2	23
						7							5	24
						11							1	25
						21								26
						22								27
						37								28
						38								29
						2								30
						3								31
						1								32
						1								33
						5								34
						5								35
						9								36
						8								37
						5								38
						6								39
						8								40
						10								41
						9								42
						2								
						3								
						7								
						3								
						5								
						11								

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—								
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.			
FITTING OR STITCHING DEPARTMENT—Continued.															
	BACKSTAY STITCHERS, FEMALE—concluded.														
1	Wisconsin:														
2	2 establishments....	1914	12	55.0	\$0.168	\$9.26							12		
		1916	12	55.0	.188	10.35							12		
3	Other States:														
4	7 establishments....	1914	19	56.8	.186	10.53				1			9	9	
		1916	18	56.7	.198	11.20				1			9	8	
5	Total:														
6	72 establishments....	1914	381	54.3	.198	10.72	13	39	190			119		20	
		1916	405	54.2	.207	11.23	11	43	235			93		23	
	LINING MAKERS, FEMALE.														
7	Illinois:														
8	4 establishments....	1914	66	55.0	.197	10.82							66		
		1916	45	53.9	.247	13.31				17			28		
9	Maine:														
10	4 establishments....	1914	30	58.0	.187	10.85								30	
		1916	40	58.0	.196	11.39								49	
11	Massachusetts:														
12	19 establishments....	1914	232	53.9	.210	11.31			29	203					
		1916	208	53.9	.227	12.23			20	188					
13	Minnesota:														
14	3 establishments....	1914	10	54.3	.214	11.63						7	3		
		1916	19	54.0	.197	10.66						19			
15	Missouri:														
16	6 establishments....	1914	57	53.0	.163	8.65	14			43					
		1916	66	54.0	.172	9.27				66					
17	New Hampshire:														
18	6 establishments....	1914	76	55.0	.161	8.85							76		
		1916	98	55.0	.159	8.77							98		
19	New Jersey:														
20	4 establishments....	1914	19	55.0	.191	10.48							19		
		1916	24	55.0	.202	11.09							24		
21	New York:														
22	11 establishments....	1914	117	52.1	.207	10.78	38	46	16				17		
		1916	121	51.8	.219	11.35	51	27	43						
23	Ohio:														
24	6 establishments....	1914	97	53.7	.170	9.15			59	38					
		1916	66	53.8	.176	9.49			33	33					
25	Pennsylvania:														
26	7 establishments....	1914	56	54.0	.173	9.32							56		
		1916	56	54.0	.180	9.70							56		
27	Virginia:														
28	3 establishments....	1914	17	59.0	.139	8.20								17	
		1916	17	59.0	.137	8.07								17	
29	Other States:														
30	3 establishments....	1914	19	54.8	.188	10.33				3			16		
		1916	9	54.6	.145	7.89				4			5		
31	Total:														
32	76 establishments....	1914	796	54.1	.190	10.24	52	134	366			197		47	
		1916	769	54.1	.209	10.78	51	97	409			155		57	
	CLOSERS-ON, FEMALE.														
33	Illinois:														
34	3 establishments....	1914	14	55.0	.233	12.81							14		
		1916	11	54.2	.257	13.89				3			8		
35	Massachusetts:														
36	12 establishments....	1914	58	53.9	.213	11.48				11			47		
		1916	51	54.0	.213	11.49				5			46		
37	Missouri:														
38	8 establishments....	1914	52	53.3	.170	9.05	9			43					
		1916	50	54.0	.175	9.44				50					

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

FITTING OR STITCHING DEPARTMENT—Continued.

CLOSERS-ON, FEMALE—concluded.											
1	New York:										
2	7 establishments....	1914	54	51.8	\$0.192	\$9.98	19	23	4	8	
		1916	58	51.9	.212	11.02	18	22	18		
3	Pennsylvania:										
4	6 establishments....	1914	28	54.0	.187	10.08			28		
		1916	35	54.0	.178	9.63			35		
5	Wisconsin:										
6	2 establishments....	1914	16	55.0	.189	10.37				16	
		1916	12	55.0	.172	9.47				12	
7	Other States:										
8	13 establishments....	1914	37	55.9	.204	11.40		2	2	22	11
		1916	32	55.6	.203	11.28		8	4	10	10
9	Total:		259	53.8	.195	10.51	28	36	124	60	11
10	51 establishments....	1914	249	53.8	.199	10.69	18	38	153	30	10
TOP STITCHERS OR UNDER TRIMMERS, FEMALE.											
11	Illinois:										
12	4 establishments....	1914	42	55.0	.238	13.07				42	
		1916	32	54.1	.245	13.22		10		22	
13	Maine:										
14	4 establishments....	1914	41	58.0	.240	13.89					41
		1916	39	58.0	.229	13.29					39
15	Massachusetts:										
16	19 establishments....	1914	301	53.8	.232	12.47		70	231		
		1916	312	53.8	.230	12.40		74	238		
17	Minnesota:										
18	3 establishments....	1914	20	54.3	.239	13.00			15	5	
		1916	18	54.0	.244	13.18			18		
19	Missouri:										
20	8 establishments....	1914	119	53.5	.190	10.13	16		103		
		1916	169	54.0	.186	10.04			169		
21	New Hampshire:										
22	6 establishments....	1914	134	55.0	.177	9.73				134	
		1916	159	55.0	.199	10.92				159	
23	New Jersey:										
24	4 establishments....	1914	18	55.0	.236	12.97				18	
		1916	24	55.0	.219	12.05				24	
25	New York:										
26	11 establishments....	1914	115	51.9	.237	12.24	40	34	41		
		1916	141	52.3	.251	13.12	39	37	65		
27	Ohio:										
28	6 establishments....	1914	113	53.8	.201	10.84		48	65		
		1916	97	53.9	.186	10.03		41	56		
29	Pennsylvania:										
30	7 establishments....	1914	46	54.0	.176	9.50			46		
		1916	56	54.0	.187	10.07			56		
31	Virginia:										
32	2 establishments....	1914	16	59.0	.201	11.88					16
		1916	14	59.0	.207	12.23					14
33	Wisconsin:										
34	2 establishments....	1914	31	55.0	.175	9.62				31	
		1916	30	55.0	.180	9.87				30	
35	Other States:										
36	1 establishment....	1914	8	54.0	.175	9.44			8		
		1916	10	54.0	.161	8.68			10		
37	Total:		1,004	54.1	.212	11.46	56	152	509	230	57
38	77 establishments....	1914	1,101	54.1	.214	11.55	39	162	612	235	53

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
FITTING OR STITCHING DEPARTMENT—Continued.												
BUTTON FASTENERS, FEMALE.												
1	Massachusetts:											
2	13 establishments...	1914	43	53.8	\$0.198	\$10.65		15	28			
		1916	28	53.7	.192	10.31		14	14			
3	Missouri:											
4	7 establishments...	1914	26	53.1	.181	9.56	6		20			
		1916	22	54.0	.200	10.80			22			
5	New York:											
6	10 establishments...	1914	34	51.6	.223	11.56	12	15	5	2		
		1916	25	51.4	.261	13.41	11	9	5			
7	Ohio:											
8	4 establishments...	1914	24	53.9	.148	7.96		9	15			
		1916	12	53.8	.187	10.08		7	5			
9	Pennsylvania:											
10	7 establishments...	1914	22	54.0	.160	8.65			22			
		1916	14	54.0	.159	8.59			14			
11	Other States:											
12	19 establishments...	1914	40	55.8	.210	11.73			3	27	10	
		1916	41	55.6	.218	12.16		1	5	25	10	
13	Total:											
14	60 establishments...	1914	189	53.7	.192	10.32	18	39	93	29	10	
		1916	142	53.9	.209	11.28	11	31	65	25	10	
BUTTONHOLE MAKERS, FEMALE.												
15	Illinois:											
16	4 establishments...	1914	12	55.0	.200	10.99				12		
		1916	8	54.3	.256	13.79		2		6		
17	Maine:											
18	4 establishments...	1914	28	58.0	.228	13.25					28	
		1916	19	58.0	.282	16.34					19	
19	Massachusetts:											
20	19 establishments...	1914	146	53.8	.235	12.65		44	102			
		1916	106	53.8	.233	12.54		38	68			
21	Missouri:											
22	7 establishments...	1914	59	53.1	.195	10.31	14		45			
		1916	59	54.0	.196	10.61			59			
23	New Hampshire:											
24	6 establishments...	1914	32	55.0	.156	8.60					32	
		1916	19	55.0	.186	10.23					19	
25	New Jersey:											
26	4 establishments...	1914	15	55.0	.158	8.67					15	
		1916	11	55.0	.184	10.11					11	
27	New York:											
28	9 establishments...	1914	77	51.6	.189	9.80	32	27	13	5		
		1916	55	51.5	.237	12.20	26	14	15			
29	Ohio:											
30	6 establishments...	1914	48	53.8	.162	8.74		28	20			
		1916	36	53.8	.188	10.11		25	11			
31	Pennsylvania:											
32	5 establishments...	1914	36	54.0	.146	7.89			36			
		1916	33	54.0	.173	9.34			33			
33	Wisconsin:											
34	2 establishments...	1914	11	55.0	.174	9.58					11	
		1916	9	55.0	.193	10.60					9	
35	Other States:											
36	7 establishments...	1914	20	56.7	.159	8.92			7	3	10	
		1916	14	56.5	.157	8.77			7		7	
37	Total:											
38	73 establishments...	1914	484	53.9	.196	10.55	46	99	223	78	38	
		1916	369	54.0	.213	11.50	26	79	193	45	26	

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

FITTING OR STITCHING DEPARTMENT—Continued.

			1	5	3	5	12	9	6	2			1
	1		4		1	6	3	8	3	2			2
			3	6	2	2	2	7	4				3
				5	1	2	1	10	2	1			4
			1				9	6	2				5
			1				2	4	8	6			6
										4	2		7
	5	3	4	2	3	4	4	3					8
	1	1	2	1	3	3	2	2	1	1			9
		1	5	4	2	2	3	4	1				10
		1	1	5	2	2	2	3					11
			2	9	5	3	6	5	2	5	3		12
			4	2	4	3	6	9	6	7			13
		6	15	28	14	24	33	38	15	13	3		14
	1	2	11	12	8	16	19	36	20	15	2		15
			2	1	1	1	1	2	3	1			16
			1	1				1	2	3			17
			1		4	1	3	8	9	1	1		18
					1		1	4	3	10			19
		1	2	8	15	19	16	34	23	20	7	1	20
	1	6	4	6	6	11	16	28	14	12	6	2	21
		2	9	9	5	3	6	19	5	1			22
		2	7	5	9	7	6	7	8	8			23
		2	3	5	8	3	7	4					24
			2	1	1	2	7	5	1				25
			2	1	6	4	1	1					26
			1	1	2	3	3	4					27
		1	6	5	7	14	12	24	6	2			28
						3	9	24	14	4	1		29
		1	5	11	9	9	3	6	4				30
		1	1	3	3	10	9	6	4				31
		2	1	6	9	6	4	3					32
		5	3	1	4	6	4	6	4				33
			2		2	1	3	3					34
				3			1	5					35
		1	3	4	5		2	5					36
	2	1	1	1	2	3		3	1				37
		2	9	41	53	68	60	58	109	50	25	8	38
		2	9	22	20	26	44	56	93	51	37	7	

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
FITTING OR STITCHING DEPARTMENT—Continued.												
VAMPERS, MALE.												
1	Illinois:											
2	4 establishments...	1914	41	55.0	\$0.294	\$16.17					41	
		1916	38	54.2	.290	15.70		10			28	
3	Maine:											
4	3 establishments...	1914	17	58.1	.262	15.23						17
		1916	10	58.3	.326	19.01						10
5	Massachusetts:											
6	17 establishments...	1914	265	53.9	.332	17.93		65	174		26	
		1916	252	54.1	.352	19.02		31	188		33	
7	Missouri:											
8	5 establishments...	1914	14	56.1	.239	13.43				8		6
		1916	19	57.2	.274	15.55			7			12
9	New Hampshire:											
10	6 establishments...	1914	59	55.0	.259	14.27					59	
		1916	63	55.0	.278	15.29					63	
11	New Jersey:											
12	3 establishments...	1914	11	55.0	.317	17.43					11	
		1916	10	55.0	.284	15.63					10	
13	New York:											
14	7 establishments...	1914	40	52.7	.327	17.24	6				8	
		1916	46	52.5	.399	20.94	7	26	32		7	
15	Pennsylvania:											
16	3 establishments...	1914	17	56.6	.313	17.64				6		11
		1916	31	56.7	.338	19.24				10		21
17	Other States:											
18	5 establishments...	1914	15	58.3	.269	15.71					4	5
		1916	27	58.6	.277	16.15					5	13
19	Total:											
20	53 establishments...	1914	479	54.5	.311	16.95	6	91	188		149	39
		1916	496	54.7	.332	18.12	7	73	205		146	56
VAMPERS, FEMALE.												
21	Illinois:											
22	4 establishments...	1914	49	55.0	.236	12.99					49	
		1916	39	53.7	.286	15.35		17			22	
23	Maine:											
24	4 establishments...	1914	42	58.0	.251	14.56						42
		1916	60	58.0	.272	15.75						60
25	Massachusetts:											
26	18 establishments...	1914	239	53.9	.260	14.04		58	181			
		1916	250	53.9	.275	14.79		59	191			
27	Minnesota:											
28	3 establishments...	1914	22	54.4	.220	11.95				13	9	
		1916	30	54.0	.269	14.55				30		
29	Missouri:											
30	8 establishments...	1914	122	53.0	.240	12.67	30				92	
		1916	161	54.0	.241	13.01				161		
31	New Hampshire:											
32	6 establishments...	1914	105	55.0	.237	13.01					105	
		1916	114	55.0	.248	13.64					114	
33	New Jersey:											
34	4 establishments...	1914	21	55.0	.256	14.08					21	
		1916	24	55.0	.235	12.93					24	
35	New York:											
36	10 establishments...	1914	155	52.1	.266	13.84	50	50	28		27	
		1916	140	51.9	.290	15.03	44	49	47			
37	Ohio:											
38	6 establishments...	1914	147	53.8	.223	11.98		73	74			
		1916	130	53.8	.206	11.07		60	70			
39	Pennsylvania:											
40	7 establishments...	1914	69	54.0	.207	11.19					69	
		1916	66	54.0	.209	11.26					66	

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

FITTING OR STITCHING DEPARTMENT—Continued.

							1		11	14	12	3		1
							3	1	8	13	10	2	1	2
			1		2	1	1	2		3	8			3
					1	1	1	1	2		2		1	4
		2	1	1	2	6	8	27	43	118	51	6		5
					2	2	5	23	36	117	52	15		6
				1	1	1	1	1	3	5	2			7
				2	1	1	1	1	2	5	9			8
				2		3	5	22	13	12	2			9
					1	2	5	17	13	24	1			10
								1	2	8				11
							1	1	4	4				12
					1			8	8	16	5	2		13
								2	3	19	14	8		14
								1	3	8	3	3		15
								1	3	19	4	1		16
									6	6	2	1		17
						4	2	5	7	7	1	1		18
		2	2	4	6	12	18	79	97	186	65	8		19
				2	4	13	16	63	84	211	76	27		20
				2	2	4	9	12	12	8				21
			1		4	4	1	10	7	11	4	1		22
				1	2	3	6	10	9	9	2			23
					2	2	2	19	14	19	2			24
		3	3	8	5	11	23	58	61	57	10			25
			1	2	4	9	16	70	66	70	10	2		26
					2	1	3	10	6					27
							2	11	8	9				28
		1	3	3	6	8	17	34	27	20	3			29
		1	1	6	9	14	29	31	34	33	3			30
					6	11	16	33	23	15	1			31
				3	2	3	9	40	40	17				32
				1	1	2		7	4	5	1			33
					1		4	12	2	5				34
		1		2	5	16	14	29	36	47	4	1		35
				1	1	2	11	29	30	58	8			36
				3	8	15	21	45	33	12				37
		1	3	5	19	14	18	44	19	6	1			38
			3	5	12	3	13	16	10	7				39
			2	4	7	9	12	10	10	9				40

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

FITTING OR STITCHING DEPARTMENT—Concluded.

	VAMPERS, FEMALE—continued.												
	Virginia:												
1	2 establishments....	1914	11	59.0	\$0.205	\$12.07							11
2		1916	14	59.0	.215	12.68							14
	Wisconsin:												
3	2 establishments....	1914	34	55.0	.220	12.09					34		
4		1916	22	55.0	.224	12.31					22		
	Other States:												
5	1 establishment.....	1914	11	54.0	.192	10.35				11			
6		1916	15	54.0	.151	8.17				15			
7	Total:												
8	75 establishments....	1914	1,027	54.0	.242	13.06	80	181	468	245	53		
		1916	1,065	54.1	.252	13.61	44	185	580	182	74		

LASTING DEPARTMENT.

	ASSEMBLERS, FOR PULLING-OVER MACHINE, MALE.												
	Illinois:												
9	3 establishments....	1914	39	55.0	\$0.233	\$12.84					39		
10		1916	30	53.7	.341	18.28		13			17		
	Maine:												
11	4 establishments....	1914	30	57.8	.279	16.10					2	28	
12		1916	31	58.1	.322	18.77						31	
	Massachusetts:												
13	11 establishments....	1914	176	54.3	.326	17.72		6	133		37		
14		1916	153	54.4	.355	19.31		3	112		38		
	Minnesota:												
15	3 establishments....	1914	16	59.6	.287	17.11						6	10
16		1916	15	60.0	.309	18.54							15
	Missouri:												
17	8 establishments....	1914	104	56.7	.239	13.42			33		19	52	
18		1916	114	55.7	.234	13.01			76		38		
	New Hampshire:												
19	4 establishments....	1914	45	55.0	.259	14.23					45		
20		1916	32	55.0	.281	15.43					32		
	New Jersey:												
21	2 establishments....	1914	18	55.0	.299	16.42					18		
22		1916	15	55.0	.313	17.21					15		
	New York:												
23	7 establishments....	1914	105	52.5	.266	13.96	25	44	12		24		
24		1916	104	52.5	.290	15.18	22	51	6		25		
	Ohio:												
25	5 establishments....	1914	69	57.6	.281	16.15					25	44	
26		1916	42	56.8	.340	19.38					23	19	
	Pennsylvania:												
27	3 establishments....	1914	10	54.2	.255	13.79			8		2		
28		1916	9	54.2	.268	14.53			7		2		
	Virginia:												
29	3 establishments....	1914	27	59.0	.215	12.69						27	
30		1916	15	59.0	.243	14.35						15	
	Wisconsin:												
31	2 establishments....	1914	14	60.0	.214	12.85							14
32		1916	20	59.5	.205	12.15					2		18
	Other States:												
33	1 establishment.....	1914	6	59.0	.262	15.44						6	
34		1916	6	55.0	.269	14.79					6		
	Total:												
35	56 establishments....	1914	659	55.5	.276	15.24	25	50	186	211	163	24	
36		1916	586	55.1	.300	16.50	22	67	201	160	103	33	

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

FITTING OR STITCHING DEPARTMENT—Concluded.

						1	1	4	4	1				1
							5	1	5	3				2
									7	2	3			3
					1	1	1	3	19	9	6	1		4
				1	1	2	1		5	1				5
			5	5	2	1	4		3					6
			5	13	31	57	76	133	232	225	183	21	1	7
			5	13	24	47	67	108	293	239	238	28	3	8

LASTING DEPARTMENT.

				2	2	2	4	3	7	10	9			9
					1	1			1	2	19	5	1	10
							1	3	10	6	7	3		11
								4	4	5	10	7	1	12
						1		10	18	34	84	21	8	13
						1		2	12	23	72	35	8	14
						1				5	2	7		15
								2	2	3	6	2		16
			4	6	9	10	7	16	23	28	1			17
			1	7	9	11	19	25	27	11	4			18
						2	5	16	12	9	1			19
							3	5	14	9	1			20
							1	2	7	7	1			21
								1	5	9				22
			3	1	2	4	8	6	24	23	26	6	2	23
					1	3	2	4	15	31	42	6		24
						3	1	6	17	14	24	4		25
									6	5	22	9		26
									6	3	1			27
								1	2	4	2			28
						1	2	3	17	4				29
						1			8	5	1			30
							4	2	5	3				31
						3	2	5	7	3				32
									1	5				33
									2	4				34
			3	7	10	21	32	46	144	146	202	37	11	35
				1	9	17	16	40	90	131	203	69	10	36

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

LASTING DEPARTMENT—Continued.

PULLERS-OVER, HAND, MALE.											
1	Illinois:										
2	3 establishments...	1914	86	55.0	\$0.372	\$20.46					86
		1916	92	54.7	.388	21.26			8		84
3	Massachusetts:										
4	10 establishments...	1914	283	54.3	.374	20.33		38	149		96
		1916	186	54.1	.351	18.97		39	113		34
5	Missouri:										
6	2 establishments...	1914	12	54.7	.383	21.12				4	8
		1916	12	56.5	.378	21.33			6		6
7	New York:										
8	5 establishments...	1914	34	52.9	.338	17.87	2	14	16		2
		1916	40	53.3	.370	19.68	1	13	21		5
9	Ohio:										
10	3 establishments...	1914	43	55.0	.350	19.27					43
		1916	29	55.0	.361	19.83					29
11	Pennsylvania:										
12	4 establishments...	1914	62	57.2	.285	16.29			4		11
		1916	63	57.2	.292	16.75			8		6
13	Other States:										
14	3 establishments...	1914	17	56.0	.286	16.03					12
		1916	7	57.0	.334	18.99					3
15	Total:										
16	30 establishments...	1914	537	54.8	.357	19.52	2	52	173	258	52
		1916	429	54.8	.353	19.33	1	60	148	161	59
PULLERS-OVER, MACHINE, MALE.											
17	Illinois:										
18	2 establishments...	1914	17	55.0	.348	19.14					17
		1916	19	53.3	.370	19.68		11			8
19	Maine:										
20	4 establishments...	1914	29	57.7	.336	19.42					3
		1916	33	58.1	.364	21.17					33
21	Massachusetts:										
22	15 establishments...	1914	125	54.3	.395	21.49		7	81		37
		1916	122	54.4	.441	23.95		5	83		34
23	Minnesota:										
24	3 establishments...	1914	14	59.6	.312	18.58					6
		1916	15	60.0	.343	20.58					15
25	Missouri:										
26	8 establishments...	1914	58	57.1	.328	18.59			15		9
		1916	56	56.5	.347	19.52			28		28
27	New Hampshire:										
28	4 establishments...	1914	38	55.0	.309	17.01					38
		1916	52	55.0	.296	16.30					52
29	New York:										
30	10 establishments...	1914	53	53.0	.341	17.99	8	23	8		14
		1916	59	52.9	.409	21.55	11	24	4		20
31	Ohio:										
32	5 establishments...	1914	35	56.5	.389	21.97					22
		1916	28	56.6	.419	23.75					17
33	Pennsylvania:										
34	4 establishments...	1914	9	54.9	.278	15.22			4		5
		1916	9	54.9	.298	16.33			4		5
35	Wisconsin:										
36	2 establishments...	1914	10	60.0	.343	20.60					10
		1916	10	59.0	.309	18.23					8
37	Other States:										
38	6 establishments...	1914	22	57.9	.311	17.94					6
		1916	18	56.8	.356	20.24					10
39	Total:										
40	63 establishments...	1914	410	55.6	.353	19.56	8	30	108	151	95
		1916	421	55.3	.382	21.08	11	40	119	148	80

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were--													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

LASTING DEPARTMENT—Continued.

							1	3	15	35	31	2	1	
								6	6	48	33	4	2	
						2	5	27	32	124	57	36	3	
								16	29	98	37	6	4	
										8	4		5	
									1	8	3		6	
								5	5	17	7		7	
								4	8	15	9	4	8	
								4	5	25	7	2	9	
								3	7	10	8	1	10	
					2	4	2	17	10	21	4	2	11	
		1		1	1		2	16	15	19	7	1	12	
								3	8	6			13	
									1	6			14	
					2	6	7	59	75	236	110	42	15	
		1		1	1		3	39	67	204	97	16	16	
							1	2		9	5		17	
					2				2	8	6	1	18	
									3	7	6	1	19	
									1	8	8	3	20	
										12	6		21	
						1		3	11	55	41	14	21	
						1	1	2	6	27	55	30	22	
										7	6	1	23	
										4	8	2	24	
						2	1	5	18	18	14		25	
							1	11	10	15	17	2	26	
						2		6	7	17	6		27	
						4	4	13	9	14	5	3	28	
					1	1		3	9	30	8	1	29	
								2	4	25	16	12	30	
							1	4	2	13	9	6	31	
								1	1	10	11	5	32	
									4	2	3		33	
									2	3	4		34	
							1		2	4	3		35	
								1	3	6			36	
									3	10	6	2	37	
									5	5	7	1	38	
					1	7	3	33	75	173	94	24	39	
					2	5	6	33	55	137	125	58	40	

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
LASTING DEPARTMENT—Continued.												
SIDE LASTERS, HAND, MALE.												
Maine:												
1	2 establishments....	1914	10	58.0	\$0.328	\$19.00						10
2		1916	14	58.0	.294	17.04						14
Massachusetts:												
3	2 establishments....	1914	82	53.5	.320	17.13		76	6			
4		1916	72	53.5	.319	17.10		66	6			
New Hampshire:												
5	2 establishments....	1914	45	55.0	.208	11.45					45	
6		1916	36	55.0	.242	13.31					36	
New York:												
7	4 establishments....	1914	69	51.6	.349	17.86	31	26			12	
8		1916	44	52.6	.375	19.59	10	22			12	
Other States:												
9	6 establishments....	1914	11	57.2	.278	15.80				1	4	2
10		1916	13	57.1	.318	18.09				1	6	5
Total:												
11	16 establishments...	1914	217	53.6	.304	16.20	31	102	7	61	14	2
12		1916	179	54.2	.315	17.02	10	88	7	54	15	5
SIDE LASTERS, MACHINE, MALE.												
Massachusetts:												
13	5 establishments....	1914	68	54.3	.369	20.06			58	10		
14		1916	66	54.3	.361	19.58			56	10		
Missouri:												
15	4 establishments....	1914	23	56.4	.348	19.48				12		11
16		1916	26	56.3	.301	16.93				14		12
New Hampshire:												
17	2 establishments....	1914	23	55.0	.284	15.59					23	
18		1916	26	55.0	.359	19.73					26	
New York:												
19	2 establishments....	1914	18	53.1	.334	17.63		8	10			
20		1916	21	53.1	.313	16.58		9	12			
Other States:												
21	4 establishments....	1914	21	57.2	.309	17.69					11	3
22		1916	19	56.3	.307	17.22					14	5
Total:												
23	17 establishments...	1914	153	55.0	.341	18.69		8	80	44	14	7
24		1916	158	54.8	.338	18.48		9	82	50	12	5
BED-MACHINE OPERATORS, MALE.												
Illinois:												
25	4 establishments....	1914	111	55.0	.304	16.72					111	
26		1916	109	54.1	.353	19.08		34			75	
Maine:												
27	4 establishments....	1914	35	58.0	.350	20.30						35
28		1916	32	58.2	.359	20.93						32
Massachusetts:												
29	16 establishments....	1914	455	54.0	.332	17.97		100	301	54		
30		1916	431	54.2	.383	20.72		94	263	74		
Minnesota:												
31	3 establishments....	1914	16	59.9	.293	17.55					2	14
32		1916	33	60.0	.305	18.33						33
Missouri:												
33	5 establishments....	1914	89	56.3	.343	19.21			34	17	38	
34		1916	81	57.3	.312	17.83			28		53	
New Hampshire:												
35	4 establishments....	1914	138	55.0	.245	13.49					138	
36		1916	149	55.0	.299	16.45					149	
New Jersey:												
37	3 establishments....	1914	19	55.0	.390	21.45					19	
38		1916	20	55.0	.342	18.81					20	

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
LASTING DEPARTMENT—Continued.											
	BED-MACHINE OPERATORS, MALE—contd.										
	New York:										
1	8 establishments....	1914	105	53.1	\$0.319	\$16.92		72	18	15	
2		1916	99	53.1	.361	19.15		67	15	17	
	Ohio:										
3	5 establishments....	1914	64	56.7	.356	20.14				37	
4		1916	57	56.9	.386	21.98				30	
	Pennsylvania:										
5	6 establishments....	1914	28	56.4	.351	19.87			4	10	
6		1916	27	56.6	.301	17.08			3	9	
	Virginia:										
7	3 establishments....	1914	19	59.0	.264	15.57					
8		1916	17	59.0	.347	20.46					
	Wisconsin:										
9	2 establishments....	1914	20	60.0	.307	18.39					
10		1916	25	59.2	.250	14.74				4	
	Other States:										
11	1 establishment....	1914	14	59.0	.265	15.62					
12		1916	12	55.0	.315	17.32				12	
	Total:										
13	64 establishments....	1914	1,113	55.0	.319	17.52		172	357	401	
14		1916	1,092	55.1	.351	19.31		195	309	390	
	HAND-METHOD LASTING-MACHINE OPERATORS, MALE.										
	Maine:										
15	3 establishments....	1914	33	57.6	.370	21.33				4	
16		1916	38	58.0	.402	23.35					
	Massachusetts:										
17	6 establishments....	1914	95	54.8	.348	19.05			32	63	
18		1916	73	54.7	.384	20.98			30	43	
	Missouri:										
19	5 establishments....	1914	67	57.6	.308	17.68			8	13	
20		1916	91	55.6	.323	17.89			62		
	New Hampshire:										
21	2 establishments....	1914	39	55.0	.276	15.16				39	
22		1916	30	55.0	.304	16.71				30	
	New York:										
23	2 establishments....	1914	46	53.8	.391	20.89					
24		1916	61	52.9	.374	19.61		25		23	
	Ohio:										
25	4 establishments....	1914	59	55.7	.384	21.38				48	
26		1916	47	56.1	.372	20.84				34	
	Pennsylvania:										
27	3 establishments....	1914	9	55.1	.298	16.39			5	3	
28		1916	13	54.8	.318	17.40			9	3	
	Other States:										
29	7 establishments....	1914	24	59.0	.300	17.65				3	
30		1916	19	58.9	.291	17.10				3	
	Total:										
31	32 establishments....	1914	372	55.9	.342	19.04		25	45	173	
32		1916	372	55.4	.354	19.55		23	101	151	
	TURN LASTERS, HAND, MALE.										
	Massachusetts:										
33	3 establishments....	1914	75	54.0	.393	21.20			35	19	
34		1916	92	54.3	.405	21.95			35	14	
	Missouri:										
35	3 establishments....	1914	81	54.4	.316	17.20				49	
36		1916	139	57.0	.372	21.33				55	

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

LASTING DEPARTMENT—Continued.

			1	1		1	5	6	21	62	6	2	1	
							1	10	17	36	32	3	2	
					1			4	8	31	18	2	3	
								3	4	25	18	7	4	
								2	5	14	6	1	5	
					1		1	8	5	8	2	2	6	
								8	9	1	1		7	
									6	7	4		8	
								5	5	6	4		9	
					4	4	2	2	8	9			10	
								5	7	2			11	
								1	4	6	1		12	
			1	3	9	18	28	131	265	499	135	24	13	
			1	3	9	7	18	85	197	476	229	66	14	
								2	1	20	8	2	16	
									3	17	11	7	15	
								7	14	57	15	2	17	
				1				2	7	35	20	8	18	
					1	1	1	12	11	36	5		19	
					1	1		12	20	44	12	1	20	
							4	9	14	11	1		21	
							2	7	6	11	4		22	
								1	4	20	18	3	23	
								5	10	20	18	8	24	
								5	8	22	12	12	25	
								7	8	13	11	8	26	
						1	1		4	4			27	
									3	6	2		28	
						1	1		4	7	8	4	29	
						1		3	6	9			30	
					1	3	5	40	63	178	63	19	31	
					2	2	2	37	63	155	78	32	32	
								2	10	26	29	8	33	
								7	5	35	29	16	34	
				1		1	8	13	14	26	16	2	35	
					1		4	16	21	42	34	21	36	

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

LASTING DEPARTMENT—Concluded.

	TURN LASTERS, HAND, MALE—concluded.													
1	New Jersey:													
2	4 establishments...	1914	65	55.0	\$0.288	\$15.86						65		
		1916	47	55.0	.318	17.51						47		
3	New York:													
4	8 establishments...	1914	226	52.1	.357	18.58	86	75				65		
		1916	226	52.7	.357	18.76	66	67				93		
5	Ohio:													
6	3 establishments...	1914	80	57.0	.312	17.74						40	40	
		1916	85	56.8	.392	22.32						47	35	3
7	Pennsylvania:													
8	5 establishments...	1914	120	55.3	.275	15.22			1			106	13	
		1916	137	55.2	.291	16.12			22			97	18	
9	Other States:													
10	3 establishments...	1914	34	59.9	.258	15.44							3	31
		1916	7	60.0	.266	15.95								7
11	Total:													
12	29 establishments...	1914	681	54.4	.325	17.60	86	110	69			329	56	31
		1916	733	54.9	.354	19.46	66	102	91			327	137	10
	TURN SEWERS, MALE.													
13	New York:													
14	6 establishments...	1914	16	51.5	.461	23.74	9	3	1			3		
		1916	16	51.3	.495	25.45	10	3				3		
15	Pennsylvania:													
16	4 establishments...	1914	21	55.1	.320	17.69				1		19	1	
		1916	24	55.1	.318	17.60				1		22	1	
17	Other States:													
18	7 establishments...	1914	11	55.3	.466	25.72			2			5	2	
		1916	12	55.1	.472	25.87			3			5	2	
19	Total:													
20	17 establishments...	1914	48	53.9	.401	21.54	9	5	4			27	3	
		1916	52	53.9	.408	21.93	10	6	3			30	3	

BOTTOMING DEPARTMENT.

	GOODYEAR WELTERS, MALE.													
21	Illinois:													
22	4 establishments...	1914	30	55.0	\$0.679	\$37.33						30		
		1916	30	54.1	.617	33.38			9			21		
23	Maine:													
24	4 establishments...	1914	13	58.0	.516	29.96						1	12	
		1916	13	58.2	.516	30.07							13	
25	Massachusetts:													
26	17 establishments...	1914	178	54.1	.536	29.02			27	118		33		
		1916	172	54.1	.560	30.36			30	114		28		
27	Minnesota:													
28	3 establishments...	1914	8	59.6	.387	22.90							3	5
		1916	11	60.0	.444	26.63								11
29	Missouri:													
30	6 establishments...	1914	38	55.8	.440	24.51				17		9	12	
		1916	24	57.1	.431	24.54			9				15	
31	New Hampshire:													
32	4 establishments...	1914	40	55.0	.430	23.64						40		
		1916	43	55.0	.444	24.41						43		
33	New York:													
34	8 establishments...	1914	33	53.2	.518	27.59			21	6		6		
		1916	37	53.1	.579	30.76			24	7		6		

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916.—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

LASTING DEPARTMENT—Concluded.

			2		3		6	10	14	28	1	1		
					1	2		2	14	23	5			2
							3	24	36	96	56	11		3
						1	1	25	43	83	53	20		4
				1	5	2	1	17	8	32	10	4		5
								4	11	33	22	15		6
			2	1	2	3	6	25	48	26	6	1		7
						1	2	29	65	30	8	2		8
					1				12	16				9
						1		1	3	5				10
			4	3	11	6	24	103	146	239	118	27		11
					2	5	7	84	161	249	151	74		12
									1	3	7	5	5	13
									1	4	5	6	6	14
								1		19		1	1	15
									17	3	2	1	1	16
										2	5	4	4	17
									2	1	4	5	5	18
								1	1	24	12	10		19
							1		20	8	11	12	12	20

BOTTOMING DEPARTMENT.

													1	29	21
													2	4	22
														6	23
														7	24
														6	24
										8	64	106			25
								5	3	6	34	124			26
									2	3					27
								1	1	1	5		3		28
									1	4	9	12	12		29
									3	8	6	7			30
										1	8	14			31
				1			2		2	15	6	16	15		32
										6	16	15			32
										9	8	16			33
									1	2	14	20			34

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
BOTTOMING DEPARTMENT—Continued.											
GOODYEAR WELTERS, MALE—concluded.											
1	Ohio:										
2	6 establishments....	1914	34	56.3	\$0.433	\$24.24			23	11	
		1916	36	56.0	.443	24.73			27	9	
3	Pennsylvania:										
4	6 establishments....	1914	16	56.3	.489	27.76		4	4	8	
5		1916	16	56.1	.429	24.25		4	5	7	
4	Other States:										
5	9 establishments....	1914	27	58.2	.449	25.99			7	14	
6		1916	25	57.4	.450	25.71			13	8	
7	Total:										
8	67 establishments....	1914	417	55.1	.506	27.85		48	145	153	
		1916	410	55.1	.519	28.49		63	134	143	
									60	11	
									52	18	
ROUGH ROUNDERS, MALE.											
9	Illinois:										
10	4 establishments....	1914	20	55.0	.734	40.36			20		
		1916	21	54.3	.647	34.99		5	16		
11	Massachusetts:										
12	17 establishments....	1914	91	54.1	.543	29.42		17	59	15	
		1916	86	54.1	.569	30.84		16	56	14	
13	Missouri:										
14	6 establishments....	1914	18	55.9	.501	27.84			8	4	
		1916	18	56.8	.401	22.68			8	6	
15	New Hampshire:										
16	4 establishments....	1914	24	55.0	.413	22.73				24	
		1916	26	55.0	.455	25.03				26	
17	New York:										
18	8 establishments....	1914	22	53.1	.476	25.41		15	3	4	
		1916	24	53.1	.525	27.94		17	3	4	
19	Ohio:										
20	6 establishments....	1914	23	56.0	.380	21.20				17	
		1916	23	56.0	.390	21.74				17	
21	Pennsylvania:										
22	7 establishments....	1914	12	55.3	.391	21.73		2	3	4	
		1916	13	55.9	.384	21.73			4	4	
23	Other States:										
24	15 establishments....	1914	33	58.3	.443	25.71				7	
		1916	34	57.8	.444	25.63				12	
25	Total:										
26	67 establishments....	1914	243	55.1	.500	27.52		34	73	95	
		1916	245	55.1	.503	27.64		38	71	93	
									32	9	
									32	11	
GOODYEAR STITCHERS, MALE.											
27	Illinois:										
28	4 establishments....	1914	43	55.0	.591	32.48				43	
		1916	45	54.1	.568	30.73		14		31	
29	Maine:										
30	3 establishments....	1914	14	58.3	.420	24.45				14	
		1916	15	58.3	.368	21.42				15	
31	Massachusetts:										
30	17 establishments....	1914	238	54.1	.433	23.47		39	157	42	
		1916	231	54.2	.468	25.38		33	160	38	
32	Minnesota:										
33	3 establishments....	1914	11	59.5	.363	21.63				5	
34		1916	10	60.0	.514	30.82				10	
35	Missouri:										
36	6 establishments....	1914	49	56.0	.349	19.47			20	12	
		1916	39	57.6	.337	19.32			11	28	
37	New Hampshire:										
38	4 establishments....	1914	58	55.0	.305	16.78				58	
		1916	67	55.0	.336	18.45				67	

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

BOTTOMING DEPARTMENT—Continued.

								3	2	8				
							1	4	1	11		11	10	1
												6	13	2
							1		4	1			10	3
								1	2	6		2	5	4
										13		7	7	5
									3	7		10	8	6
							1	5	14	66		120	211	7
				1			3	11	17	49		104	225	8
							1					2	18	9
									1			4	15	10
								1	1	12		30	58	11
												11	61	12
										3		5	10	13
									1	3		10	1	14
									2	6		15	1	15
						1				4		13	8	16
									1	11		4	6	17
										11		1	12	18
								1	4	11		3	4	19
								2	5	8		5	3	20
								2	2	3		1	4	21
						1		1	3	3		2	3	22
									1	10		14	8	23
								2	1	7		14	10	24
								3	10	47		74	109	25
							2	1	7	14		60	113	26
										2		6	35	27
									1	3		5	36	28
										5		7	2	29
									1	11		3		30
										11		83	94	31
								6	11	35		103	76	32
									1	1		4	5	33
												5	4	34
								1	1	12		26	8	35
								1	3	8		18	9	36
								2	8	19		27	2	37
									7	10		41	9	38

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
BOTTOMING DEPARTMENT—Continued.												
	GOODYEAR STITCHERS, MALE—concluded.											
1	New York:											
2	8 establishments....	1914	47	52.9	.455	\$24.13		34	8		5	
		1916	53	53.0	.454	24.09		36	10		7	
3	Ohio:										34	15
4	6 establishments....	1914	49	56.2	.329	18.40					30	11
		1916	41	56.1	.369	20.59						
5	Pennsylvania:											
6	6 establishments....	1914	22	56.3	.399	22.62			5		6	11
		1916	25	56.2	.406	22.93			7		6	12
7	Other States:										8	13
8	8 establishments....	1914	28	58.1	.384	22.13					19	2
		1916	31	56.9	.386	21.79						7
9	Total:											
10	65 establishments...	1914	559	55.0	.412	22.62		73	190		208	75
		1916	557	55.0	.433	23.76		83	188		198	68
	M'KAY SEWERS, MALE.											
11	Maine:											
12	3 establishments....	1914	17	57.9	.338	19.57			1		16	
		1916	23	58.0	.340	19.73						23
13	Massachusetts:											
14	6 establishments....	1914	29	54.7	.372	20.39		5	2		22	
		1916	34	54.7	.403	22.04		7	2		25	
15	Missouri:											
16	3 establishments....	1914	11	58.1	.366	21.16			2			9
		1916	24	55.0	.281	15.39			19			5
17	New Hampshire:											
18	2 establishments....	1914	24	55.0	.245	13.49					24	
		1916	14	55.0	.266	14.61					14	
19	New York:											
20	3 establishments....	1914	18	52.2	.349	18.07	8	2			8	
		1916	12	50.8	.419	21.19	8	2			2	
21	Other States:											
22	13 establishments...	1914	24	57.3	.313	17.87			2		9	8
		1916	29	57.7	.323	18.64			2		10	5
23	Total:											
24	30 establishments...	1914	123	55.7	.327	18.17	8	7	7		79	17
		1916	136	55.7	.341	18.91	8	9	23		51	33
	HEELERS, MALE.											
25	Illinois:											
26	3 establishments....	1914	12	55.0	.500	27.50					12	
		1916	13	55.0	.585	32.15					13	
27	Maine:											
28	4 establishments....	1914	12	57.9	.474	27.52					1	11
		1916	16	58.1	.407	23.68						16
29	Massachusetts:											
30	19 establishments...	1914	97	54.3	.447	24.27		13	53		31	
		1916	88	54.3	.503	27.29		12	53		23	
31	Missouri:											
32	8 establishments....	1914	33	56.6	.369	20.77			12		5	16
		1916	35	56.4	.369	20.84			18			17
33	New Hampshire:											
34	6 establishments....	1914	27	55.0	.293	16.14					27	
		1916	33	55.0	.360	19.80					33	
35	New York:											
36	10 establishments...	1914	45	52.6	.424	22.30					9	
		1916	49	52.6	.446	23.40	6	25	4		8	
37	Ohio:											
38	6 establishments....	1914	33	56.6	.336	18.92					20	13
		1916	36	56.6	.360	20.33					22	13

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916.—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

BOTTOMING DEPARTMENT—Continued.

							1	3	4	15	9	15	1	
								2	2	18	18	15	2	
						1		4	17	15	10	2	3	
								2	9	14	11	5	4	
								4	1	6	6	5	5	
							1	4	1	7	6	6	6	
								2	6	10	6	4	7	
								4	1	15	6	5	8	
						2								
							3	23	71	193	153	114	9	
							2	26	44	163	175	147	10	
								2	2	12	1		11	
									8	11	3	1	12	
							1	1	5	13	7	2	13	
								2	2	11	14	5	14	
									1	8	1	1	15	
					1	1		4	8	10			16	
					1			5	10	3			17	
						1		3	3	5			18	
							1	1	2	7	5	1	19	
										5	7		20	
								3	5	3	3	2	21	
								2	9	15	3		22	
					2		10	19	16	53	17	6	23	
					1	2	1	11	32	56	27	6	24	
											1	7	25	
											2	3	26	
											3	5	27	
								1	2	5	4	4	28	
								6	6	29	19	37	29	
							2	4	6	14	18	44	30	
								1	9	8	8	5	31	
								3	1	22	3	5	32	
							1	10	2	13	1		33	
								2	1	23	5	2	34	
								1	4	10	15	11	35	
								1	5	15	14	14	36	
								3	5	6	11	4	37	
								4	6	16	5	5	38	

TABLE 3.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

BOTTOMING DEPARTMENT—Continued.

	HEELERS, MALE—concl'd.											
1	Pennsylvania:											
2	7 establishments...	1914	16	56.1	\$0.394	\$22.25			4	5	7	
		1916	21	56.2	.364	20.56			5	6	10	
3	Wisconsin:											
4	2 establishments...	1914	10	60.0	.336	20.15						10
		1916	9	59.4	.418	24.86					1	8
5	Other States:											
6	11 establishments...	1914	20	58.0	.395	22.88				6	10	4
		1916	23	57.7	.397	22.90				10	3	10
7	Total:											
8	76 establishments...	1914	305	55.3	.403	22.22	7	38	73	116	57	14
		1916	323	55.3	.429	23.66	6	42	81	116	59	19
	HEEL TRIMMERS OR SHAVERS, MALE.											
9	Illinois:											
10	4 establishments...	1914	23	55.0	.579	31.83					23	
		1916	22	54.0	.616	33.18		7			15	
11	Maine:											
12	3 establishments...	1914	11	58.2	.398	23.16						11
		1916	13	58.2	.373	21.71						13
13	Massachusetts:											
14	19 establishments...	1914	82	54.2	.456	24.74		22	37	23		
		1916	84	54.2	.508	27.51		24	39	21		
15	Missouri:											
16	8 establishments...	1914	21	56.3	.363	20.35			8	4	9	
		1916	29	55.9	.393	21.94			18		11	
17	New Hampshire:											
18	6 establishments...	1914	20	55.0	.334	18.36					20	
		1916	22	55.0	.354	19.45					22	
19	New York:											
20	10 establishments...	1914	31	52.6	.496	26.15	6	15	3	7		
		1916	39	52.8	.515	27.16	6	18	5	10		
21	Ohio:											
22	6 establishments...	1914	26	56.5	.364	20.49					16	10
		1916	24	56.3	.434	24.41					16	8
23	Pennsylvania:											
24	7 establishments...	1914	21	55.8	.319	18.01			3	12	6	
		1916	26	55.5	.307	17.22			2	19	5	
25	Other States:											
26	12 establishments...	1914	23	58.3	.405	23.52				6	8	9
		1916	25	58.1	.412	23.83				9	3	13
27	Total:											
28	75 establishments...	1914	258	55.2	.428	23.54	6	37	51	111	44	9
		1916	284	55.0	.454	24.92	6	49	64	112	40	13
	HEEL BREASTERS, MALE.											
29	Massachusetts:											
30	19 establishments...	1914	50	54.2	.339	18.39		11	25	14		
		1916	56	54.3	.356	19.29		13	27	16		
31	Missouri:											
32	8 establishments...	1914	17	56.8	.286	16.08			5	3	9	
		1916	22	56.5	.256	14.52			11	11		
33	New Hampshire:											
34	6 establishments...	1914	14	55.0	.247	13.58					14	
		1916	14	55.0	.297	16.34					14	
35	New York:											
36	9 establishments...	1914	17	52.9	.351	18.56	2	9	2	4		
		1916	20	52.6	.329	17.29	3	11	2	4		
37	Ohio:											
38	5 establishments...	1914	17	56.4	.291	16.29					11	6
		1916	15	56.3	.328	18.38					10	5

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

BOTTOMING DEPARTMENT—Continued.

HEEL BREASTERS, MALE—concluded.												
Pennsylvania:												
1	7 establishments....	1914	13	55.5	\$0.207	\$11.54				3	7	3
2		1916	17	55.8	.234	13.18				3	9	5
Other States:												
3	16 establishments....	1914	29	57.3	.282	16.08					12	13
4		1916	32	55.4	.314	17.85		3			10	9
Total:												
5	70 establishments....	1914	157	55.3	.300	16.51	2	20	35	65	31	4
6		1916	176	54.9	.314	17.30	3	27	43	74	19	10
EDGE TRIMMERS, MALE.												
Illinois:												
7	4 establishments....	1914	47	55.0	.533	29.34					47	
8		1916	45	54.0	.553	29.87		15			30	
Maine:												
9	4 establishments....	1914	40	57.8	.397	23.00					4	36
10		1916	43	58.1	.400	23.24						43
Massachusetts:												
11	19 establishments....	1914	324	54.2	.409	22.18		59	178		87	
12		1916	303	54.2	.464	25.18		56	169		78	
Missouri:												
13	8 establishments....	1914	70	56.5	.376	21.11			24		13	33
14		1916	85	56.4	.357	20.12			44			41
New Hampshire:												
15	6 establishments....	1914	88	55.0	.351	19.31					88	
16		1916	99	55.0	.387	21.28					99	
New Jersey:												
17	4 establishments....	1914	12	55.0	.496	27.28					12	
18		1916	10	55.0	.547	30.10					10	
New York:												
19	10 establishments....	1914	94	52.7	.429	22.57	19	41	10	24		
20		1916	93	52.8	.445	23.43	16	38	13	26		
Ohio:												
21	6 establishments....	1914	75	56.4	.348	19.57					49	26
22		1916	71	56.2	.368	20.68					49	22
Pennsylvania:												
23	7 establishments....	1914	30	55.7	.359	20.12			8		13	9
24		1916	33	55.6	.368	20.59			8		17	8
Virginia:												
25	3 establishments....	1914	16	59.0	.297	17.53						16
26		1916	14	57.6	.348	20.02					5	9
Wisconsin:												
27	2 establishments....	1914	15	60.0	.334	20.03						15
28		1916	16	59.1	.328	19.34					3	13
Other States:												
29	4 establishments....	1914	16	59.4	.367	21.81						10
30		1916	23	58.3	.385	22.57					8	15
Total:												
31	77 establishments....	1914	827	55.1	.398	21.90	19	100	220	337	130	21
32		1916	835	55.1	.426	23.38	16	109	234	325	123	28
EDGE SETTERS, MALE.												
Illinois:												
33	4 establishments....	1914	50	55.0	.497	27.34					50	
34		1916	47	54.1	.522	28.28		14			33	
Maine:												
35	4 establishments....	1914	34	58.2	.383	22.31						34
36		1916	22	58.2	.408	23.74						22
Massachusetts:												
37	19 establishments....	1914	283	54.2	.430	23.27		62	150	71		
38		1916	246	54.3	.446	24.18		44	132	70		
Minnesota:												
39	3 establishments....	1914	11	59.6	.389	23.22						4
40		1916	16	60.0	.378	22.68						16

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

BOTTOMING DEPARTMENT—Continued.

			2		2	2		5	1		1		1
			3		5	1		1	3		2		2
					2	2	1	6	5	10	3		3
			1		3	1	1	6	2	8	9	1	4
			2		5	10	8	30	30	48	19	5	5
			4		8	8	6	20	27	70	28	5	6
								1	2	10	10	24	7
										2	14	27	8
								3	5	15	8	9	9
					1			3	5	11	18	5	10
					2	3	2	8	26	114	115	54	11
			1		2	2	2	6	12	78	89	115	12
					1	2	2	2	5	32	16	10	13
					1	1	1	7	9	44	20	3	14
								4	16	42	26		15
							1	1	11	40	41	5	16
										2	2	6	17
							1			1	2	6	18
								5	4	32	27	26	19
								5	3	27	30	28	20
							2	5	13	37	17	1	21
					1		1	3	12	29	20	5	22
								3	9	9	6	3	23
						2	1	3	9	9	2	7	24
								3	10		3		25
									5	5	4		26
									5	9	1		27
								1	4	11			28
			1					2	1	9	3	1	29
							1	1	4	6	5	5	30
					3	5	6	36	98	311	234	134	31
			1	1	2	3	8	30	76	263	245	206	32
											3	13	33
										1	9	24	34
									2	19	11	2	35
										8	14		36
								1	11	105	117	49	37
							1	3	22	66	69	85	38
									2	2	7		39
									1	2	7		40

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK
WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60
BOTTOMING DEPARTMENT—Continued.												
	EDGE SETTERS, MALE—concluded.											
1	Missouri:											
2	8 establishments....	1914	65	56.6	\$0.387	\$21.75			20	14	31	
		1916	78	56.2	.349	19.66			43		35	
3	New Hampshire:											
4	6 establishments....	1914	72	55.0	.339	18.65				72		
		1916	71	55.0	.369	20.29				71		
5	New Jersey:											
6	4 establishments....	1914	26	55.0	.399	21.95					26	
		1916	22	55.0	.438	24.11					22	
7	New York:											
8	11 establishments....	1914	101	52.2	.435	22.66	28	47	9	17		
		1916	103	52.5	.429	22.39	24	46	12	21		
9	Ohio:											
10	6 establishments....	1914	82	56.5	.375	21.12					52	30
		1916	79	56.4	.376	21.11					51	28
11	Pennsylvania:											
12	7 establishments....	1914	56	55.9	.376	21.07			8	29	19	
		1916	52	55.9	.395	22.12			8	26	18	
13	Virginia:											
14	3 establishments....	1914	15	59.0	.308	18.20						15
		1916	13	59.0	.331	19.52						13
15	Wisconsin:											
16	2 establishments....	1914	18	60.0	.318	19.05						18
		1916	15	59.3	.313	18.57				2		13
17	Other States:											
18	1 establishment....	1914	6	59.0	.373	21.99						6
		1916	6	55.0	.354	19.45					6	
19	Total:											
20	78 establishments....	1914	819	55.1	.405	22.27	28	109	187	331	133	31
		1916	770	55.1	.413	22.65	24	104	195	302	116	29
	HEEL SCOURERS, MALE.											
21	Illinois:											
22	4 establishments....	1914	17	55.0	.374	20.55					17	
		1916	18	54.0	.374	20.18		6			12	
23	Maine:											
24	4 establishments....	1914	14	58.0	.360	20.90					1	13
		1916	15	58.1	.393	22.86						15
25	Massachusetts:											
26	19 establishments....	1914	103	54.2	.333	18.08		24	52	27		
		1916	121	54.2	.372	20.14		33	61	27		
27	Minnesota:											
28	3 establishments....	1914	9	59.7	.314	18.73						3
		1916	11	60.0	.372	22.33						11
29	Missouri:											
30	8 establishments....	1914	39	56.3	.242	13.55			17	5	17	
		1916	51	56.5	.287	16.13			26		25	
31	New Hampshire:											
32	6 establishments....	1914	45	55.0	.250	13.73					45	
		1916	37	55.0	.269	14.82					37	
33	New York:											
34	10 establishments....	1914	45	52.9	.365	19.34					15	
		1916	50	53.2	.402	21.34	4	23	4	19		
35	Ohio:											
36	6 establishments....	1914	35	56.5	.282	15.92					22	13
		1916	35	56.0	.338	19.00					26	9
37	Pennsylvania:											
38	7 establishments....	1914	20	55.9	.246	13.74			6	7	7	
		1916	22	55.7	.253	14.16			5	11	6	
39	Other States:											
40	9 establishments....	1914	24	58.5	.279	16.20					5	11
		1916	24	57.7	.314	17.99					10	5
41	Total:											
42	76 establishments....	1914	351	55.0	.305	16.84	7	44	78	144	64	14
		1916	384	55.2	.342	18.84	4	62	96	142	60	20

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

BOTTOMING DEPARTMENT—Continued.

							4	3	8	17	21	12	1
						2		2	19	32	22	1	2
						1	1	3	17	46	5	1	3
								1	5	43	20	1	4
									4	9	6	6	5
									3	5	6	8	6
									4	39	35	23	7
							2	4	7	33	25	32	8
						1		5	9	30	33	4	9
							1	5	8	35	22	8	10
								2	9	21	22	2	11
								3	5	19	20	5	12
									10	2	3		13
									5	7	1		14
								2	4	12			15
					1		1	3	9	9	1		16
										5	1		17
										6			18
						1							19
						1	3	4	17	80	310	295	112
							6	19	79	278	220	164	20
								2	1	7	4	3	21
							1	3	1	8	3	2	22
								1	3	7	1	2	23
								1	2	4	8		24
					2	1	3	16	21	38	17	5	25
					1	1		7	16	49	43	5	26
									1	8			27
								1	1	4	4	1	28
										5			29
			1	2	2	4	1	11	13	16	11	5	30
				1	1		2	14	16				
					1	3	4	13	18	6			31
			1		1	1	1	8	16	10			32
						1	1	6	7	16	3	11	33
								3	6	16	19	6	34
						1		13	8	12		1	35
						1	1	1	9	14	8	1	36
								5	3	7			37
				3	3	2	3	3	4	4	3		38
					1	1	1	10	5	2	3	1	39
					1	1	1	5	8	4	4	1	40
				1	5	7	11	77	80	108	28	23	41
			4	1	3	8	5	46	79	124	97	17	42

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

BOTTOMING DEPARTMENT—Concluded.

HEEL BURNISHERS, MALE.												
1	Illinois:											
2	4 establishments....	1914	16	55.0	\$0.459	\$25.23					16	
		1916	13	54.1	.513	27.80		4			9	
3	Maine:											
4	4 establishments....	1914	13	57.7	.345	19.93					2	11
		1916	10	58.2	.383	22.26						10
5	Massachusetts:											
6	19 establishments...	1914	83	54.3	.340	18.50		7	47		29	
		1916	79	54.4	.362	19.71		6	47		26	
7	Missouri:											
8	8 establishments....	1914	27	57.1	.251	14.32				6	21	
		1916	30	56.7	.254	14.36			14			16
9	New Hampshire:											
10	6 establishments....	1914	24	55.0	.245	13.45					24	
		1916	25	55.0	.269	14.82					25	
11	New York:											
12	9 establishments....	1914	30	52.6	.335	17.64		4	19	2	5	
		1916	33	52.7	.364	19.20		5	16	5	7	
13	Ohio:											
14	6 establishments....	1914	27	57.1	.300	17.13					13	14
		1916	27	57.1	.310	17.69					13	14
15	Pennsylvania:											
16	7 establishments....	1914	16	55.9	.253	14.31				4	6	6
		1916	14	56.1	.289	16.38			3		5	6
17	Wisconsin:											
18	2 establishments....	1914	8	60.0	.269	16.16						8
		1916	11	59.5	.242	14.39					1	10
19	Other States:											
20	10 establishments...	1914	18	58.1	.307	17.71					5	9
		1916	19	58.1	.309	17.91					6	7
21	Total:											
22	75 establishments...	1914	262	55.5	.315	17.47		4	26	59	121	40
		1916	261	55.5	.331	18.32		5	26	69	92	52
BUFFERS, MALE.												
23	Illinois:											
24	3 establishments....	1914	11	55.0	.338	18.57					11	
		1916	17	55.0	.350	19.23					17	
25	Maine:											
26	4 establishments....	1914	19	58.2	.310	18.02						19
		1916	16	58.1	.365	21.19						16
27	Massachusetts:											
28	18 establishments...	1914	121	54.3	.346	18.76		18	61		42	
		1916	116	54.4	.349	18.98		19	55		42	
29	Missouri:											
30	8 establishments....	1914	37	57.0	.265	15.08				10	6	21
		1916	46	56.4	.277	15.69				24		22
31	New Hampshire:											
32	6 establishments....	1914	56	55.0	.221	12.13					56	
		1916	49	55.0	.294	16.19					49	
33	New York:											
34	8 establishments....	1914	37	52.0	.330	17.27		14	15		8	
		1916	35	52.3	.362	18.93		13	11		11	
35	Ohio:											
36	6 establishments....	1914	35	55.9	.354	19.76					27	8
		1916	27	55.9	.376	20.97					21	6
37	Pennsylvania:											
38	7 establishments....	1914	18	56.1	.279	15.74			3		8	7
		1916	25	55.7	.238	13.36			4		14	7
39	Other States:											
40	12 establishments...	1914	30	58.5	.274	15.99					7	11
		1916	28	58.0	.292	16.94					10	5
41	Total:											
42	72 establishments...	1914	364	55.3	.306	16.89		14	33	74	165	66
		1916	359	55.2	.324	17.88		13	30	83	164	56

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

BOTTOMING DEPARTMENT—Concluded.

								1	2	3	5	5	1
								2	1	2	3	5	2
								1	4	5	3		3
										4	0		4
			1	2		1	4	18	40	14	3		5
							8	13	26	29	3		6
						4	5	6	6				7
					1	3	1	12	5				8
							3	8	2	1			9
			1			4	9	8	9				10
							7	5	5				
							2	9	13	6			11
					1	1	2	2	6	13	8		12
								2					
						1	1	2	12	13			13
							1	5	4	13	3		14
		1		2	1		3	3	3	5			15
			1		2	1	1	1	2	5	2		16
							2	3	3	2			17
							3	3	4	1			18
			1			1	1	2	5	7	1	1	19
					1	1		2	6	8		1	20
		1		5	3	1	9	39	69	96	30	9	21
			1		5	8	8	38	53	86	51	11	22
								1	4	6	1		23
									6	6	3	1	24
								3	4	12			25
									3	8	5		26
							1	12	20	66	15	7	27
								10	19	62	23	2	28
			1	2	2	2	9	9	10	10	2		29
				1		2	9	9	25	8	1		30
				3	10	11	19	9	9	3	1		31
			2	1			3	17	23	3	2		32
						2	1	5	7	16	3	3	33
							2	2	3	15	12	1	34
							1	1	3	23	6	1	35
								5	1	10	9	2	36
					3	1	1	4	2	3	5		37
			4	3		1	1	5	5	4	2		38
						1	3	7	8	11			39
								10	10	10	2		40
				1	8	15	20	60	66	150	33	11	41
			4	5	3	1	5	45	85	146	59	6	42

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
FINISHING DEPARTMENT.												
TREERS OR IRONERS, HAND, MALE.												
1	Illinois:											
2	4 establishments....	1914	86	55.0	\$0.324	\$17.82					86	
		1916	86	53.8	.370	19.92		35			51	
3	Maine:											
4	4 establishments....	1914	59	57.7	.293	16.91					7	52
		1916	54	58.1	.305	17.75						54
5	Massachusetts:											
6	19 establishments....	1914	494	54.2	.302	16.33		119	251	124		
		1916	452	54.2	.315	17.03		114	238	100		
7	Minnesota:											
8	3 establishments....	1914	22	59.7	.262	15.62						7
		1916	20	60.0	.301	18.06						20
9	Missouri:											
10	7 establishments....	1914	89	55.8	.220	12.77					12	30
		1916	97	55.8	.236	13.14			63			34
11	New Hampshire:											
12	5 establishments....	1914	75	55.0	.255	14.05					75	
		1916	77	55.0	.274	15.07					77	
13	New Jersey:											
14	3 establishments....	1914	25	55.0	.329	18.08					25	
		1916	21	55.0	.375	20.61					21	
15	New York:											
16	5 establishments....	1914	61	53.3	.232	12.35		36	17		8	
		1916	66	53.4	.271	14.49		36	23		7	
17	Ohio:											
18	6 establishments....	1914	84	56.8	.233	13.24					46	38
		1916	73	56.5	.246	13.92					46	27
19	Pennsylvania:											
20	5 establishments....	1914	35	56.5	.231	13.12			12		2	21
		1916	36	56.2	.209	11.80			15		2	19
21	Virginia:											
22	3 establishments....	1914	26	59.0	.233	13.77						26
		1916	22	59.0	.274	16.17						22
23	Wisconsin:											
24	2 establishments....	1914	23	60.0	.271	16.26						23
		1916	15	59.0	.286	16.88					3	12
25	Other States:											
26	1 establishment....	1914	16	59.0	.222	13.08						16
		1916	19	55.0	.238	13.09					19	
27	Total:											
28	67 establishments...	1914	1,095	55.3	.279	15.39		155	327	385	190	38
		1916	1,038	55.1	.295	16.24		185	339	326	156	32
TREERS OR IRONERS, HAND, FEMALE.												
29	New York:											
30	4 establishments....	1914	44	50.7	.204	10.32	27	17				
		1916	42	51.0	.226	11.52	20	22				
31	Ohio:											
32	2 establishments....	1914	23	53.6	.173	9.27		23				
		1916	23	53.6	.171	9.18		23				
33	Pennsylvania:											
34	2 establishments....	1914	18	54.0	.130	7.01			18			
		1916	20	54.0	.154	8.34			20			
35	Other States:											
36	3 establishments....	1914	22	51.8	.154	7.99	14		1		7	
		1916	26	54.5	.148	8.10			14		12	
37	Total:											
38	11 establishments...	1914	107	52.1	.175	9.06	41	40	19		7	
		1916	111	52.9	.183	9.66	20	45	34		12	

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

FINISHING DEPARTMENT.

				3	3	6	8	7	8	30	15	6	1
					2	1	1	10	6	35	22	9	2
						1		7	23	28			3
							1	7	16	29	1		4
			3	1	13	14	80	140	208	27	8		5
			1	3	1	16	72	108	199	33	19		6
						1	5	4	6	7			7
							1	3	4	10	1		8
		1	7	2	3	11	27	31	7				9
	1	5	7	3	5	6	19	35	16				10
		1	1	1	1	6	9	16	18	21		1	11
						1	1	24	29	22			12
					1	3	3	5		3	8	2	13
					2		2	4	1	1	4	7	14
		1	2	4	7	10	18	6	13				15
					1	3	20	25	12	4			16
			2	11	10	11	19	19	10			2	17
				3	5	10	20	21	13	1			18
			2	2	6	5	3	11	5	1			19
			4	2	4	6	4	5	6	5			20
		1	1	2	1	6	3	2	3	5	2		21
							10	6	6	6			22
							1	6	9	7			23
								2	9	4			24
					1	1	3	8	3				25
					3		8	8	8				26
		2	4	22	27	62	83	202	277	344	53	19	27
	1	9	10	18	24	45	204	273	353	66	35		28
					3	8	12	15	6				29
				4	1	2	1	21	12	1			30
					3	6	5	4					31
			1	10	2	5	3	7					32
	1	6	5	1	1	1		2	1				33
			1	6	7	2	2	2					34
		1	2	7	5	3	1	2		1			35
	1	2	5	1	5	8	1	3					36
	1	7	7	11	15	17	18	23	7	1			37
	1	2	7	11	23	14	7	33	12	1			38

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

OTHER EMPLOYEES (ALL DEPARTMENTS).

MALES.												
1	Illinois:											
2	4 establishments...	1914	1,134	55.0	\$0.233	\$12.84					1,134	
		1916	887	54.3	.248	13.50			202		685	
3	Maine:											
4	4 establishments...	1914	815	58.2	.233	13.56					1	809 1 5
		1916	729	58.1	.248	14.42					729	
5	Massachusetts:											
6	20 establishments...	1914	6,277	54.2	.248	13.42	2 9	1,018	3,526	1,709	4	3 11
		1916	6,120	54.3	.264	14.31	4 59	1,192	3,321	1,499	20	1 29
7	Minnesota:											
8	3 establishments...	1914	368	59.5	.205	12.20					181	187
		1916	372	60.0	.242	14.53						372
9	Missouri:											
10	10 establishments...	1914	1,890	56.5	.204	11.51	5 2		751	236	888	6 13
		1916	2,291	56.1	.224	12.57			1,392		878	7 21
11	New Hampshire:											
12	7 establishments...	1914	2,060	55.0	.199	10.97				2,060		
		1916	2,073	55.1	.225	12.39				2,069		1 4
13	New Jersey:											
14	4 establishments...	1914	406	55.1	.226	12.42				405		11
		1916	341	55.2	.242	13.33	8 10			325		1 6
15	New York:											
16	11 establishments...	1914	2,717	52.6	.239	12.58	9 590	1,186	253	679		10 9
		1916	2,605	52.8	.268	14.15	11 470	1,161	367	585	1	12 21
17	Ohio:											
18	6 establishments...	1914	1,983	55.8	.192	10.68	257			1,068	652	1 6
		1916	1,699	56.5	.203	11.47	13 3		16	1,071	602	1 7
19	Pennsylvania:											
20	7 establishments...	1914	1,223	56.1	.191	10.79			262	482	475	1 4
		1916	1,160	56.2	.212	11.97	1		344	295	497	14 23
21	Virginia:											
22	2 establishments...	1914	184	59.3	.187	11.07					182	1 2
		1916	262	59.0	.196	11.56					261	1 1
23	Wisconsin:											
24	2 establishments...	1914	510	60.0	.195	11.67						510
		1916	362	59.4	.196	11.61				45		317
25	Other States:											
26	1 establishment...	1914	100	59.0	.217	12.83					100	
		1916	100	55.3	.220	12.16				98		1 2
27	Total:											
28	81 establishments...	1914	19,667	55.1	.223	12.28	16 858	2,204	4,792	7,774	3,201	16 748
		1916	19,001	55.1	.242	13.32	17 543	2,555	5,440	6,672	2,988	18 803
FEMALE.												
29	Illinois:											
30	4 establishments...	1914	469	55.0	.162	8.93				469		
		1916	447	54.5	.175	9.57			76		371	
31	Maine:											
32	4 establishments...	1914	514	58.0	.181	10.51						514
		1916	570	58.0	.184	10.67						570
33	Massachusetts:											
34	20 establishments...	1914	4,032	53.8	.182	9.79	19 9	850	3,173			
		1916	3,695	53.8	.188	10.14	20 24	865	2,806			

1 Over 60 hours.
 2 Including 6 under 48 hours and 2 at 48 hours.
 3 Including 10 over 60 hours.
 4 Including 15 at 48 hours.
 5 48 hours.
 6 Including 4 over 60 hours.
 7 Including 18 over 60 hours.
 8 Under 48 hours.
 9 Including 7 under 48 hours.
 10 Including 2 over 60 hours.

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

OTHER EMPLOYEES (ALL DEPARTMENTS).

2	1	7	38	93	64	112	94	276	189	126	52	30	1
-----	7	13	38	58	68	90	76	171	143	144	45	34	2
1	2	4	18	45	114	32	63	231	139	144	20	2	3
1	1	8	30	47	115	47	36	121	117	130	57	19	4
6	24	89	266	341	249	598	530	1,169	1,340	1,315	268	82	5
7	34	121	245	281	194	519	431	1,056	1,265	1,365	438	164	6
-----	1	4	37	20	65	25	21	94	67	27	3	4	7
-----	-----	2	32	20	21	28	13	95	68	74	17	2	8
8	9	58	167	156	260	216	126	363	249	239	26	13	9
3	8	89	149	149	197	191	149	460	368	328	86	47	10
12	9	39	114	190	226	293	247	513	223	172	17	5	11
5	12	23	59	149	111	326	237	491	304	275	59	22	12
-----	2	11	33	32	37	36	21	95	55	60	16	8	13
1	2	7	25	28	22	23	21	76	54	52	17	13	14
1	12	41	141	185	224	241	235	529	452	467	149	40	15
6	10	25	122	132	177	160	151	443	478	593	212	96	16
1	12	105	235	182	274	208	115	395	231	187	36	2	17
1	7	48	254	131	195	147	103	308	241	218	35	11	18
5	69	98	162	129	99	114	91	177	128	94	30	27	19
2	18	70	148	119	141	99	74	159	121	115	58	36	20
2	10	11	22	19	15	17	12	32	25	16	3	-----	21
4	10	19	45	15	21	12	6	60	33	27	7	-----	22
-----	13	8	58	60	58	40	50	104	59	51	9	-----	23
-----	4	16	38	45	40	44	25	51	49	41	6	-----	24
1	1	6	9	7	4	10	4	24	17	10	5	-----	25
-----	1	4	7	6	9	9	4	27	18	14	1	-----	26
39	165	481	1,350	1,459	1,689	1,942	1,609	4,002	3,174	2,908	634	215	27
30	114	445	1,192	1,247	1,311	1,695	1,326	3,518	3,259	3,376	1,038	450	28
-----	19	18	90	72	59	43	44	86	27	10	1	-----	29
-----	16	15	51	68	57	62	42	79	36	18	2	-----	30
4	7	16	41	72	87	41	54	115	57	18	2	-----	31
3	11	23	67	71	77	47	47	120	69	33	1	-----	32
19	92	228	403	398	352	611	534	813	388	172	15	7	33
10	47	133	361	400	330	500	509	794	402	185	21	3	34

¹¹ Including 17 under 48 hours.
¹² Including 15 over 60 hours.
¹³ Under 48 hours.
¹⁴ Including 7 over 60 hours.
¹⁵ Including 13 under 48 hours and 4 at 48 hours.
¹⁶ Including 34 over 60 hours.
¹⁷ Including 30 under 48 hours and 15 at 48 hours.
¹⁸ Including 89 over 60 hours.
¹⁹ Including 8 under 48 hours and 1 at 48 hours.
²⁰ Including 1 under 48 hours and 21 at 48 hours.

TABLE B.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK WEEKLY EARNINGS, IN EACH

Line No.	Occupation, sex, State, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

OTHER EMPLOYEES (ALL DEPARTMENTS)—Concluded.

FEMALE—concluded.												
1	Minnesota:											
2	3 establishments...	1914	162	54.6	\$0.167	\$9.11				106	49	7
		1916	213	54.0	.185	10.01				213		
3	Missouri:											
4	8 establishments...	1914	1,133	53.3	.151	8.05	190			943		
		1916	1,273	54.0	.154	8.32				1,273		
5	New Hampshire:											
6	7 establishments...	1914	851	55.0	.171	9.40					851	
		1916	1,033	55.0	.185	10.16					1,033	
7	New Jersey:											
8	4 establishments...	1914	244	55.0	.156	8.57					344	
		1916	295	54.8	.154	8.43	17				288	
9	New York:											
10	11 establishments...	1914	1,435	51.5	.183	9.42	* 612	502	321			
		1916	1,495	51.5	.202	10.40	* 656	464	375			
11	Ohio:											
12	6 establishments...	1914	1,026	53.8	.145	7.79			531	495		
		1916	1,108	53.8	.156	8.38	* 1	530	577			
13	Pennsylvania:											
14	7 establishments...	1914	940	54.0	.134	7.22				940		
		1916	819	54.0	.144	7.80	* 3			816		
15	Virginia:											
16	3 establishments...	1914	194	59.0	.132	7.80						194
		1916	182	59.0	.145	8.58						182
17	Wisconsin:											
18	2 establishments...	1914	297	55.0	.140	7.70					297	
		1916	325	55.0	.137	7.52					325	
19	Other States:											
20	1 establishment....	1914	105	54.0	.134	7.23				105		
		1916	101	54.0	.142	7.66				101		
21	Total:											
22	80 establishments...	1914	11,502	54.0	.167	9.00	* 811	1,883	6,083	2,010	708	7
		1916	11,556	54.0	.176	9.48	* 691	1,935	6,161	2,017	752	

1 Under 48 hours.
 * Including 6 under 48 hours.
 * Including 8 under 48 hours.
 * 48 hours.

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME STATE, BY YEARS, 1914 AND 1916—Concluded.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

OTHER EMPLOYEES (ALL DEPARTMENTS)—Concluded.

		5	37	25	24	14	14	24	14	4		1	1
		2	26	34	26	23	19	50	22	9	2		2
9	28	173	146	188	193	116	64	145	46	21	4		3
7	36	168	218	200	148	158	87	149	67	32	2	1	4
10	15	43	82	101	129	142	86	177	49	12	4	1	5
16	24	27	59	122	104	157	131	275	75	31	10	2	6
1	7	22	65	66	44	39	36	45	11	5	3		7
	4	20	44	57	53	47	25	33	8	3		1	8
2	14	57	125	165	181	214	200	269	149	51	6	2	9
	9	35	116	138	161	162	151	363	235	104	15	6	10
7	35	148	185	166	145	100	77	106	46	10	1		11
8	12	83	220	163	186	89	103	170	60	13	1		12
10	75	182	201	128	101	86	41	74	29	13			13
4	39	135	200	107	83	82	34	73	37	21	4		14
4	17	28	47	28	23	16	13	15	2	1			15
2	8	25	36	17	27	27	14	15	10	1			16
	9	22	73	66	42	33	25	23	4				17
7	16	33	78	56	37	35	21	35	7				18
	4	34	14	9	11	11	8	10	3	1			19
	4	29	9	9	11	10	14	11	3	1			20
66	322	976	1,509	1,484	1,39	1,466	1,196	1,902	825	318	36	11	21
57	226	728	1,485	1,442	1,300	1,399	1,197	2,167	1,031	451	58	15	22

⁵ Including 1 under 48 hours.
⁶ Including 14 under 8 hours and 1 at 48 hours.
⁷ Including 17 under 48 hours and 22 at 48 hours.

TABLE C.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, WEEKLY EARNINGS,

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

CUTTING DEPARTMENT.

	Cutters, vamp and whole shoe, hand, male:																				
1	Illinois.....	5	156	54.2	\$0.378	\$20.46				36	23	97									
2	Maine.....	5	74	56.9	.320	18.14					19								55		
3	Massachusetts.....	46	882	53.1	.363	20.84			217	174	343	141								10	
4	Minnesota.....	3	43	60.0	.325	19.56														43	
5	Missouri.....	11	322	54.7	.365	19.99			20		134	131								37	
6	New Jersey.....	4	61	55.0	.330	18.12															
7	New York.....	12	313	51.9	.420	21.80			86	163	35	29									
8	Ohio.....	6	189	53.6	.373	19.86			111			7								69	
9	Pennsylvania.....	9	188	53.6	.327	18.16				10	62	67								49	
10	Wisconsin.....	4	37	57.4	.299	17.13						19								18	
11	Other States.....	8	90	55.3	.294	16.24					25	51								14	
	Total.....	113	2,355	53.9	.375	20.12			434	380	641	603								224	73
	Cutters, vamp and whole shoe, machine, male:																				
12	Massachusetts.....	33	434	53.8	.376	20.18			77	8	200	149									
13	Missouri.....	6	164	56.8	.254	14.33			22		30									112	
14	New Hampshire.....	3	151	55.0	.311	17.13															
15	New York.....	5	141	54.2	.338	18.23			15	21		105									
16	Ohio.....	4	52	55.4	.292	16.14						47								5	
17	Pennsylvania.....	3	23	54.9	.239	13.10					2	21									
18	Virginia.....	2	17	59.0	.345	20.34														17	
19	Other States.....	11	77	57.5	.313	18.01				3		23								25	26
	Total.....	67	1,059	54.9	.331	18.07			114	32	232	496								159	26
	Skivers, upper, machine, male:																				
20	Massachusetts.....	21	91	54.2	.320	17.30					81	9								1	
21	New York.....	2	13	53.2	.397	21.16				11		2									
22	Other States.....	9	20	57.6	.218	12.49						5								14	1
	Total.....	32	124	54.6	.311	16.93				11	81	16								15	1
	Skivers, upper, machine, female:																				
23	Illinois.....	4	36	54.9	.199	10.91					3	33									
24	Maine.....	5	10	57.9	.224	12.98														10	
25	Massachusetts.....	38	172	53.8	.238	12.80			8	30	126	8									
26	Minnesota.....	3	20	54.0	.199	10.74					2										
27	Missouri.....	12	73	53.8	.189	10.14			4		69										
28	New Hampshire.....	9	69	55.0	.193	10.62														69	
29	New Jersey.....	4	13	55.0	.180	9.92						13									
30	New York.....	12	73	52.1	.249	12.95			16	33	24										
31	Ohio.....	8	42	53.8	.176	9.45				20	22										
32	Pennsylvania.....	9	46	53.2	.164	8.72			10	2	32	2									
33	Virginia.....	3	12	59.0	.169	9.97														12	
34	Wisconsin.....	4	15	55.0	.171	9.41						15									
35	Other States.....	2	10	54.0	.200	10.80					10										
	Total.....	113	591	54.0	.209	11.26			38	85	306	140								22	

SOLE-LEATHER DEPARTMENT.

	Cutters, outsole, male:																				
36	Massachusetts.....	27	115	54.6	\$0.326	\$17.74			6	2	54	53									
37	Missouri.....	4	73	52.8	.330	17.44			21		51									1	
38	New York.....	8	51	54.5	.265	14.42			2	4	2	43									
39	Ohio.....	8	27	55.4	.275	15.28						24								3	
40	Pennsylvania.....	6	16	56.4	.276	15.53				2	3	1								10	
41	Other States.....	11	63	56.4	.301	16.92				1	1	41								5	15
	Total.....	64	345	54.7	.307	16.74			29	9	111	162								19	15

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME BY STATES, 1916.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

CUTTING DEPARTMENT.

							1	2	5	15	67	54	12	1	
							1	2	1	14	45	11		2	
							2	2	16	60	496	216	90	3	
									4	4	39			4	
			1	2			1	24	40	127	108	19	5	5	
								11	9	23	13	2	6	6	
								6	18	97	147	45	7	7	
							1	1	15	26	88	35	24	8	
							1	4	3	33	50	49	33	15	9
							3	1	2	10	21	1		10	10
								1	1	24	28	25	5	3	11
			1	6	11	16	137	274	1,077	623	210				
							4	6	18	39	150	201	16	12	12
		1		5	2	20	11	41	42	37	5		2	13	13
								6	17	49	68	9	17	14	14
							2	2	32	19	64	9		15	15
							1	2	8	7	32	1		16	16
								3	11	6	2			17	17
									4	4	11	2		18	18
							3	1	7	15	45	5	1	19	19
			1	5	3	29	29	134	181	409	232	36			
							1	1	4	15	61	4	5	20	20
			2	3				2	7	4	8	5		21	21
											2			22	22
			2	3	1	1	2	11	19	71	9	5			
			2	2	2	4	2	23		1				23	23
							1	3	2	3	1			24	24
			1	3	7	46	12	29	34	35	2	3		25	25
							3	3	9	1	2			26	26
			4	4	11	12	8	2	17	12	1			27	27
			3	3	3	15	9	25	4	2				28	28
							3	2	1	3				29	29
							1	3	5	4	29	15	16	30	30
							4	6	7	5	3	2		31	31
							5	6	3	7	8	1	1	32	32
							6	3	3	7	2			33	33
							2	1	5	3	1			34	34
			1	2	3	1	3	1	3	1	1			35	35
														36	36
			10	27	41	59	102	49	157	77	62	4	3		

SOLE-LEATHER DEPARTMENT.

									7	25	83			36	36
									3	8	61			37	37
									13	28	10			38	38
									8	11	8			39	39
									6	2	8			40	40
									7	24	27	5		41	41
									44	98	197	5	1		

TABLE C.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, WEEKLY EARNINGS,

Line No.	Occupation, sex, and State.	Number of establishments	Number of employ-ees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

SOLE-LEATHER DEPARTMENT—Concluded.

	Channelers, insole and outsole, male:													
1	Illinois.....	6	12	54.1	\$0.323	\$17.49			3	2		7		
2	Maine.....	5	11	58.1	.324	18.79							11	
3	Massachusetts.....	35	99	54.1	.378	20.47	7	9	49	34				
4	Missouri.....	9	19	57.4	.295	16.95			6				13	
5	New Hampshire.....	6	15	55.0	.382	20.98						15		
6	New York.....	12	32	52.7	.355	18.73	6	15	2			9		
7	Ohio.....	8	18	55.7	.293	16.30						15	3	
8	Pennsylvania.....	9	23	55.8	.253	14.22		1	6	7		7	9	
9	Other States.....	17	26	57.3	.313	17.93			2	11		3	3	10
	Total.....	107	255	55.0	.340	18.69	13	28	67	98		39	10	

FITTING OR STITCHING DEPARTMENT.

	Tip stitchers, female:													
10	Illinois.....	5	21	54.0	\$0.244	\$13.17			6	2		13		
11	Maine.....	5	16	57.9	.238	13.74							16	
12	Massachusetts.....	48	174	53.8	.251	13.52	3	29	142					
13	Missouri.....	11	49	53.7	.187	10.05	4		45					
14	New Hampshire.....	8	35	55.0	.229	12.59						35		
15	New Jersey.....	4	12	55.0	.202	11.11						12		
16	New York.....	13	43	52.3	.233	14.78		11	14	18				
17	Ohio.....	8	26	53.8	.202	10.86			14	12				
18	Pennsylvania.....	9	30	53.3	.182	9.73		5	1	24				
19	Wisconsin.....	4	18	55.0	.180	9.92						18		
20	Other States.....	9	18	55.1	.200	11.01				14			4	
	Total.....	124	442	54.0	.231	12.45	23	64	257	78		20		
	Backstay stitchers, female:													
21	Illinois.....	5	24	54.0	.252	13.64		6	6		12			
22	Maine.....	5	18	57.8	.178	10.27							18	
23	Massachusetts.....	50	204	53.7	.238	12.81	12	20	172					
24	Minnesota.....	3	9	54.0	.252	13.63						9		
25	Missouri.....	11	69	53.7	.178	9.57	5		64					
26	New Hampshire.....	9	69	55.0	.200	11.02						69		
27	New York.....	11	48	52.6	.251	13.17	11	14	14			9		
28	Ohio.....	8	41	53.8	.184	9.88			20	21				
29	Pennsylvania.....	9	53	53.0	.161	8.59	11	5	37					
30	Wisconsin.....	4	15	55.0	.183	10.05						15		
31	Other States.....	10	25	56.0	.205	11.43				7		10	8	
	Total.....	125	575	54.0	.213	11.47	39	65	330	115		26		
	Lining makers, female:													
32	Illinois.....	5	52	53.9	.240	12.93		17	7		28			
33	Maine.....	5	45	57.9	.190	11.00							45	
34	Massachusetts.....	50	356	53.7	.220	11.81	20	26	310					
35	Minnesota.....	3	19	54.0	.197	10.66					19			
36	Missouri.....	10	84	53.6	.168	9.04	7		77					
37	New Hampshire.....	9	105	55.0	.160	8.82						105		
38	New Jersey.....	4	24	55.0	.202	11.09						24		
39	New York.....	13	128	51.8	.220	11.41	51	34	43					
40	Ohio.....	8	77	53.8	.178	9.60			44	33				
41	Pennsylvania.....	9	72	53.2	.171	9.10	13	3	56					
42	Virginia.....	3	17	59.0	.137	8.07							17	
43	Other States.....	7	25	54.4	.155	8.42				16		9		
	Total.....	126	1,004	53.9	.198	10.69	91	124	561	166		62		

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME BY STATES, 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

SOLE-LEATHER DEPARTMENT—Concluded.

						1		1	1	7	2	1
								3		7	1	3
								1	17	55	18	8
					2			1	7	8	1	4
								1	1	7	5	5
								1	6	20	3	2
								4	5	7	2	7
			2	2	2		2		6	9		8
								5	7	11	1	2
			2	2	4	1	2	17	50	131	33	13

FITTING OR STITCHING DEPARTMENT.

				2	2		2	4	7	4		10
					1	2	1	4	7			11
		2	1		7	13	17	56	33	43	2	12
		1	3	5	4	13	6	11	4	2		13
				3	1	1	1	14	8	4		14
					2	3	1	5	1			15
					2	2		8	16	11	4	16
				2	2	4	6	8	3	1		17
		3	2	1	9	1	3	9	1	1		18
			1	1	4	3	4	4	1			19
		1		1	1	3	2	6	2	2		20
		7	7	15	35	45	46	129	83	69	6	
				1	1	1	1	11	8	2		21
			2	1	1	5	3	6				22
			7	1	11	19	18	77	35	31	5	23
						1	1	3	1	3		24
	1	5	8	5	9	7	8	18	5	3		25
		1	4	2	7	12	4	25	5	5		26
				3	5	5	7	13	13	8	1	27
					3	5	12	9	2	1		28
	1	1	2	4	19	8	6	1	4	1		29
				3	3	3	3	5	1	1		30
			2	3	1	3	2	6	8			31
		2	9	29	27	58	68	66	174	81	55	6
				1	1	4	2	6	16	14	7	1
			2	4	9	4	4	6	18			33
		7	8	13	23	40	57	110	60	33	5	34
				3		6	1	6	3			35
	6	7	10	5	9	13	8	17	7	2		36
		2	9	13	15	14	14	13	4			37
			1	5	3	1	2	4	8			38
			4	6	12	19	9	38	19	19	1	39
			7	10	9	14	10	22	5			40
	3	5	7	7	18	8	3	10	7	4		41
		3	2	3	4	5						42
		2	2	8	3	3	3	3		1		43
	11	34	57	80	108	133	119	257	130	68	6	1

TABLE C.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, WEEKLY EARNINGS,

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
FITTING OR STITCHING DEPARTMENT—Continued.												
Closers-on, female:												
1	Illinois.....	4	12	54.2	\$0.244	\$13.22		3	1		8	
2	Massachusetts.....	35	124	53.9	.224	12.07		3	12	109		
3	Missouri.....	12	63	53.7	.182	9.78		5		58		
4	New York.....	9	63	51.9	.213	11.07		18	27	18		
5	Pennsylvania.....	8	51	52.9	.166	8.84		12	4	35		
6	Wisconsin.....	2	12	55.0	.172	9.47					12	
7	Other States.....	15	35	55.5	.211	11.68			8	7	10	10
	Total.....	83	360	53.6	.204	10.95		38	54	228	30	10
Top stitchers or under trimmers, female:												
8	Illinois.....	5	44	54.0	.226	12.21			10	12	22	
9	Maine.....	5	43	57.9	.230	13.29						43
10	Massachusetts.....	50	481	53.7	.238	12.77		18	83	390		
11	Minnesota.....	3	18	54.0	.244	13.18				18		
12	Missouri.....	12	197	53.7	.189	10.17		14		183		
13	New Hampshire.....	9	171	55.0	.208	11.17					171	
14	New Jersey.....	4	24	55.0	.219	12.05					24	
15	New York.....	14	197	52.7	.260	13.66		39	48	110		
16	Ohio.....	8	115	53.8	.194	10.43			59	56		
17	Pennsylvania.....	9	69	53.3	.179	9.58		11	2	56		
18	Virginia.....	2	14	59.0	.207	12.23						14
19	Wisconsin.....	4	37	55.0	.178	9.82					37	
20	Other States.....	3	17	54.0	.173	9.37				17		
	Total.....	128	1,427	54.0	.220	11.87		82	202	832	254	57
Button fasteners, female:												
21	Massachusetts.....	33	57	53.6	.218	11.69		3	19	35		
22	Missouri.....	10	27	53.5	.195	10.44		3		24		
23	New York.....	13	30	51.6	.250	12.90		11	14	5		
24	Ohio.....	6	17	53.7	.188	10.07			12	5		
25	Pennsylvania.....	8	16	53.5	.156	8.33		2		14		
26	Other States.....	24	48	55.5	.213	11.83			1	9	27	11
	Total.....	94	195	53.8	.211	11.32		19	46	92	27	11
Buttonhole makers, female:												
27	Illinois.....	5	10	54.2	.227	12.25			2	2	6	
28	Maine.....	5	20	58.0	.283	16.42						20
29	Massachusetts.....	42	161	53.7	.238	12.77		8	45	108		
30	Missouri.....	9	67	53.7	.202	10.82		5		62		
31	New Hampshire.....	9	24	55.0	.188	10.37					24	
32	New Jersey.....	4	11	55.0	.184	10.11					11	
33	New York.....	12	61	51.4	.240	12.33		28	18	15		
34	Ohio.....	8	46	53.7	.190	10.19			35	11		
35	Pennsylvania.....	7	37	53.6	.170	9.13		3	1	33		
36	Wisconsin.....	4	11	55.0	.194	10.68					11	
37	Other States.....	8	18	55.9	.162	8.98				11		7
	Total.....	113	466	53.8	.217	11.65		44	101	242	52	27
Vampers, male:												
38	Illinois.....	4	38	54.2	.290	15.70			10		28	
39	Maine.....	4	12	58.1	.322	18.72						12
40	Massachusetts.....	38	368	54.2	.347	18.79		9	34	235	90	
41	Missouri.....	5	19	57.2	.274	15.55				7		12
42	New Hampshire.....	9	69	55.0	.281	15.48					69	
43	New Jersey.....	3	10	55.0	.284	15.63					10	
44	New York.....	8	47	52.5	.401	21.05		7	32		8	
45	Pennsylvania.....	3	31	56.7	.338	19.24			10			21
46	Other States.....	8	30	58.2	.274	15.91			1	1	6	13
	Total.....	82	624	54.6	.333	18.14		16	87	243	211	58

98 WAGES AND HOURS OF LABOR, 1907 TO 1916—BOOTS AND SHOES.

TABLE C.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, WEEKLY EARNINGS,

Line No.	Occupation, sex, and State.	Number of establishments	Number of employes.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

FITTING OR STITCHING DEPARTMENT—Concluded.

1	Vampers, female:													
2	Illinois	5	44	53.7	\$0.284	\$15.25			17	5	22			
3	Maine	5	63	58.0	.270	15.66							63	
4	Massachusetts	45	420	53.7	.274	14.69	20	73	327					
5	Minnesota	3	30	54.0	.269	14.55			30					
6	Missouri	12	192	53.7	.245	13.16	15		177					
7	New Hampshire	8	122	55.0	.252	13.87					122			
8	New Jersey	4	24	55.0	.235	12.93					24			
9	New York	13	163	52.0	.291	15.12	44	67	52					
10	Ohio	8	155	53.8	.211	11.37		85	70					
11	Pennsylvania	9	101	52.8	.197	10.41	29	6	66					
12	Virginia	2	14	59.0	.215	12.68							14	
13	Wisconsin	4	30	55.0	.226	12.45					30			
	Other States	3	25	54.0	.198	10.67			25					
	Total	121	1,383	53.9	.254	13.66	108	248	752	198	77			

LASTING DEPARTMENT.

14	Assemblers, for pulling-over machine, male:													
15	Illinois	5	34	53.7	\$0.339	\$18.18			13	4	17			
16	Maine	5	34	58.0	.316	18.36							34	
17	Massachusetts	28	255	54.6	.326	17.80		3	155	89	8			
18	Minnesota	3	15	60.0	.309	18.54								15
19	Missouri	12	125	55.5	.242	13.41	6		77		42			
20	New Hampshire	7	47	55.0	.271	14.90					47			
21	New Jersey	3	25	55.0	.273	15.01					25			
22	New York	10	127	52.8	.283	14.95	26	51	6	44				
23	Ohio	8	56	56.4	.313	17.73					37		19	
24	Pennsylvania	6	32	54.1	.262	14.14		2	26	4				
25	Virginia	3	15	59.0	.243	14.35							15	
26	Wisconsin	4	24	59.2	.217	12.77					4			20
	Other States	3	12	54.7	.239	13.08			4		8			
	Total	97	801	55.0	.291	16.02	32	69	272	275	118	35		
27	Pullers-over, hand, male:													
28	Illinois	3	92	54.7	.388	21.26			8		84			
29	Massachusetts	23	285	54.4	.346	18.79		39	148	98				
30	Minnesota	3	15	57.0	.352	20.01							9	
31	Missouri	5	40	53.3	.370	19.68	1	13	21	5				
32	New York	3	29	55.0	.361	19.83					29			
33	Ohio	6	75	56.6	.282	16.05		3	17	6	49			
	Pennsylvania	3	7	57.0	.334	18.99				3	4			
	Other States	3	7	57.0	.334	18.99								
	Total	46	543	54.8	.347	18.99	1	63	192	225	62			
34	Pullers-over, machine, male:													
35	Illinois	5	24	53.5	.395	21.15		11	3	10				
36	Maine	5	36	58.0	.360	20.93							36	
37	Massachusetts	42	238	54.4	.406	22.07	10	10	121	94	3			
38	Minnesota	3	15	60.0	.343	20.58								15
39	Missouri	12	64	56.2	.353	19.76	3		30		31			
40	New Hampshire	8	84	55.0	.311	17.12					84			
41	New York	14	79	52.9	.405	21.37	16	29	4	30				
42	Ohio	8	42	56.0	.388	21.80					31		11	
43	Pennsylvania	6	19	54.3	.330	17.89		1	13	5				
44	Virginia	4	14	58.2	.318	18.52					5			9
	Wisconsin	9	25	56.2	.371	20.82			2	15	8			
	Other States	9	25	56.2	.371	20.82								
	Total	116	640	55.0	.377	20.70	29	51	173	274	89	24		

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME BY STATES, 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

FITTING OR STITCHING DEPARTMENT—Concluded.

			1			4	1	13	7	13	4	1	1
					2	2	2	21	15	19	2	2	2
			5	3	6	14	25	114	118	117	15	3	3
							2	11	8	9			4
		2	1	6	9	14	29	38	50	40	3		5
				3	1	3	9	41	44	19	1		6
					1		4	12	2	5			7
				1	2	2	12	34	37	64	10	1	8
		1	3	5	19	14	23	54	27	7	2		9
		3	2	7	18	20	16	13	12	10			10
					1	5	1	5	3				11
					1	1	4	14	8	1			12
			5	2	1	5	2	3	3	4			13
		6	17	28	61	84	130	373	334	308	37	5	

LASTING DEPARTMENT.

				1	1		1	1	2	21	6	1	14
							5	5	5	11	7	1	15
		1	4	3	2	1	10	39	47	89	44	15	16
							2	2	3	6	2		17
			1	8	9	11	19	25	28	20	4		18
					1	2	4	9	17	12	2		19
			1		1		2	3	9	9			20
				1	5	2	4	24	37	48	6		21
						1	4	11	7	24	9		22
			1				1	11	15	3	1		23
						1		8	5	1			24
					3	2	5	8	5	1			25
					1	1		4	6				26
		1	7	13	23	21	57	150	186	245	81	17	
							1		6	48	33	4	27
								30	48	144	51	12	28
								2	1	9	3		29
								4	8	15	9	4	30
									7	10	8	1	31
		1		1	2		2	24	17	20	7	1	32
									1	6			33
		1		1	2		3	63	88	252	111	22	
					2				2	11	6	3	34
								1	10	13	9	3	35
						2	1	10	21	81	83	40	36
									4	8	2	1	37
								1	11	19	19	3	38
						4	1	11	12	37	10	3	39
							4	14	6	36	20	15	40
								2	4	7	11	5	41
								3	4	9	3		42
								1	3	10			43
									7	7	10	1	44
					2	6	6	46	87	242	177	74	

100 WAGES AND HOURS OF LABOR, 1907 TO 1916—BOOTS AND SHOES.

TABLE C.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, WEEKLY EARNINGS.

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
LASTING DEPARTMENT—Concluded.												
	Side lasters, hand, male:											
1	Maine.....	3	18	58.2	\$0.335	\$19.55					18	
2	Massachusetts.....	12	163	53.9	.335	18.03		66	89			
3	New Hampshire.....	2	36	55.0	.242	13.31				36		
4	New York.....	7	62	52.7	.380	19.94	10	35		17		
5	Other States.....	16	79	54.4	.299	16.23		21	15	37	1	
	Total.....	40	358	54.1	.325	17.57	10	122	104	98	19	5
	Side lasters, machine, male:											
6	Massachusetts.....	14	105	54.2	.374	20.24	3	11	69	17	5	
7	Missouri.....	5	30	55.5	.296	16.45	4		14		12	
8	New Hampshire.....	6	42	55.0	.312	17.14				42		
9	New York.....	6	53	53.9	.327	17.55		16	12	25		
10	Other States.....	14	61	56.4	.327	18.42				41	8	
	Total.....	45	291	54.9	.339	18.53	7	27	95	125	25	12
	Bed-machine operators, male:											
11	Illinois.....	5	112	54.1	.357	19.29		34	3	75		
12	Maine.....	5	40	58.0	.351	20.35					40	
13	Massachusetts.....	30	557	54.2	.373	20.17	9	94	338	116		
14	Minnesota.....	3	33	60.0	.305	18.33					33	
15	Missouri.....	7	90	56.7	.310	17.59	7		28		55	
16	New Hampshire.....	5	155	55.0	.298	16.40				155		
17	New Jersey.....	3	20	55.0	.342	18.81				20		
18	New York.....	11	146	53.3	.363	19.28	8	72	15	51		
19	Ohio.....	6	66	56.6	.386	21.87			3	39	27	
20	Pennsylvania.....	8	50	55.3	.294	16.31		3	23	9	15	
21	Virginia.....	3	17	59.0	.347	20.46				9	17	
22	Wisconsin.....	4	33	58.6	.264	15.42				3	24	
23	Other States.....	3	17	54.8	.334	18.27			3	14		
	Total.....	93	1,336	55.0	.349	19.13	24	203	410	488	154	57
	Hand-method lasting-machine operators, male:											
24	Maine.....	3	38	58.0	.402	23.35					38	
25	Massachusetts.....	28	212	54.4	.383	20.79	20	10	56	123	3	
26	Missouri.....	7	98	55.7	.328	18.20			65		33	
27	New Hampshire.....	5	46	55.0	.315	17.31				46		
28	New York.....	3	64	52.9	.382	20.03	23	3		38		
29	Ohio.....	6	59	55.9	.353	19.71				46	13	
30	Pennsylvania.....	4	14	54.6	.317	17.25		1	9	3	1	
31	Other States.....	10	25	58.2	.317	18.34			3	4	6	
	Total.....	66	556	55.1	.361	19.82	43	14	133	260	94	12
	Turn lasters, hand, male:											
32	Massachusetts.....	8	262	54.5	.416	22.64		59	55	148		
33	Missouri.....	4	145	57.1	.371	21.28			55		90	
34	New Jersey.....	4	47	55.0	.318	17.51				47		
35	New York.....	11	242	52.6	.355	18.65	66	81	2	93		
36	Ohio.....	3	85	56.8	.392	22.32				47	35	
37	Pennsylvania.....	6	162	55.7	.297	16.55			22	97	43	
38	Other States.....	6	31	55.9	.356	19.74			21		10	
	Total.....	42	974	54.9	.365	20.07	66	140	155	432	168	13
	Turn sewers, male:											
39	New York.....	10	20	51.6	.484	25.05	10	6	1	3		
40	Pennsylvania.....	5	27	55.4	.327	18.21			1	22	4	
41	Other States.....	14	34	55.2	.508	27.98		3	12	13	6	
	Total.....	29	81	54.4	.442	24.00	10	9	14	38	10	

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME BY STATES, 1916—Continued.

Employees whose rates of wages per hour were—												Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.		50 cents and over.

LASTING DEPARTMENT—Concluded.

								3	6	4	5		1
					1	1	3	12	41	77	16		2
		1	1	2		1	1	14	12	4			3
								4	13	19	16		4
			1		2	2	5	15	13	31	10		5
		1	2	2	3	4	9	48	85	135	47		22
							1	9	7	57	22		6
					1			3	12	12	2		7
						1	1	7	10	14	4		8
								8	9	29	7		9
					1		1	3	16	28	12		10
				1	2	1	5	30	54	140	47		11
							1	7	14	56	26		5
							3	1	7	26	4		12
					2	3	3	37	83	232	144		13
					2	2	2	4	4	17	4		14
					1	1	1	12	26	41	8		15
	1		1	1		1	5	18	51	69	8		16
								2	4	9	4		17
								1	13	27	33		18
								3	4	32	20		7
					1		1	15	12	17	2		20
									6	7	4		21
					4	4	2	3	11	9			22
							1	1	4	6	5		23
	1		1	3	11	7	19	116	253	578	287		80
									3	17	11		24
			1	1				5	20	104	64		25
					1	1		12	20	48	15		26
								7	9	23	5		27
							2	5	10	20	18		28
								7	18	15	11		29
						1		1	4	6	2		8
							1	3	7	11	3		30
													31
			1	1	2	3	2	40	91	244	129		43
								14	22	81	91		54
								16	22	46	35		21
						1	2	2	14	23	5		34
							2	27	47	88	55		21
								4	11	33	22		15
					1	4	2	29	72	38	12		4
								4	4	9	12		1
					3	9	8	96	192	318	232		116
									1	5	7		7
									1	17	3		2
									2	4	10		18
													41
							1	1	20	12	20		27

TABLE C.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, WEEKLY EARNINGS,

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.
BOTTOMING DEPARTMENT.												
	Goodyear welters, male:											
1	Illinois.....	5	31	54.1	\$0.610	\$33.01			9	1	21	
2	Maine.....	5	16	58.0	.532	30.86						16
3	Massachusetts.....	26	198	54.1	.562	30.39	5	30	129	34		
4	Minnesota.....	3	11	60.0	.444	26.63						11
5	Missouri.....	8	27	57.0	.423	24.09	1		9		17	
6	New Hampshire.....	5	47	55.0	.430	23.66					47	
7	New York.....	10	43	52.9	.582	30.82		30	7	6		
8	Ohio.....	6	36	56.0	.443	24.73				27	9	
9	Pennsylvania.....	18	24	55.4	.483	26.78		1	11	5	7	
10	Other States.....	13	34	57.1	.446	25.32				2	16	8
	Total.....	89	467	54.9	.520	28.50	6	70	159	156	57	19
	Rough rounders, male:											
11	Illinois.....	5	22	54.3	.641	34.67		5	1	16		
12	Massachusetts.....	27	107	54.0	.547	29.54		22	65	20		
13	Missouri.....	9	23	55.6	.401	22.26	4		8		11	
14	New Hampshire.....	5	28	55.0	.451	24.79				28		
15	New York.....	10	27	53.0	.541	28.73		20	3	4		
16	Ohio.....	6	23	56.0	.390	21.74				17	6	
17	Pennsylvania.....	9	23	55.0	.404	22.33		1	13	4	5	
18	Other States.....	20	43	57.4	.422	24.20			2	15	14	12
	Total.....	91	296	54.9	.491	26.89	4	48	92	104	36	12
	Goodyear stitchers, male:											
19	Illinois.....	6	48	54.1	.556	30.08		14	3	31		
20	Maine.....	5	21	58.0	.382	22.13					21	
21	Massachusetts.....	32	276	54.1	.469	25.36	5	37	184	50		
22	Minnesota.....	3	10	60.0	.514	30.82						10
23	Missouri.....	10	52	56.1	.370	20.50	10		11		31	
24	New Hampshire.....	5	72	55.0	.333	18.32				72		
25	New York.....	10	61	52.9	.467	24.73		44	10	7		
26	Ohio.....	6	41	56.1	.369	20.59				30	11	
27	Pennsylvania.....	8	37	55.4	.429	23.83		2	17	6	12	
28	Other States.....	12	38	56.6	.386	21.70			3	22	2	11
	Total.....	97	656	54.8	.437	23.87	15	97	228	218	77	21
	McKay sewers, male:											
29	Maine.....	3	23	58.0	.340	19.73						23
30	Massachusetts.....	27	89	54.4	.386	21.00	7	11	18	50	3	
31	Missouri.....	5	27	55.3	.311	17.24			20		7	
32	New Hampshire.....	4	19	55.0	.263	14.45				19		
33	New York.....	4	13	50.9	.445	22.60	8	3		2		
34	Other States.....	18	39	57.0	.334	18.98			4	18	5	12
	Total.....	61	210	55.2	.349	19.51	15	14	42	89	38	12
	Loose-nail and standard-screw machine operators, male:											
35	Massachusetts.....	11	44	55.2	.335	18.49			14	30		
36	Other States.....	11	27	55.8	.293	16.29	2	2		15	3	5
	Total.....	22	71	55.4	.319	17.65	2	2	14	45	3	5
	Heelers, male:											
37	Illinois.....	6	21	54.1	.613	33.09		5	3	13		
38	Maine.....	5	17	58.0	.419	24.30					17	
39	Massachusetts.....	51	157	54.2	.474	25.70	11	16	75	52	3	
40	Missouri.....	12	40	55.9	.368	20.63	3		19		18	
41	New Hampshire.....	9	37	55.0	.365	20.09				37		
42	New York.....	13	59	52.7	.442	23.26	6	36	5	12		
43	Ohio.....	8	41	56.4	.349	19.66				27	13	1
44	Pennsylvania.....	9	27	55.6	.372	20.75		2	9	6	10	
45	Wisconsin.....	4	13	58.8	.395	23.26				3		10
46	Other States.....	13	28	57.1	.393	22.46			3	12	3	10
	Total.....	130	440	55.0	.430	23.59	20	59	114	162	64	21

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME BY STATES, 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

BOTTOMING DEPARTMENT.

													2	5	24	1
														7	9	2
								5	3	10				37	143	3
								1	1	1				5	3	4
									4	9				7	7	5
				1				2	1	4				16	15	6
									1	1				15	25	7
								1	4	1				6	13	8
									1	2				2	13	9
										3				10	10	10
				1				3	12	19			59	111	262	
								1						4	16	11
								1	2	18				17	69	12
								2	3	4				12	2	13
						1				5				14	8	14
										11				1	15	15
								2		8				5	3	16
						1		1	4	6				5	6	17
								4	3	11				14	11	18
						2	1	10	18	63				72	130	
									1	5				6	36	19
									1	13				7		20
								6	12	45				122	91	21
										1				5	4	22
								1	3	10				10	8	23
								7	13	43				9		24
									2	19				20	20	25
									2	9				11	5	26
								1	4	1				7	9	27
								4	4	1				15	9	27
									4	19				9	4	28
							2	26	50	186				214	178	
									8	11				3	1	29
								1	4	40				23	13	30
					1	1		4	8	10				1	2	31
						1		2	5	6				5		32
										5				7	1	33
								3	10	18				8		34
					1	2	3	20	36	89				42	17	
						3	2	3	6	20				10		35
						2	2	6	2	13				2		36
							5	4	9	8				33	12	
									1	2				3	5	37
									4	16				4	5	38
						1		1	3	27				33	66	39
								3	1	23				3	5	40
								3	1	23				7	3	41
								2	6	17				17	17	42
								6	8	17				5	5	43
								1	1	4				3	6	44
								1	1	2				4	1	45
								1	1	2				6	5	46
					1				1	13				6		
					1		2	4	26	42				152	87	126

104 WAGES AND HOURS OF LABOR, 1907 TO 1916—BOOTS AND SHOES.

TABLE C.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, WEEKLY EARNINGS,

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—				
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

BOTTOMING DEPARTMENT—Continued.

	Heel trimmers or shavers, male:																			
1	Illinois	5	23	54.0	\$0.616	\$33.19			7		1		15							
2	Maine	4	14	58.1	.381	22.13													14	
3	Massachusetts	46	134	54.2	.492	26.63				25	55	44								2
4	Missouri	12	34	55.7	.387	21.52			2		19									13
5	New Hampshire	9	26	55.0	.360	19.79														26
6	New York	13	46	52.9	.509	26.85			6	22	5		13							
7	Ohio	8	28	56.1	.411	23.05														8
8	Pennsylvania	9	31	55.2	.310	17.25				2	5		19							5
9	Other States	15	31	57.7	.397	22.84					3		10							3
	Total	121	367	54.9	.449	24.55			16	56	88	147	45							15
	Heel breasters, male:																			
10	Massachusetts	41	86	54.4	.354	19.28			2	14	37	30								3
11	Missouri	9	23	56.2	.253	14.29			1		11	11								
12	New Hampshire	9	17	55.0	.286	15.72														
13	New York	12	27	52.8	.350	18.44			3	15	2		7							
14	Ohio	7	18	56.1	.321	17.94							13							5
15	Pennsylvania	9	20	55.4	.241	13.44				1	5		9							5
16	Other States	24	41	55.4	.309	17.50				3	4		13							11
	Total	111	232	54.8	.319	17.50			6	33	590	100	23							11
	Edge trimmers, male:																			
17	Illinois	6	49	54.0	.548	29.60				15	4		30							
18	Maine	5	46	58.1	.415	24.06														46
19	Massachusetts	50	458	54.2	.446	24.16			22	62	228	142								
20	Missouri	12	100	55.7	.376	20.82			11		46		43							
21	New Hampshire	9	110	55.0	.382	21.00														
22	New Jersey	4	10	55.0	.547	30.10							10							
23	New York	13	112	53.0	.447	23.62			16	47	13		36							
24	Ohio	8	83	56.1	.360	20.18							61							22
25	Pennsylvania	9	49	55.0	.376	20.73				2	22		17							8
26	Virginia	3	14	57.6	.348	20.02							5							9
27	Wisconsin	4	22	58.6	.347	20.29							6							
28	Other States	6	28	57.6	.405	23.38					3		10							16
	Total	129	1,081	54.9	.423	23.16			49	126	316	427	132							31
	Edge setters, male:																			
29	Illinois	6	51	54.1	.521	28.19				14	4		33							
30	Maine	5	26	58.0	.409	23.71														26
31	Massachusetts	51	361	54.2	.435	23.58			18	50	176	114								3
32	Minnesota	3	16	60.0	.378	22.68														
33	Missouri	12	92	55.8	.361	20.13			8		44		40							
34	New Hampshire	9	79	55.0	.366	20.10							79							
35	New Jersey	4	22	55.0	.438	24.11							22							
36	New York	14	116	52.5	.441	23.04			24	56	12		24							
37	Ohio	8	92	56.2	.372	20.84							64							28
38	Pennsylvania	9	67	55.5	.395	21.92				1	22		26							18
39	Virginia	3	13	59.0	.331	19.52							13							
40	Wisconsin	4	19	58.7	.334	19.54							5							14
41	Other States	3	12	54.6	.413	22.52					5		7							
	Total	131	966	54.9	.414	22.62			50	121	263	374	128							30
	Heel scourers, male:																			
42	Illinois	6	21	54.0	.389	21.01				6	3		12							
43	Maine	5	17	58.0	.378	21.92														17
44	Massachusetts	48	191	54.1	.377	20.41			12	36	83	58								2
45	Minnesota	3	11	60.0	.372	22.33														
46	Missouri	12	56	56.3	.288	16.11			2		27		27							
47	New Hampshire	8	44	55.0	.266	14.65							44							
48	New York	13	62	53.3	.390	20.70			4	29	4		25							
49	Ohio	8	41	55.9	.330	18.48							32							9
50	Pennsylvania	9	30	55.2	.261	14.44				2	11		11							6
51	Other States	13	31	57.4	.321	18.31					2		13							5
	Total	125	504	55.0	.346	18.94			18	73	130	195	66							22

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME BY STATES, 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

BOTTOMING DEPARTMENT—Continued.

								1		1			18	1	
							1			1			4	2	
								2		7			26	3	
				1				2		4			9	4	
								2		5			11	5	
										6			9	6	
								1		2			15	7	
				1		2				6			7	8	
										8			4	9	
								1		9			6		
								2		3			11		
				2	2	1	2	17	37	95	91	120			
							3	1	6	11	44	14	7	10	
							3	4	7	5	7			11	
						1	1	1	7	5	1			12	
							1	1	6	10	4		3	13	
									4	6	5	2	1	14	
				3	5	1	1	1	4	3	3	2		15	
				1	3	2	2	9	2	11	10	10	1	16	
				4	9	11	9	28	41	85	33	12			
									2	2	16	29		17	
					1			3	5	11	18	8		18	
				2				15	30	122	144	142	19	19	
						1		7	10	46	25	10	20	20	
								1	2	13	46	43	5	21	
											1	2	6	22	
									5	4	31	39	33	23	
					1			3	14	39	20	5	24	24	
						2		1	3	9	21	5	8	25	
										5	4			26	
									1	5	13	1	2	27	
				1				1	2	4	7	5	8	28	
				1	2	2	3	9	41	101	344	322	256		
									1		9	15	26	29	
									2	8	9	17		30	
									1	2	116	97	108	31	
									2	6	7			32	
									2	19	40	26	3	33	
						1		1	6	49	21	1	1	34	
									3	5	6	8		35	
								2	5	7	37	25	40	36	
								1	5	9	46	23	8	37	
									4	6	24	27	6	38	
										5	7	1		39	
										3	10	4		40	
											7	2	3	41	
					1	3	7	26	90	365	271	203			
									1	1	8	5	3	42	
									1	2	5	8		43	
									2	17	23	75	55	17	44
										1	4	4		45	45
										2	19	13	5	1	46
				1	1	1			2	14	19	13	5	1	46
									2	9	16	12	1		47
									1	4	10	18	22	7	48
										1	11	17	8	1	49
				3		2				4	9	6	3		50
						3				6	10	6	5	2	51
				4	2	3	12	9	60	102	164	116	32		

106 WAGES AND HOURS OF LABOR, 1907 TO 1916—BOOTS AND SHOES.

TABLE C.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, WEEKLY EARNINGS,

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

BOTTOMING DEPARTMENT—Concluded.

Heel burnishers, male:													
1	Illinois	5	14	54.1	\$0.509	\$27.55			4	1	9		
2	Maine	5	11	58.1	.377	21.92						11	
3	Massachusetts	50	143	54.4	.345	18.77		7	9	66	58	3	
4	Missouri	12	37	56.4	.255	14.39		2		15		20	
5	New Hampshire	9	32	55.0	.270	14.88						32	
6	New York	13	41	52.9	.356	18.78		5	20	5	11		
7	Ohio	8	30	56.9	.307	17.45					16	14	
8	Pennsylvania	9	22	55.3	.268	14.93		1	10		5	6	
9	Wisconsin	4	15	59.0	.245	14.42					3		
10	Other States	12	22	57.6	.308	17.67				2	7	6	
	Total	127	367	55.2	.325	17.84		14	34	99	109	92	19
Buffers, male:													
11	Illinois	6	22	54.6	.372	20.27			2	3	17		
12	Maine	5	18	57.9	.402	23.27						18	
13	Massachusetts	49	225	54.4	.340	18.46		7	25	97	94	2	
14	Missouri	12	53	55.9	.280	15.66		4		25		24	
15	New Hampshire	9	59	55.0	.287	15.78						59	
16	New York	14	50	52.8	.364	19.22		13	15	2	20		
17	Ohio	8	32	55.8	.362	20.17						26	
18	Pennsylvania	9	36	55.0	.235	13.01			4	11	14	7	
19	Other States	17	40	57.2	.322	18.35				4	17	5	
	Total	129	535	54.9	.327	17.92		24	46	142	247	62	14

FINISHING DEPARTMENT.

Treers or ironers, hand, male:													
20	Illinois	6	91	53.8	\$0.366	\$19.73			35	5	51		
21	Maine	5	60	58.0	.307	17.82						60	
22	Massachusetts	47	645	54.5	.313	16.98		18	125	311	180	11	
23	Minnesota	3	20	60.0	.301	18.06						20	
24	Missouri	8	100	55.7	.236	13.13				66		34	
25	New Hampshire	7	86	55.0	.271	14.93					86		
26	New Jersey	3	21	55.0	.375	20.61					21		
27	New York	9	99	53.0	.291	15.47		8	52	23	16		
28	Ohio	6	73	56.5	.246	13.92					46	27	
29	Pennsylvania	5	36	56.2	.209	11.80				15	2	19	
30	Virginia	3	22	59.0	.274	16.17						22	
31	Wisconsin	4	22	58.2	.287	16.67					8		
32	Other States	3	32	54.7	.238	13.02				9	23		
	Total	109	1,307	55.0	.297	16.31		26	212	429	433	152	45
Treers or ironers, hand, female:													
33	New York	4	42	51.0	.226	11.52		20	22				
34	Ohio	3	37	53.6	.192	10.28			37				
35	Pennsylvania	3	24	54.0	.157	8.47				24			
36	Other States	5	41	54.3	.163	8.83				29	12		
	Total	15	144	53.1	.188	9.93		20	59	53	12		
Treers or ironers, machine, male:													
37	Massachusetts	7	129	53.7	.261	14.02		21		59	49		
38	Missouri	8	74	55.8	.251	14.03		19		11		44	
39	New Hampshire	5	84	55.0	.257	14.14					84		
40	Pennsylvania	3	17	53.8	.304	16.31		4		11	2		
41	Other States	4	41	55.3	.314	17.35				6	31		
	Total	27	345	54.7	.266	14.56		40	4	87	166	44	4

¹ Over 60.

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME BY STATES, 1916—Continued.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

BOTTOMING DEPARTMENT—Concluded.

								2	1	2	4	5	1
								15	30	51	6	5	2
					1	3	2	9	15	7	5	5	3
					1	1	4	10	7	9	3	4	4
					1	1	1	4	8	15	10	2	5
						1	1	1	6	14	3	6	7
			1		2	2	1	4	5	5	2	8	8
					1	1	2	4	7	1	1	9	9
					1	1	1	4	6	8	1	1	10
			1		5	11	13	58	84	117	64	14	
								1	1	6	6	2	11
									3	8	5	2	12
				1		1	3	18	53	105	38	6	13
					1		2	12	26	10	2	14	14
				2	1	1	3	4	20	26	2	15	15
							2	2	3	6	15	2	16
									7	1	9	2	17
			4	4	2		2	8	10	13	4	2	18
								10	9	14	4	3	19
			4	7	4	2	13	63	134	208	83	17	

FINISHING DEPARTMENT.

						2	1	1	11	6	39	22	9	20
								1	7	16	35	1	21	21
			5	3	6	7	17	92	164	273	53	25	22	22
						1	1	1	3	4	10	1	23	23
			1	5	7	3	5	6	21	36	16	24	24	24
							1	1	29	32	23	25	25	25
						2	2	4	1	1	4	7	26	26
						1	1	3	24	32	27	11	27	27
						3	5	10	20	21	13	1	28	28
			4	2	4	6	4	5	5	6	6	29	29	29
								10	6	6	6	30	30	30
								4	11	7	4	31	31	31
				2		4		9	17	17	17	32	32	32
			1	14	14	21	31	46	239	351	456	93	41	
				4	1	2	1	21	12	1	1	33	33	33
					10	2	4	18	2	3	3	34	34	34
				1	6	10	2	3	6	2	2	35	35	35
			1	3	6	2	6	12	3	6	2	36	36	36
			1	3	8	12	27	18	10	48	16	1		
			1		1	2	10	9	35	35	34	2	37	37
						1	3	6	20	31	10	1	38	38
								1	36	40	7	39	39	39
						1	1	4	1	4	10	40	40	40
								1	9	10	14	7	41	41
			1	2	1	4	14	17	101	120	75	10		

* Including 11 over 60.

108 WAGES AND HOURS OF LABOR, 1907 TO 1916—BOOTS AND SHOES,

TABLE C.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, WEEKLY EARNINGS,

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Average full-time weekly earnings.	Employees whose full-time hours per week were—					
							Over 48 and under 51.	51 and under 54.	54.	Over 54 and under 57.	57 and under 60.	60.

OTHER EMPLOYEES (ALL DEPARTMENTS).

Male:												
1	Illinois.....	6	984	54.3	\$0.247	\$13.44		202	97	685		
2	Maine.....	5	806	58.0	.245	14.23					806	
3	Massachusetts.....	52	8,980	54.2	.262	14.19	¹ 499	1,279	4,375	2,693	93	² 41
4	Minnesota.....	3	372	60.0	.242	14.53						372
5	Missouri.....	14	2,648	56.0	.226	12.65		107	1,481		953	³ 107
6	New Hampshire.....	11	2,580	55.1	.226	12.44				2,575		⁴ 5
7	New Jersey.....	4	341	55.2	.242	13.33		⁵ 10			325	⁴ 6
8	New York.....	14	2,953	52.9	.268	14.19	⁶ 477	1,369	367	715	1	⁷ 24
9	Ohio.....	8	1,937	56.3	.203	11.45	⁶ 3		17	1,308	602	⁴ 7
10	Pennsylvania.....	9	1,434	55.8	.212	11.92	4	53	554	295	497	⁸ 31
11	Virginia.....	2	262	59.0	.196	11.56					261	⁴ 1
12	Wisconsin.....	4	440	58.9	.194	11.43	⁹ 3				87	350
13	Other States.....	3	273	54.7	.243	13.28			145	125		⁴ 3
	Total.....	135	24,010	55.0	.243	13.35	¹⁰ 1,103	2,903	7,036	8,808	3,213	¹¹ 947
Female:												
14	Illinois.....	6	539	54.4	.173	9.41		76	92	371		
15	Maine.....	5	621	57.9	.183	10.59					621	
16	Massachusetts.....	52	5,698	53.6	.193	10.37	¹² 347	936	4,415			
17	Minnesota.....	3	213	54.0	.185	10.01				213		
18	Missouri.....	12	1,526	53.7	.156	8.38		99	1,427			
19	New Hampshire.....	11	1,234	55.0	.183	10.07				1,234		
20	New Jersey.....	4	295	54.8	.154	8.43		⁶ 7			288	
21	New York.....	14	1,713	51.6	.204	10.53	¹³ 657	612	444			
22	Ohio.....	8	1,252	53.8	.157	8.47	⁹ 1	674	577			
23	Pennsylvania.....	9	972	53.4	.142	7.62	¹⁴ 126	30	816			
24	Virginia.....	3	182	59.0	.145	8.58					182	
25	Wisconsin.....	4	413	55.0	.138	7.59				413		
26	Other States.....	3	193	54.0	.158	8.52			193			
	Total.....	134	14,851	53.8	.179	9.62	¹⁶ 1,237	2,328	8,177	2,306	803	

¹ Including 26 under 48 hours and 15 at 48 hours.

² Including 32 over 60 hours.

³ Including 22 over 60 hours.

⁴ Over 60 hours.

⁵ Under 48 hours.

⁶ Including 24 under 48 hours.

⁷ Including 17 over 60 hours.

⁸ Including 15 over 60 hours.

AND RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME BY STATES, 1916—Concluded.

Employees whose rates of wages per hour were—													Line No.
Under 6 cents.	6 and under 8 cents.	8 and under 10 cents.	10 and under 12 cents.	12 and under 14 cents.	14 and under 16 cents.	16 and under 18 cents.	18 and under 20 cents.	20 and under 25 cents.	25 and under 30 cents.	30 and under 40 cents.	40 and under 50 cents.	50 cents and over.	

OTHER EMPLOYEES (ALL DEPARTMENTS).

.....	9	22	48	63	74	96	79	184	158	164	48	39	1
1	1	9	37	54	124	52	46	137	127	137	60	21	2
13	37	154	358	437	344	795	684	1,576	1,761	1,960	595	266	3
.....	2	32	20	21	28	28	13	95	68	74	17	2	4
4	13	100	179	237	212	207	170	532	436	403	105	50	5
7	13	29	69	180	130	400	298	637	383	334	69	31	6
1	2	7	25	28	22	23	21	76	54	52	17	13	7
6	12	28	138	146	197	173	163	515	547	681	245	102	8
1	7	48	266	147	211	178	143	380	273	237	35	11	9
2	21	81	171	142	159	125	103	225	161	136	64	44	10
4	10	19	45	15	21	12	6	60	33	27	7	3	11
.....	8	22	44	51	49	49	29	71	62	46	6	3	12
.....	1	4	15	14	20	22	17	63	60	38	14	5	13
.....	39	134	525	1,427	1,534	1,584	2,160	1,772	4,551	4,123	4,289	1,282	590
.....	2	30	26	58	80	69	65	48	93	41	23	2	14
4	13	25	76	74	84	54	52	129	74	34	1	1	15
12	63	185	508	566	485	768	780	1,285	638	354	50	4	16
.....	2	26	34	26	23	23	19	50	22	9	2	.....	17
7	49	176	238	249	187	201	109	182	83	41	3	1	18
16	24	31	90	158	116	186	152	328	87	34	10	2	19
.....	4	20	44	57	53	47	25	33	8	3	.....	1	20
.....	11	37	125	155	190	192	172	407	266	131	21	6	21
8	12	84	237	187	209	112	129	187	70	16	1	.....	22
4	41	144	225	174	121	84	38	75	39	22	5	.....	23
2	8	25	36	17	27	27	14	15	10	1	.....	.....	24
7	30	39	90	70	50	43	27	46	10	1	.....	.....	25
.....	4	31	25	23	20	20	26	32	7	4	1	.....	26
.....	62	289	825	1,778	1,844	1,637	1,822	1,591	2,862	1,355	673	96	17

⁹ 48 hours.
¹⁰ Including 63 under 48 hours and 18 at 48 hours.
¹¹ Including 108 over 60 hours.
¹² Including 64 under 48 hours and 22 at 48 hours.
¹³ Including 9 under 48 hours.
¹⁴ Including 1 under 48 hours.
¹⁵ Including 81 under 48 hours and 23 at 48 hours.

TABLE D.—AVERAGE FULL-TIME HOURS, HOURS ACTUALLY WORKED, AND NUMBER OF EMPLOYEES WORKING EACH CLASSIFIED PER CENT ONE WEEK, BY STATES, 1916.

[This table does not include data from six

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours per week of establishments	Average hours actually worked per employee during one week.	Average full-time weekly earnings.	Average amt't actually earned per employee during one week.	Employees working each classified per cent of full time during one week.					
								Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 and under 100 per cent.	100 per cent.	Over 100 per cent.

CUTTING DEPARTMENT.

	Cutters, vamp and whole shoe, hand, male:														
1	Illinois.....	4	133	54.2	49.1	\$20.85	\$18.45	3	40	27	43	20			
2	Maine.....	5	74	56.9	53.6	18.14	17.07	1	1	1	27	39	5		
3	Massachusetts.....	46	822	53.1	47.4	20.84	18.52	10	51	93	228	468	32		
4	Minnesota.....	3	43	60.0	54.2	19.50	17.63	2	1	1	6	34			
5	Missouri.....	11	322	54.7	42.2	19.98	15.18	7	20	58	198	17	16		
6	New Jersey.....	3	36	55.0	51.4	19.98	18.46	1	1	1	25	8	1		
7	New York.....	12	313	51.9	45.5	21.80	19.14	13	10	20	119	136	15		
8	Ohio.....	5	186	53.6	41.0	19.92	14.96	7	29	47	41	61	1		
9	Pennsylvania.....	4	188	55.4	46.2	18.16	15.06	1	15	29	79	63	1		
10	Wisconsin.....	4	37	57.4	51.3	17.13	15.35	3	3	1	16	16	1		
11	Other States.....	8	90	46.8	51.4	16.24	14.93	1	3	8	51	11	16		
	Total.....	110	2,304	53.6	46.5	20.19	17.31	40	144	299	817	896	108		
	Cutters, vamp and whole shoe, machine, male:														
12	Massachusetts.....	33	434	53.8	48.5	20.18	18.15	2	10	60	143	214	5		
13	Missouri.....	6	164	56.8	53.3	14.33	13.39	1	6	10	51	57	40		
14	New Hampshire.....	3	151	55.0	52.9	17.13	16.46	5	5	14	72	11	49		
15	New York.....	5	141	54.2	53.1	18.23	17.86	1	1	6	15	32	87		
16	Ohio.....	3	34	55.6	51.9	16.95	15.90	1	1	2	9	22			
17	Pennsylvania.....	3	23	54.9	45.6	13.10	10.85	1	1	1	17	4			
18	Other States.....	10	72	57.6	53.7	18.17	16.95	1	2	2	25	41	3		
	Total.....	63	1,019	54.9	51.0	18.11	16.77	5	22	95	332	381	184		
	Skivers, upper, machine, male:														
19	Massachusetts.....	21	91	54.2	45.9	17.30	14.80	1	8	16	29	33	4		
20	New York.....	2	13	53.2	49.7	21.16	19.86	1	1	1	5	7			
21	Other States.....	9	20	57.6	54.5	12.49	11.95	1	1	1	8	11			
	Total.....	32	124	54.6	47.7	16.93	14.87	1	9	17	42	51	4		
	Skivers, upper, machine, female:														
22	Illinois.....	3	33	55.0	47.4	10.85	9.40	1	1	7	9	15			
23	Maine.....	5	10	57.9	55.6	12.98	12.41	1	1	1	3	6	1		
24	Massachusetts.....	38	172	53.8	47.3	12.80	11.07	4	6	22	61	76	3		
25	Minnesota.....	3	20	54.0	48.5	10.74	9.66	1	1	1	5	14			
26	Missouri.....	12	73	53.8	47.6	10.14	8.91	1	1	11	37	23			
27	New Hampshire.....	9	69	55.0	50.6	10.62	9.72	1	1	8	30	30			
28	New York.....	12	73	52.1	45.5	12.95	11.20	3	3	11	28	18	13		
29	Ohio.....	7	38	53.8	44.1	9.74	7.88	1	1	12	15	9	1		
30	Pennsylvania.....	9	46	53.2	48.0	8.72	7.83	2	4	4	18	21	1		
31	Wisconsin.....	4	15	55.0	50.7	9.41	8.90	1	1	1	4	10			
32	Other States.....	6	22	55.5	53.5	11.15	10.73	1	1	1	8	9	4		
	Total.....	108	571	53.9	47.9	11.35	9.98	7	15	77	218	231	23		

TABLE D.—AVERAGE FULL-TIME HOURS, HOURS ACTUALLY WORKED, AND NUMBER OF EMPLOYEES WORKING EACH CLASSIFIED PER CENT ONE WEEK, BY STATES, 1916—Continued.

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours per week of establishments	Average hours actually worked per employee during one week.	Average full-time weekly earnings.	Average am't actually earned per employee during one week.	Employees working each classified per cent of full time during one week.					
								Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 and under 100 per cent.	100 per cent.	Ov-100 per cent.

SOLE-LEATHER DEPARTMENT.

1	Cutters, outsole, male:														
2	Massachusetts.....	27	115	54.6	49.6	\$17.74	\$16.03	1	1	22	21	67	3		
3	Missouri.....	4	73	52.8	50.2	17.74	16.51	1		4	31	37			
4	New York.....	8	51	54.5	53.1	14.42	13.98			2	9	7	33		
5	Ohio.....	7	16	55.8	54.9	16.04	15.68				2	14			
6	Pennsylvania.....	6	16	56.4	54.3	15.53	14.95				8	8			
	Other States.....	16	63	56.4	54.0	16.92	16.23		1	3	14	44	1		
	Total.....	68	334	54.7	51.6	16.83	15.79	2	2	31	85	177	37		
	Channelers, insole and outsole, male:														
7	Illinois.....	4	10	54.1	50.6	18.02	17.07			1	2	6	1		
8	Maine.....	5	11	58.1	48.5	18.79	15.76		1	2	8				
9	Massachusetts.....	35	99	54.1	46.8	20.47	17.19		5	20	27	42	5		
10	Missouri.....	9	19	57.4	50.7	16.95	15.13		1	1	11	4	2		
11	New Hampshire.....	6	15	55.0	53.5	20.98	20.39				7	7	1		
12	New York.....	12	32	52.7	49.5	18.73	17.50			1	13	13	5		
13	Ohio.....	7	16	55.8	47.4	16.74	13.98		1	5	4	6			
14	Pennsylvania.....	9	23	55.8	53.0	14.22	13.48			1	7	15			
15	Other States.....	14	21	57.5	54.6	18.22	17.26			1	8	11	1		
	Total.....	101	246	55.0	49.4	18.81	16.65		8	32	87	104	15		

FITTING OR STITCHING DEPARTMENT.

16	Tip stitchers, female:														
17	Illinois.....	4	19	54.1	46.0	\$13.59	\$11.82			4	14	1			
18	Maine.....	5	16	57.9	55.7	13.74	13.16				8	8			
19	Massachusetts.....	48	174	53.8	46.5	13.52	11.65	2	6	27	82	57			
20	Missouri.....	11	49	53.7	46.7	10.05	8.66			1	10	32	6		
21	New Hampshire.....	8	35	55.0	51.7	12.59	11.86			1	23	11			
22	New Jersey.....	3	10	55.0	48.9	11.30	10.12			1	7	2			
23	New York.....	13	43	52.3	48.3	14.78	13.50			2	1	26	8	6	
24	Ohio.....	7	20	53.7	47.4	11.69	10.17			1	9	8			
25	Pennsylvania.....	9	30	53.3	49.1	9.73	8.98	1		2	19	10			
26	Wisconsin.....	4	18	55.0	48.4	9.92	8.81	1		2	9	6			
	Other States.....	7	15	54.3	50.1	11.16	11.04				11	3	1		
	Total.....	119	429	54.0	48.0	12.55	11.14	4	10	48	240	120	7		
	Backstay stitchers, female:														
27	Illinois.....	4	18	54.0	49.2	14.08	12.78				16	2			
28	Maine.....	5	18	57.8	53.6	10.27	9.59			2	9	5	2		
29	Massachusetts.....	50	204	53.7	44.8	12.81	10.61	2	17	29	104	46	6		
30	Minnesota.....	3	9	54.0	46.6	13.63	11.57				2	3	4		
31	Missouri.....	11	69	53.7	47.1	9.57	8.33		3	11	35	20			
32	New Hampshire.....	9	69	55.0	50.1	11.02	10.01	1	3	6	19	40			
33	New York.....	11	48	52.6	47.9	13.17	12.07	1	2	2	18	15	10		
34	Ohio.....	7	34	53.8	48.2	9.79	8.80				2	17	14	1	
35	Pennsylvania.....	9	53	53.0	48.8	8.59	7.89		2	1	29	21			
36	Wisconsin.....	4	15	55.0	45.1	10.05	8.19	1	2	2	3	7			
37	Other States.....	7	18	55.1	47.7	12.06	10.47				2	10	6		
	Total.....	120	555	53.9	47.2	11.50	9.99	5	29	59	263	180	19		

TABLE D.—AVERAGE FULL-TIME HOURS, HOURS ACTUALLY WORKED, AND NUMBER OF EMPLOYEES WORKING EACH CLASSIFIED PER CENT ONE WEEK, BY STATES, 1916—Continued.

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours worked per week of establishments	Average hours actually worked per employee during one week.	Average full-time weekly earnings.	Average am't actually earned per employee during one week.	Employees working each classified per cent of full time during one week.				
								Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 and under 100 per cent.	100 per cent.	Over 100 per cent.

FITTING OR STITCHING DEPARTMENT—Continued.

1	Lining makers, female:																		
2	Illinois.....	4	45	53.9	47.2	\$13.31	\$11.41	2	3	39	1	7							
3	Maine.....	5	45	57.9	55.5	11.00	10.59			1	15	22	8						
4	Massachusetts.....	50	356	53.7	44.9	11.81	9.84	4	22	56	198	68	8						
5	Minnesota.....	3	19	54.0	49.1	10.66	9.69				13	5	1						
6	Missouri.....	10	84	53.6	45.9	9.04	7.71	1	5	13	42	23	2						
7	New Hampshire.....	9	105	55.0	50.0	8.82	8.03	4	1	6	44	50							
8	New Jersey.....	3	13	55.0	47.7	13.46	11.58				13								
9	New York.....	13	128	51.8	47.1	11.41	10.45		4	18	32	53	21						
10	Ohio.....	7	71	53.8	44.7	9.56	8.01	1	2	18	26	24							
11	Pennsylvania.....	9	72	53.2	50.3	9.10	8.57			4	41	27							
	Other States.....	8	29	55.0	51.0	8.64	7.97			2	18	9							
	Total.....	121	967	52.8	47.1	10.76	9.38	10	36	121	481	282	37						
12	Closers-on, female:																		
13	Illinois.....	3	11	54.2	48.1	13.89	12.42				11								
14	Massachusetts.....	35	124	53.9	46.9	12.07	10.43	1	7	14	74	28							
15	Missouri.....	12	63	53.7	46.8	9.78	8.57	1	2	6	41	13							
16	New York.....	9	63	51.9	45.5	11.07	9.74	1	4	6	18	25	9						
17	Pennsylvania.....	8	51	52.9	50.5	8.84	8.41			1	36	14							
18	Wisconsin.....	2	12	55.0	47.1	9.47	8.20		1	2	5	4							
	Other States.....	12	29	55.2	46.7	12.16	10.44		2	1	21	4	1						
	Total.....	81	353	53.5	47.2	10.99	9.67	3	16	30	206	88	10						
19	Top stitchers or under trimmers, female:																		
20	Illinois.....	4	32	54.1	45.1	13.22	11.19	2	1	3	26								
21	Maine.....	5	43	57.9	55.8	13.29	12.70			1	14	17	11						
22	Massachusetts.....	50	481	53.7	46.2	12.77	11.03	5	19	74	252	127	4						
23	Minnesota.....	3	18	54.0	48.0	13.18	11.70				14	3	1						
24	Missouri.....	12	197	53.7	46.0	10.17	8.55	2	11	24	129	31							
25	New Hampshire.....	9	171	55.0	50.9	11.17	10.28	1	5	11	60	94							
26	New Jersey.....	3	12	55.0	49.5	12.22	10.85			1	10		1						
27	New York.....	14	197	52.7	48.2	13.66	12.39	2	6	19	66	57	47						
28	Ohio.....	7	105	53.8	45.8	10.29	8.67		2	24	43	36							
29	Pennsylvania.....	9	69	53.3	49.0	9.58	8.77			7	39	23							
30	Wisconsin.....	4	37	55.0	50.0	9.82	8.93			3	21	13							
	Other States.....	3	17	54.0	49.2	9.37	8.56			1	13	3							
	Total.....	123	1,379	53.9	47.6	11.89	10.46	12	44	168	687	404	64						
31	Button fasteners, female:																		
32	Massachusetts.....	33	57	53.6	44.4	11.69	9.33	1	3	11	25	16	1						
33	Missouri.....	10	27	53.5	49.5	10.44	9.57			2	16	9							
34	New York.....	13	30	51.6	48.0	12.90	12.16			1	13	14	2						
35	Ohio.....	5	16	53.7	45.2	9.86	8.32		1	3	9	3							
36	Pennsylvania.....	8	16	53.5	48.4	8.33	7.63		1	3	6	6							
	Other States.....	20	38	55.4	50.0	12.93	11.88	1	1	2	18	10	6						
	Total.....	89	184	53.6	47.3	11.51	10.12	2	6	22	87	58	9						

FULL-TIME WEEKLY EARNINGS AND AMOUNTS ACTUALLY EARNED, OF FULL TIME AND EARNING EACH CLASSIFIED AMOUNT, DURING

Employees earning each classified amount during one week.															Line No.	
Under \$3.	\$3 and under \$4.	\$4 and under \$5.	\$5 and under \$6.	\$6 and under \$7.	\$7 and under \$8.	\$8 and under \$9.	\$9 and under \$10.	\$10 and under \$11.	\$11 and under \$12.	\$12 and under \$14.	\$14 and under \$16.	\$16 and under \$18.	\$18 and under \$20.	\$20 and under \$25.	\$25 and over.	

FITTING OR STITCHING DEPARTMENT—Continued.

				1	3		8	5	11	12	5					1
		1		2	6		6	7	4	11	2		2			2
8	3	11	22	34	29	34	51	39	34	51	20	12	7	1		3
				1	5	2	4	2	1	2	2					4
4	6	10	7	9	12	7	8	6	6	6	2					5
4	2	6	15	13	17	14	12	7	3	5	7					6
				1	1	1	2	1		7	7					7
1	4	4	5	9	10	14	14	12	11	19	17	5	3			8
3	1	4	8	8	10	9	11	6	8	2	1					9
	2	7	7	9	14	9	4	4	3	5	5	3				10
		1	4	8	3	2	7	2	2	2						11
20	18	44	68	95	104	101	126	93	81	122	62	20	12	1		
				1	1		1		2	2	2	2				12
1	3	3	8	5	7	11	10	20	13	28	13	2				13
2	1	2	7	6	10	7	7	10	4	4	2	1				14
1	2	4	2	5	6	9	7	3	10	8	4	4				15
	1	4	6	8	3	7	5	7	3	6	1					16
		2	1	2	2	2	2	2	1	1	1					17
1	1	1	1	2	1	4	3	3	3	6	2	2				18
5	8	15	25	29	29	40	33	43	36	54	25	11				
2	1	1		2			3	2	6	8	5	1	1			19
					1	2	5	9	3	10	9	1		3		20
9	4	3	9	25	51	54	58	55	52	76	35	27	11	11	1	21
					1	3	2	1	3	5	2	1				22
4	4	5	6	44	25	21	38	19	14	12	3	2				23
2	2	1	8	13	13	16	22	25	16	35	11	6	1			24
						3	1	4	1	2	1	1				25
1		2	2	6	8	15	17	27	16	36	35	18	10	4		26
	2	8	10	7	11	12	28	10	8	5	4					27
1		2	9	4	17	7	6	8	4	7	3		1			28
		3		3	5	11	3	3	6	3						29
		1	2	2	2	3	3	1	1	2						30
19	13	26	46	106	134	147	186	164	130	201	107	57	24	18	1	
	2	2	10	1	5	8	5	3	8	8	5					31
	1			5	2	2	3	4	4	6						32
		1		2	2	3	3	1	2	4	6	1	1	3		33
1	1		1		4	1	3	4		1						34
1			3	1	6	1	1	1	1	1						35
1	1	2		1	1	2	4	7	3	4	7	1		4		36
3	4	6	16	9	20	17	19	20	18	24	18	2	1	7		

TABLE D.—AVERAGE FULL-TIME HOURS, HOURS ACTUALLY WORKED, AND NUMBER OF EMPLOYEES WORKING EACH CLASSIFIED PER CENT ONE WEEK, BY STATES, 1916—Continued.

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours per week of establishments	Average hours actually worked per employee during one week.	Average full-time weekly earnings.	Average amount actually earned per employee during one week.	Employees working each classified per cent of full time during one week.					
								Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 and under 100 per cent.	100 per cent.	Over 100 per cent.

FITTING OR STITCHING DEPARTMENT—Concluded.

Buttonhole makers, female:												
1	Illinois.....	4	8	54.3	45.2	\$13.79	\$11.72			2	5	1
2	Maine.....	5	20	58.0	54.7	16.42	15.66	1			8	3
3	Massachusetts.....	42	161	53.7	42.6	12.77	9.85	4	14	42	50	49
4	Missouri.....	9	67	53.7	46.2	10.82	9.25		3	6	53	5
5	New Hampshire.....	9	24	55.0	50.8	10.37	9.71		1	1	15	7
6	New York.....	12	61	51.4	46.7	12.33	11.25		2	6	22	25
7	Ohio.....	7	44	53.7	48.1	10.04	9.00			5	19	20
8	Pennsylvania.....	7	37	53.6	47.4	9.13	8.03		2	3	29	3
9	Wisconsin.....	4	11	55.0	51.8	10.68	10.01			1	3	7
10	Other States.....	9	18	54.6	49.9	10.24	9.10			2	10	5
	Total.....	108	451	53.7	46.1	11.76	9.99	4	23	68	214	125
Vampers, male:												
11	Illinois.....	4	38	54.2	46.5	15.70	13.73		1	4	31	2
12	Maine.....	4	12	58.1	53.6	18.72	17.27			1	5	3
13	Massachusetts.....	38	368	54.2	45.1	18.79	15.54	2	18	86	148	104
14	Missouri.....	5	19	57.2	50.6	15.55	13.70				17	2
15	New Hampshire.....	9	69	55.0	51.6	15.48	14.53		2	4	33	30
16	New York.....	8	47	52.5	47.9	21.05	19.16		2	3	23	13
17	Pennsylvania.....	3	31	56.7	53.3	19.24	18.11			1	19	6
18	Other States.....	9	25	56.9	49.4	16.63	14.32			3	17	2
	Total.....	80	609	54.6	47.1	18.23	15.65	2	23	102	293	162
Vampers, female:												
19	Illinois.....	4	39	53.7	47.1	15.35	13.49		3	1	33	1
20	Maine.....	5	63	58.0	54.7	15.66	14.90	1	3	1	15	16
21	Massachusetts.....	45	420	53.7	46.9	14.69	12.72	2	25	50	187	154
22	Minnesota.....	3	30	54.0	49.9	14.55	13.45				20	9
23	Missouri.....	12	192	53.7	46.3	13.16	11.39	2	4	26	111	46
24	New Hampshire.....	8	122	55.0	50.3	13.87	12.65		2	12	55	53
25	New Jersey.....	3	11	55.0	46.7	14.19	12.04			2	9	
26	New York.....	13	163	52.0	49.1	15.12	14.23		2	5	62	63
27	Ohio.....	7	135	53.8	47.2	11.46	9.98		3	19	81	30
28	Pennsylvania.....	9	101	52.8	50.1	10.41	9.76		1	6	50	44
29	Wisconsin.....	4	30	55.0	50.4	12.45	11.37		1	2	12	15
30	Other States.....	4	32	55.1	46.5	11.60	9.78	2	1	3	18	8
	Total.....	117	1,338	53.8	48.2	13.73	12.24	7	45	130	653	439

LASTING DEPARTMENT.

Assemblers, for pulling-over machine, male:												
31	Illinois.....	4	32	53.7	44.6	\$18.44	\$15.35	2	1	5	9	13
32	Maine.....	5	34	58.0	45.3	18.36	14.71	2	2	9	15	4
33	Massachusetts.....	28	255	54.6	46.3	17.80	14.97	2	8	34	156	54
34	Minnesota.....	3	15	60.0	52.7	18.54	16.21			1	10	4
35	Missouri.....	12	125	55.5	46.4	13.41	10.94	1	7	21	67	27
36	New Hampshire.....	7	47	55.0	53.8	14.90	14.51				18	28
37	New Jersey.....	2	22	55.0	49.6	14.55	12.86				13	
38	New York.....	10	127	52.8	48.6	14.95	13.54		4	13	45	53
39	Ohio.....	7	46	56.7	45.6	18.32	14.58			12	29	5
40	Pennsylvania.....	6	32	54.1	45.2	14.14	11.73	2		1	29	
41	Wisconsin.....	4	24	59.2	53.9	12.77	11.77	1		1	18	2
42	Other States.....	4	18	56.1	53.6	13.48	12.80			1	7	6
	Total.....	92	777	55.0	47.6	16.05	13.72	10	22	98	413	193

FULL-TIME WEEKLY EARNINGS AND AMOUNTS ACTUALLY EARNED, OF FULL TIME AND EARNING EACH CLASSIFIED AMOUNT, DURING

Employees earning each classified amount during one week.															Line No.
Under \$3.	\$3 and under \$4.	\$4 and under \$5.	\$5 and under \$6.	\$6 and under \$7.	\$7 and under \$8.	\$8 and under \$9.	\$9 and under \$10.	\$10 and under \$11.	\$11 and under \$12.	\$12 and under \$14.	\$14 and under \$16.	\$16 and under \$18.	\$18 and under \$20.	\$20 and under \$25.		$25 and over.

FITTING OR STITCHING DEPARTMENT—Concluded.

				2			1	1			1		2	1			1
				1							1		3	3			5
5	6	7	6	12	16	13	16	24	17	13	16	6	3	1			2
1	1	2	8	6	10	6	7	7	4	9	4	1	1				3
			2		1	3	6	4	3	3	1						4
		1	1	1	1	8	3	6	10	10	8						5
		2	2	3	11	3	8	8	3	2	2						7
	1	4	9	1	3	5	3	6		5							8
					4	2	2	1	4								9
				2	3	1	1	7	2	2							10
7	8	16	32	27	54	36	49	70	40	50	33	13	8	8			
			1		2	4	2	4	2	6	2	4	1	1	3	1	11
					1	1			1	2	2	2	4	1	2	2	12
1	3	1	5	3	7	12	13	19	26	60	46	51	55	54	12		13
				1	2	3	1	2	2	14	5	4	2				14
					1	1	1	1	1	3	9	12	9	3	5	1	15
								2	2	5	2	3	5	10	3	16	16
					1	3	1	2	1	2	2	3	5	10	5	3	17
								2	1	3	8	3	2	2	1		18
1	4	2	5	5	14	24	21	30	43	95	83	88	83	86	25		
						2	5	1	6	5	8	4	3	3			19
				1	2		2	1	7	14	12	7	8	9			20
2	1	4	9	15	18	24	22	43	36	91	78	39	21	15	2		21
						2		5	4	9	3	4	2	1			22
4		1	6	9	16	20	20	16	18	30	26	17	8	1			23
				2	4	5	8	16	17	25	29	10	3	1			24
						1	1	4	1	1	1	2					25
1			2	1	4	8	8	12	16	30	38	33	10	7	1		26
	2		4	8	14	19	27	21	13	17	7	2	1				27
		1	4	9	19	16	17	9	5	7	8	3	3				28
			2	2	1	2	4	3	3	2	3	3					29
3		2	2	2	1	5	4	1	1	5	3	3					30
12	4	11	27	49	75	100	118	132	128	241	215	127	59	37	3		

LASTING DEPARTMENT.

				1			1	1	2	2	1	5	6	3	5	2	31
2			1		2		2	1	2	2	2	6	1	6	8		32
4			3	5	6	10	6	14	24	37	35	44	32	4	7		33
								2	2	2	2	4	4	1	1		34
1	1		1	6	11	15	17	21	12	20	8	10	4	3	3		35
						2	2	3	3	3	1	8	1	1			36
				1	1	6	8	3	3	13	7	24	7	2			37
						2	8	3	6	6	4	6	6	7			38
1	1					3	2	2	12	7	12	7	6				39
						1	1	1	6	6	6	3					40
						1	1	2	2	2	5	2					41
											2	1					42
11	3		7	14	25	43	51	56	77	129	131	100	62	57	11		

TABLE D.—AVERAGE FULL-TIME HOURS, HOURS ACTUALLY WORKED, AND NUMBER OF EMPLOYEES WORKING EACH CLASSIFIED PER CENT ONE WEEK, BY STATES, 1916—Continued.

Line No.	Occupation, sex, and State.	Number of establishments	Number of employ-ees.	Average full-time hours per week of establishments	Average hours actually worked per employ-ee during one week.	Average full-time weekly earnings.	Average am't actually earned per employ-ee during one week.	Employees working each classified per cent of full time during one week.				
								Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 and under 100 per cent.	100 per cent.	Over 100 per cent.

LASTING DEPARTMENT—Continued.

	Pullers-over, hand, male:																		
1	Illinois.....	3	92	54.7	52.4	\$21.26	\$20.36	1	1	3	16	71	.....					
2	Massachusetts.....	23	285	54.4	46.0	18.79	15.83	4	16	38	168	55	4						
3	Missouri.....	3	15	57.0	50.3	20.01	17.26	.....	.....	.....	13	.....	2						
4	New York.....	5	40	53.3	45.5	19.68	16.73	1	.....	7	18	14	.....					
5	Ohio.....	3	29	55.0	44.4	19.83	15.78	.....	.....	6	21	1	1						
6	Pennsylvania.....	6	75	56.6	52.1	16.05	14.77	.....	1	4	61	4	5						
7	Other States.....	3	7	57.0	58.2	18.99	19.38	.....	.....	.....	.....	3	4						
	Total.....	46	543	54.8	48.1	18.99	16.60	6	18	58	297	148	16						
	Pullers-over, machine, male:																		
8	Illinois.....	3	21	53.4	44.4	20.21	16.85	.....	1	7	1	12	.....					
9	Maine.....	5	36	58.0	49.6	20.93	17.97	.....	1	7	21	.....	7						
10	Massachusetts.....	42	238	54.4	46.2	22.07	18.60	3	3	35	164	28	5						
11	Minnesota.....	3	15	60.0	52.0	20.58	17.74	.....	.....	.....	13	2	.....					
12	Missouri.....	12	64	56.2	48.6	19.76	16.92	.....	2	12	29	18	3						
13	New Hampshire.....	8	84	55.0	51.6	17.12	16.04	1	3	2	27	41	10						
14	New York.....	14	79	52.9	48.4	21.37	19.50	1	3	4	31	34	6						
15	Ohio.....	7	37	56.2	46.0	21.60	17.39	.....	.....	8	27	2	.....					
16	Pennsylvania.....	6	19	54.3	49.2	17.89	16.24	.....	.....	3	15	.....	1						
17	Wisconsin.....	4	14	58.2	55.5	18.52	17.64	.....	.....	.....	7	5	2						
18	Other States.....	6	17	55.4	53.8	20.12	19.54	.....	.....	.....	9	3	5						
	Total.....	110	624	55.0	48.2	20.63	17.94	5	13	78	344	145	39						
	Side lasters, hand, male:																		
19	Maine.....	3	18	58.2	43.5	19.55	14.55	.....	2	5	11	.....	.....				
20	Massachusetts.....	12	163	53.9	50.9	18.03	16.95	1	2	3	72	85	.....					
21	New Hampshire.....	2	36	55.0	54.8	13.31	13.25	.....	.....	.....	5	21	10						
22	New York.....	7	62	52.7	48.2	19.94	18.00	.....	.....	14	23	22	3						
23	Other States.....	15	77	54.4	47.6	16.01	14.23	2	3	9	24	28	11						
	Total.....	39	356	54.1	49.7	17.53	16.05	3	7	31	135	156	24						
	Side lasters, machine, male:																		
24	Massachusetts.....	14	105	54.2	44.5	20.24	16.82	1	8	21	63	11	1						
25	Missouri.....	5	30	55.5	48.1	16.45	14.27	.....	.....	10	10	6	4						
26	New Hampshire.....	6	42	55.0	52.3	17.14	16.30	1	1	1	17	18	4						
27	New York.....	6	53	53.9	50.7	17.55	16.32	.....	.....	2	23	23	5						
28	Other States.....	11	56	56.2	49.2	18.49	16.04	.....	1	10	28	15	2						
	Total.....	42	286	54.8	48.1	18.55	16.23	2	10	44	141	73	16						
	Bed-machine operators, male:																		
29	Illinois.....	4	109	54.1	50.1	19.08	17.90	1	3	9	15	81	.....					
30	Maine.....	5	40	58.0	50.7	20.35	17.69	1	.....	2	33	2	2						
31	Massachusetts.....	30	557	54.2	47.8	20.17	17.74	4	16	56	305	170	6						
32	Minnesota.....	3	33	60.0	53.4	18.33	16.39	.....	2	.....	21	9	1						
33	Missouri.....	7	90	56.7	49.3	17.59	15.14	.....	4	9	61	11	5						
34	New Hampshire.....	5	155	55.0	52.6	16.40	15.70	1	3	4	70	73	4						
35	New Jersey.....	2	18	55.0	54.7	18.23	17.85	.....	.....	.....	7	.....	11						
36	New York.....	11	146	53.3	49.8	19.28	17.95	.....	1	5	89	35	16						
37	Ohio.....	5	56	56.9	44.8	21.99	17.42	.....	3	18	28	6	1						
38	Pennsylvania.....	8	50	55.3	52.8	16.31	15.66	.....	.....	1	28	15	6						
39	Wisconsin.....	4	33	58.6	52.3	15.42	14.04	1	1	.....	22	6	3						
40	Other States.....	4	23	55.9	55.7	18.51	18.47	.....	.....	1	2	11	9						
	Total.....	88	1,310	54.9	49.5	19.07	17.15	8	33	105	681	419	64						

TABLE D.—AVERAGE FULL-TIME HOURS, HOURS ACTUALLY WORKED, AND NUMBER OF EMPLOYEES WORKING EACH CLASSIFIED PER CENT ONE WEEK, BY STATES, 1916—Continued.

Line No.	Occupation, sex, and State.	Number of establishments	Number of employ-ees.	Average full-time hours per week of establish-ments	Average hours actually worked per employ-ee during one week.	Average full-time weekly earnings.	Average am't actually earned per employ-ee during one week.	Employees working each classi-fied per cent of full time during one week.					
								Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 and under 100 per cent.	100 per cent.	Over 100 per cent.

LASTING DEPARTMENT—Concluded.

Hand-method lasting-machine operators, male:															
1	Maine.....	3	38	58.0	57.4	\$23.35	\$23.01				1	16	6	15	
2	Massachusetts.....	28	212	54.4	45.8	20.79	17.38			3	6	32	131	32	8
3	Missouri.....	7	98	55.7	49.5	18.20	16.15	1	2	11	4	49	33	2	2
4	New Hampshire.....	5	46	55.0	51.5	17.51	16.18		1	4	18	21	2	2	2
5	New York.....	3	64	52.9	50.8	20.03	19.11		1	2	12	45	4	4	4
6	Ohio.....	5	41	56.3	47.3	21.03	17.47			10	30				1
7	Pennsylvania.....	4	14	54.6	44.8	17.25	14.43		1	3	7	3			3
8	Other States.....	6	14	59.3	52.4	16.82	14.90			1	8	3			2
	Total.....	61	527	55.1	48.7	19.91	17.52	4	11	64	271	143			34
Turn lasters, hand, male:															
9	Massachusetts.....	8	262	54.5	46.5	22.64	19.30	2	4	43	173	37			3
10	Missouri.....	4	145	57.1	48.3	21.28	18.32	1	6	20	102	15			1
11	New Jersey.....	3	17	55.0	50.5	15.19	13.86				17				
12	New York.....	11	242	52.6	49.5	18.65	17.37		8	23	40	109			62
13	Ohio.....	3	85	56.8	35.7	22.32	13.93	5	21	31	27				1
14	Pennsylvania.....	6	162	55.7	54.0	16.55	15.91	1	1	12	65	53			30
15	Other States.....	5	29	56.1	52.0	20.10	18.60		1	1	14	12			1
	Total.....	40	942	54.9	48.1	20.12	17.46	9	41	130	438	226			98
Turn sewers, male:															
16	New York.....	10	20	51.6	48.3	25.05	23.26			2	4	13			1
17	Pennsylvania.....	5	27	55.4	51.2	18.21	16.11			5	4	17			1
18	Other States.....	13	32	55.2	47.5	28.16	24.24			4	23	5			
	Total.....	28	79	54.4	49.0	23.97	21.22			11	31	35			2

BOTTOMING DEPARTMENT.

Goodyear welters, male:															
19	Illinois.....	4	30	54.1	47.6	\$33.38	\$30.00				7	14	9		
20	Maine.....	5	16	58.0	45.2	30.86	24.14			10	4	1			1
21	Massachusetts.....	26	198	54.1	45.8	30.39	25.35		13	34	128	18			5
22	Minnesota.....	3	11	60.0	48.6	26.63	22.76			1	1	8			1
23	Missouri.....	8	27	57.0	50.4	24.09	21.13	1		1	23	2			
24	New Hampshire.....	5	47	55.0	51.7	23.66	22.66		1	3	28	13			2
25	New York.....	10	43	52.9	45.5	30.82	25.90			10	20	6			7
26	Ohio.....	5	32	56.1	38.6	24.23	16.19		5	16	6	4			1
27	Pennsylvania.....	8	24	55.4	49.1	26.78	23.16				17	5			2
28	Other States.....	10	26	56.8	50.3	25.51	22.62			3	20	3			
	Total.....	84	454	54.9	46.8	28.58	24.15	1	20	85	268	61			19
Rough rounders, male:															
29	Illinois.....	4	21	54.3	47.6	34.99	31.18			1	15	5			
30	Massachusetts.....	27	107	54.0	46.2	29.54	24.90		9	10	69	16			3
31	Missouri.....	9	23	55.6	50.8	22.26	20.35			1	17	5			
32	New Hampshire.....	5	28	55.0	51.2	24.79	23.00		1	3	15	9			
33	New York.....	10	27	53.0	46.0	28.73	24.23			8	9	5			5
34	Ohio.....	5	17	56.4	43.6	23.15	16.71		1	9	2	4			1
35	Pennsylvania.....	9	23	55.0	45.9	22.33	18.23			5	16	2			
36	Other States.....	17	38	57.4	49.1	24.20	20.66			9	20	5			4
	Total.....	86	284	54.8	47.4	27.13	23.15		11	46	163	51			13

FULL-TIME WEEKLY EARNINGS AND AMOUNTS ACTUALLY EARNED;
OF FULL TIME AND EARNING EACH CLASSIFIED AMOUNT, DURING

Employees earning each classified amount during one week.															Line No.
Under \$3.	\$3 and under \$4.	\$4 and under \$5.	\$5 and under \$6.	\$6 and under \$7.	\$7 and under \$8.	\$8 and under \$9.	\$9 and under \$10.	\$10 and under \$11.	\$11 and under \$12.	\$12 and under \$14.	\$14 and under \$16.	\$16 and under \$18.	\$18 and under \$20.	\$20 and under \$25.		$25 and over.

LASTING DEPARTMENT—Concluded.

2	2		1	2	3		5	2	3	17	2	2	7	13	14	1
	1		1	2	1	2	1		9	16	41	38	38	46	12	2
				1	1		1		1	6	14	17	15	16	3	3
										9	5	9	6	9	4	4
					1	1			1	7	5	9	7	29	3	5
										8	9	3	6	8	4	6
										3	2	4		2		7
										2	4	3		2		8
2	3	1	3	5	6	3	8	9	17	62	83	85	79	125	36	
1		1	1	2	1		5	4	10	20	29	32	36	87	33	9
2	1	2	1	1	3	5	3	9	5	10	11	13	15	31	33	10
					1		2			6	1	5	2			11
		1		1	3	3	3	14	11	33	37	31	33	52	19	12
3	2		3	4	3	5	3	3	4	10	15	10	5	12	3	13
1		1		1	1	2	1	4	14	31	34	27	22	17	6	14
					1		1	1		3	1	4	7	10	1	15
7	4	4	6	9	13	15	18	35	44	113	128	122	120	209	95	
											1	3	1		8	16
										1	2	18	1		2	17
										1	1	1		10	16	18
								2	2	5	22	2	1	20	25	

BOTTOMING DEPARTMENT.

								1				2	5		22	19
							2	4	6	5	1	6	14	37	121	20
			1	1							3	4	2	5	4	21
1										1	2	4	1	12	6	22
1							1	3			2	4	1	12	24	23
											2	4	2	14	21	24
		1	1			2		2		4	4	5	2	10	1	25
										1	2	4	1	5	11	26
										3	2	2	1	9	9	27
																28
2	1	1	1	1	3		3	10	6	14	19	31	33	104	225	
								1	1	1		2	1	1	15	29
								1	1	4	6	7	12	22	53	30
										1	2	5	2	7	5	31
							1			1	2	1	1	10	12	32
											2	4	2	6	13	33
							1	2	1	1	2	5	3	3	3	34
							2	2	1	5	2	2	3	6	2	35
							2	3	2	2	4	7	8	8	10	36
							1	5	6	8	9	21	30	31	63	110

TABLE D.—AVERAGE FULL-TIME HOURS, HOURS ACTUALLY WORKED, AND NUMBER OF EMPLOYEES WORKING EACH CLASSIFIED PER CENT ONE WEEK, BY STATES, 1916—Continued.

Line No.	Occupation, sex, and State.	Number of establishments	Number of employ-ees.	Average full-time hours per week of establishments	Average hours actually worked per employ-ee during one week.	Average full-time weekly earnings.	Average am't actually earned per employ-ee during one week.	Employees working each classified per cent of full time during one week.					
								Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 and under 100 per cent.	100 per cent.	Over 100 per cent.

BOTTOMING DEPARTMENT—Continued.

	Goodyear stitchers, male:														
1	Illinois.....	4	45	54.1	47.0	\$30.73	\$27.14	1	1	5	24	14	.....	
2	Maine.....	5	21	58.0	49.1	22.13	18.79	.....	.....	1	19	1	.....	
3	Massachusetts.....	32	276	54.1	47.3	25.36	21.97	2	8	47	171	46	.....	2	
4	Minnesota.....	3	10	60.0	51.0	30.82	25.84	.....	.....	1	9	.....	.....
5	Missouri.....	10	52	56.1	53.3	20.50	18.68	.....	.....	3	34	13	.....	2	
6	New Hampshire.....	5	72	55.0	51.8	18.32	17.22	.....	3	2	37	30	.....	.....
7	New York.....	10	61	52.9	46.3	24.73	21.37	.....	.....	9	39	7	.....	6	
8	Ohio.....	5	33	56.3	42.9	21.18	15.70	.....	.....	18	8	6	.....	1	
9	Pennsylvania.....	8	37	55.4	50.0	23.83	21.26	.....	.....	2	30	4	.....	1	
10	Other States.....	9	30	56.7	51.6	21.92	20.12	.....	.....	.....	24	2	.....	4	
	Total.....	91	637	54.8	48.3	24.00	20.98	3	12	88	395	123	.....	16	
	McKay sewers, male:														
11	Maine.....	3	23	58.0	52.1	19.73	17.32	1	1	.....	15	5	.....	1	
12	Massachusetts.....	27	89	54.4	45.9	21.00	17.67	1	3	17	49	15	.....	4	
13	Missouri.....	5	27	55.3	50.9	17.24	15.77	.....	.....	2	21	3	.....	1	
14	New Hampshire.....	4	19	55.0	50.7	14.45	13.48	.....	.....	1	11	7	.....	.....
15	New York.....	4	13	50.9	44.8	22.60	19.27	.....	.....	1	3	8	.....	.....
16	Other States.....	13	31	57.2	48.4	18.43	15.47	.....	.....	1	6	21	.....	3	
	Total.....	56	202	55.2	48.1	19.44	16.75	2	6	27	120	41	.....	6	
	Loose-nail and standard-screw machine operators, male:														
17	Massachusetts.....	11	44	55.2	48.4	18.49	16.22	.....	.....	1	3	29	.....	11	
18	Other States.....	11	27	55.8	51.5	16.29	15.03	.....	.....	1	15	10	.....	1	
	Total.....	22	71	55.4	49.6	17.65	15.76	.....	.....	1	4	44	.....	21	
	Heelers, male:														
19	Illinois.....	4	18	54.2	48.3	34.59	31.03	.....	.....	1	12	5	.....	.....
20	Maine.....	5	17	58.0	52.1	24.30	21.83	.....	.....	1	14	2	.....	.....
21	Massachusetts.....	51	157	54.2	47.8	25.70	22.64	.....	.....	2	26	85	.....	40	
22	Missouri.....	12	40	55.9	49.9	20.63	18.45	1	.....	1	33	4	.....	1	
23	New Hampshire.....	9	37	55.0	50.3	20.09	18.38	.....	.....	1	2	24	.....	10	
24	New York.....	13	59	52.7	45.3	23.26	19.62	1	2	11	27	9	.....	9	
25	Ohio.....	7	35	56.6	49.6	19.11	16.97	.....	.....	1	6	17	.....	8	
26	Pennsylvania.....	9	27	55.6	51.1	20.75	18.25	.....	.....	1	1	15	.....	7	
27	Wisconsin.....	4	13	58.8	51.4	23.26	20.30	1	.....	.....	9	1	.....	2	
28	Other States.....	10	24	57.1	47.8	22.63	19.44	.....	.....	2	15	5	.....	.....
	Total.....	124	427	55.0	48.5	23.68	20.79	3	9	51	251	91	.....	22	
	Heel trimmers or shavers, male:														
29	Illinois.....	4	22	54.0	46.8	33.18	29.42	.....	.....	3	12	7	.....	.....
30	Maine.....	4	14	58.1	53.5	22.13	20.42	.....	.....	1	10	1	.....	2	
31	Massachusetts.....	46	134	54.2	45.0	26.63	22.00	2	11	14	76	29	.....	2	
32	Missouri.....	12	34	55.7	51.0	21.52	20.00	.....	.....	1	1	25	.....	2	
33	New Hampshire.....	9	26	55.0	52.4	19.79	18.68	.....	.....	.....	.....	6	.....	.....
34	New York.....	13	46	52.9	47.1	26.85	23.44	.....	.....	2	16	17	.....	7	
35	Ohio.....	7	26	56.2	45.5	23.28	18.45	.....	.....	1	9	13	.....	.....
36	Pennsylvania.....	9	31	55.2	48.5	17.25	14.52	1	2	.....	16	12	.....	.....
37	Other States.....	12	28	57.7	52.2	22.84	21.11	.....	.....	2	21	3	.....	2	
	Total.....	116	361	54.9	47.7	24.57	21.18	3	17	34	209	83	.....	15	

TABLE D.—AVERAGE FULL-TIME HOURS, HOURS ACTUALLY WORKED, AND NUMBER OF EMPLOYEES WORKING EACH CLASSIFIED PER CENT ONE WEEK, BY STATES, 1916—Continued.

Line No.	Occupation, sex, and State.	Number of establishments	Number of employ-ees.	Average full-time hours per week of establish-ments	Average hours actually worked per employ-ee during one week.	Average full-time weekly earnings.	Average am't actually earned per employ-ee during one week.	Employees working each classi-fied per cent of full time during one week.					
								Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 and under 100 per cent.	100 per cent.	Over 100 per cent.

BOTTOMING DEPARTMENT—Continued.

1	Heel breasters, male:																	
2	Massachusetts.....	41	86	54.4	48.1	\$19.28	\$16.82	1	2	11	46	24	2					
3	Missouri.....	9	23	56.2	50.5	14.29	12.86		1	1	16	2	3					
4	New Hampshire.....	9	17	55.0	52.5	15.72	15.00											
5	New York.....	12	27	52.8	50.2	18.44	17.39				12	8	10					
6	Ohio.....	6	16	56.9	52.8	18.67	17.12			2	6	4	4					
7	Pennsylvania.....	9	20	55.4	50.5	13.44	11.95			2	10	7	1					
	Other States.....	20	37	56.9	49.3	17.52	15.79	2		5	20	7	3					
	Total.....	106	226	55.1	49.7	17.56	15.77	3	3	21	119	57	23					
8	Edge trimmers, male:																	
9	Illinois.....	4	45	54.0	48.6	29.87	26.96			2	28	15						
10	Maine.....	5	46	58.1	51.4	24.06	21.06	1		9	20	5	11					
11	Massachusetts.....	50	458	54.2	48.6	24.16	21.53	2	6	51	247	149	3					
12	Missouri.....	12	100	55.7	50.2	20.82	18.87			1	6	71	18					
13	New Hampshire.....	9	110	55.0	51.8	21.00	19.90	2	1	6	43	57	1					
14	New York.....	13	112	53.0	49.6	23.62	22.05		2	11	37	44	18					
15	Ohio.....	7	69	56.3	46.4	20.59	16.72		2	20	40	7						
16	Pennsylvania.....	9	49	55.0	50.3	20.73	18.79			6	30	12	1					
17	Wisconsin.....	4	22	58.6	54.6	20.29	18.97				19	3						
	Other States.....	10	37	57.4	53.1	25.09	23.43		1	1	20	5	10					
	Total.....	123	1,048	54.8	49.6	23.25	20.94	5	13	112	555	315	48					
18	Edge setters, male:																	
19	Illinois.....	4	47	54.1	49.0	28.28	25.94		1	3	25	18						
20	Maine.....	5	26	58.0	50.0	23.71	20.45			7	15	2	2					
21	Massachusetts.....	51	361	54.2	47.6	23.58	20.54	2	8	41	195	111	4					
22	Minnesota.....	3	16	60.0	51.4	22.68	19.44			1	15	6	9					
23	Missouri.....	12	92	55.8	50.0	20.13	18.21		1	6	70	6						
24	New Hampshire.....	9	79	55.0	51.1	20.10	18.76	2		5	50	22						
25	New Jersey.....	3	14	55.0	50.3	26.07	23.90				14							
26	New York.....	14	116	52.5	48.3	23.04	21.28		2	7	45	50	12					
27	Ohio.....	7	83	56.3	44.8	21.10	16.29		12	14	46	9	2					
28	Pennsylvania.....	9	67	55.5	51.5	21.92	20.26			3	44	16	4					
29	Wisconsin.....	4	19	58.7	54.9	19.54	18.34				16	3						
	Other States.....	4	15	55.5	55.2	22.27	22.08				8	1	6					
	Total.....	125	935	54.8	48.8	22.70	20.14	4	24	87	543	238	39					
30	Heel scourers, male:																	
31	Illinois.....	4	18	54.0	49.3	20.18	18.71			1	10	7						
32	Maine.....	5	17	58.0	50.4	21.92	19.20	1		2	8	1	5					
33	Massachusetts.....	48	191	54.1	41.8	20.41	17.72	2	2	29	98	52	8					
34	Minnesota.....	3	11	60.0	50.3	22.33	18.90			2	8	1						
35	Missouri.....	12	56	56.3	50.6	16.11	14.79	1	1	2	41	9	2					
36	New Hampshire.....	8	44	55.0	51.9	14.65	13.82			3	20	17	4					
37	New York.....	13	62	53.3	50.0	20.70	19.23			4	23	24	11					
38	Ohio.....	7	36	56.0	49.1	19.12	16.79		1	2	26	5	2					
39	Pennsylvania.....	9	30	55.2	52.9	14.44	13.65				18	12						
	Other States.....	10	26	57.2	53.5	18.29	17.21		1		19	5	1					
	Total.....	119	491	55.0	47.5	18.96	17.00	4	5	45	271	133	33					

FULL-TIME WEEKLY EARNINGS AND AMOUNTS ACTUALLY EARNED, OF FULL TIME AND EARNING EACH CLASSIFIED AMOUNT, DURING

Employees earning each classified amount during one week.															Line No.
Under \$3.	\$3 and under \$4.	\$4 and under \$5.	\$5 and under \$6.	\$6 and under \$7.	\$7 and under \$8.	\$8 and under \$9.	\$9 and under \$10.	\$10 and under \$11.	\$11 and under \$12.	\$12 and under \$14.	\$14 and under \$16.	\$16 and under \$18.	\$18 and under \$20.	\$20 and under \$25.		$25 and over.

BOTTOMING DEPARTMENT—Continued.

	1		1		3		4	4	2	7	13	13	17	16	5	1		
		1			1		1	5	2	4	3	1	4			2		
							1	1	2	3	4	1	1	3		3		
								1	1	3	12	2	4	1	3	4		
								1	5	5	5	5	2	3	1	5		
		1			4		4	1	4	4	1	1	3	1	1	6		
	2		1		1		1	1	2	7	2	1	7	6	4	7		
	2	1	3	1	5	6	7	12	7	9	33	40	19	38	30	13		
										1	1	1	4	12	25	8		
										2	4	8	5	13	12	9		
	3		1		1		1	5	3	7	23	31	55	62	150	116	10	
							2	1	1	2	7	16	7	21	29	13	11	
	2						1	1			3	12	16	17	47	11	12	
										2	3	8	10	14	40	32	13	
										4	11	19	8	7	13	4	14	
								2		1	13	4	4	11	7	7	15	
											2	4	4	4	6	2	16	
					2	1			2		2	2	2	3	8	15	17	
	5		4	1	2	5	3	9	9	19	65	101	115	148	325	237		
					1	1				1		5	2		5	32	18	
												4	1		9	5	19	
	1		1	1	1		3	1	7	3	28	35	55	49	94	82	20	
										1	2	2		3	6	2	21	
											8	12	16	8	36	5	22	
	1				1	3			2	2	3	9	13	13	33	3	23	
											1	1	1		3	8	24	
								2		3	9	11	12	12	36	30	25	
								1	4	5	6	7	14	15	10	17	26	
										1	2	2	8	7	12	25	10	
											1		6	4	4	2	27	
														5	7	3	28	
	2	1	2	2	5	5	6	5	16	19	60	102	134	117	275	184	29	
					1				3			1	1	2	8	2	30	
		1					1				1	2	2	2	4	4	31	
	1		1			1	3	5	4	4	24	28	30	31	49	10	32	
								1			2	1	1	1	4	1	33	
	2								4	6	15	11	8	2	4	3	34	
											5	10	11	5	4	1	35	
										2	3	4	6	9	8	25	5	36
											8	7	6	4	6	2	37	
											1	5	8	4	1	2	1	38
											3	7	1	3	2	5	3	39
	3	1	1	5	3	3	9	13	14	22	76	76	69	57	108	31		

TABLE D.—AVERAGE FULL-TIME HOURS, HOURS ACTUALLY WORKED, AND NUMBER OF EMPLOYEES WORKING EACH CLASSIFIED PER CENT ONE WEEK, BY STATES, 1916—Continued.

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours worked per week of establishments	Average hours actually worked per employee during one week.	Average full-time weekly earnings.	Average amt actually earned per employee during one week.	Employees working each classified per cent of full time during one week.					
								Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 and under 100 per cent.	100 per cent.	Over 100 per cent.

BOTTOMING DEPARTMENT—Concluded.

1	Heel burnishers, male:																	
2	Illinois.....	4	13	54.1	49.6	\$27.80	\$25.62				1	7	5					
3	Maine.....	5	11	58.1	51.9	21.92	19.87				2	6	1	2				
4	Massachusetts.....	50	143	54.4	48.1	18.77	16.48			3	13	93	33	1				
5	Missouri.....	12	37	56.5	52.1	14.39	13.35				2	25	7	3				
6	New Hampshire.....	9	32	55.0	52.3	14.88	14.23				1	19	11	1				
7	New York.....	13	41	52.9	48.7	18.78	17.32			1	4	15	14	7				
8	Ohio.....	7	28	57.0	48.8	17.55	14.82			1	5	17	4	1				
9	Pennsylvania.....	9	22	55.3	52.1	14.96	13.70			1	1	7	10	3				
8	Wisconsin.....	4	15	59.0	51.9	14.42	12.74			1			10	3				
10	Other States.....	9	16	57.3	52.6	19.27	17.69						14	2				
	Total.....	122	358	55.2	49.8	17.90	16.08			1	6	29	213	90	19			
11	Buffers, male:																	
12	Illinois.....	4	19	54.7	49.0	20.58	18.70				1	12	6					
13	Maine.....	5	18	57.9	47.3	23.27	18.83			1	1	3	8	1	4			
14	Massachusetts.....	49	225	54.4	48.1	18.46	16.17			1	10	18	134	61	1			
15	Missouri.....	12	53	55.9	51.0	15.66	14.30				1	3	31	11	7			
14	New Hampshire.....	9	59	55.0	52.8	15.78	15.14					3	23	33				
16	New York.....	14	50	52.8	51.5	19.22	18.59					2	11	24	13			
17	Ohio.....	7	30	55.8	47.9	20.65	17.55					3	20	7				
18	Pennsylvania.....	9	36	55.0	53.4	13.01	12.59						18	14	4			
19	Other States.....	14	33	57.1	51.0	18.83	16.92			1			25	5	2			
	Total.....	123	523	54.9	49.8	17.97	16.16			2	13	33	282	162	31			

FINISHING DEPARTMENT.

20	Trees or ironers, hand, male:																	
21	Illinois.....	4	86	53.8	50.3	\$19.92	\$18.95				1	8	18	59				
21	Maine.....	5	60	58.0	50.0	17.82	15.45			3		12	22	10	13			
22	Massachusetts.....	47	645	54.5	50.7	16.98	15.49			3	32	22	229	332	27			
23	Minnesota.....	3	20	60.0	53.8	18.06	16.45					1	10	9				
24	Missouri.....	8	100	55.7	49.4	13.13	11.75			1	3	9	42	41	4			
25	New Hampshire.....	7	86	55.0	52.1	14.93	14.16				1	7	46	24	8			
26	New Jersey.....	2	13	55.0	51.0	26.83	24.84						13					
27	New York.....	9	99	53.0	48.0	15.47	13.93				4	7	57	20	11			
28	Ohio.....	5	65	56.7	51.9	19.54	12.61			1	2	7	19	16	20			
29	Pennsylvania.....	5	36	56.2	59.3	11.80	12.68						2	25	9			
30	Wisconsin.....	4	22	58.2	51.5	16.67	14.80			1		1	16	2	2			
31	Other States.....	4	36	55.2	50.6	13.76	12.74			1	1		24	9	1			
	Total.....	103	1,268	55.0	50.8	16.35	15.01			11	43	74	498	547	95			
32	Trees or ironers, hand, female:																	
33	New York.....	4	42	51.0	44.8	11.52	10.16				1	8	15	4	14			
34	Ohio.....	3	37	53.6	45.3	10.28	8.76				1	5	27	4				
34	Pennsylvania.....	3	24	54.0	51.4	8.47	8.10					3	3	13	5			
35	Other States.....	4	39	54.3	50.8	8.58	8.07				1	1	23	14				
	Total.....	14	142	53.1	47.7	9.87	8.87				3	17	68	35	19			

FULL-TIME WEEKLY EARNINGS AND AMOUNTS ACTUALLY EARNED, OF FULL TIME AND EARNING EACH CLASSIFIED AMOUNT, DURING

Employees earning each classified amount during one week.														Line No.	
Under \$3.	\$3 and under \$4.	\$4 and under \$5.	\$5 and under \$6.	\$6 and under \$7.	\$7 and under \$8.	\$8 and under \$9.	\$9 and under \$10.	\$10 and under \$11.	\$11 and under \$12.	\$12 and under \$14.	\$14 and under \$16.	\$16 and under \$18.	\$18 and under \$20.		\$20 and under \$25.	$25 and over.

BOTTOMING DEPARTMENT—Concluded.

					1		1				1	1	1		7	1
										2	1	2	9	1	6	2
		1	1	1	1	1	1	2	5	12	28	21	24	9	30	7
										2	4	2	3	2	7	3
										1	6	6	4	2	1	4
			1							3	3	5	2	10	6	5
				1		1	1	2	2	3	7	4	3	2	1	1
					2				1	2	5	3	2	2	1	7
1						1	1	1		3	3	2	3	1	1	8
								1	1		4	1	4	1	4	9
1		1	4	2	5	7	17	17	26	69	51	49	31	54	24	10
						1	1		1		3	2	6	3	2	11
	1		1							1	3	1		9	2	12
1		1		2	4	3	2	5	11	28	54	41	31	38	4	13
			1	1	1	1	3	4	3	9	17	6	1	6	1	14
					3		2	5		8	15	13	9	4		15
							1	1	1	5	6	6	12	15	3	16
						1	1	1		4	4	7	2	9	2	17
		1	2	2	3	3	1	2	2	6	9			3	2	18
		1							4	6	6	4		3	3	19
1	1	3	4	5	11	9	10	18	22	67	117	80	67	90	18	

FINISHING DEPARTMENT,

1		1	1	1		4	1	5		3	5	9	21	19	15	20
3							1		4	12	12	8	14	6		21
2	2	1	4	6	7	12	12	28	30	119	127	147	80	45	23	22
						1	2	1	2	1	2	3	2	5	1	23
4	1	2	2	5	5	5	7	10	7	20	16	13	3			24
			1		2	1	2	4	5	26	21	15	9			25
										1		1	1	2	9	26
	1	1		1	1	2	8	6	12	22	19	14	1	11		27
2		1	1	1	5	1	3	7	7	12	13	3	7	2		28
			4	1	3	8	2	1	5	4	2	1	4	1		29
1								1	2	2	7	7	2			30
2				1	1	1	2	1	3	10	10	1	3	1		31
15	4	6	9	19	22	30	46	65	73	232	237	222	144	95	49	
1	1			4	3	5	2	8	6	8	4					32
1		2	2	6	2	1	2	18	3							33
		1	3	2	7	6		2	1	2						34
1	1	4	5	2	4	6	9	2	2	2	1					35
3	2	7	10	14	16	18	13	30	12	12	5					

TABLE D.—AVERAGE FULL-TIME HOURS, HOURS ACTUALLY WORKED, AND NUMBER OF EMPLOYEES WORKING EACH CLASSIFIED PER CENT ONE WEEK, BY STATES, 1916—Concluded.

Line No.	Occupation, sex, and State.	Number of establishments	Number of employees.	Average full-time hours per week of establishments	Average hours actually worked per employee during one week.	Average full-time weekly earnings.	Average am't actually earned per employee during one week.	Employees working each classified per cent of full time during one week.					
								Under 25 per cent.	25 and under 50 per cent.	50 and under 75 per cent.	75 and under 100 per cent.	100 per cent.	Over 100 per cent.

FINISHING DEPARTMENT—Concluded.

1	Treers or ironers, machine, male:																			
2	Massachusetts.....	7	129	53.7	49.6	\$14.02	\$13.07					12	71	44	2					
3	Missouri.....	8	74	55.3	50.9	14.03	12.79	1	5			2	41	15	10					
4	New Hampshire.....	5	84	55.0	54.5	14.14	13.99					2	20	29	33					
5	Pennsylvania.....	3	17	53.8	54.1	16.31	16.28						7	3	7					
	Other States.....	4	41	55.3	49.4	17.35	15.77			1	2		36	1	1					
	Total.....	27	345	54.7	51.3	14.56	13.71	1	6	18	175	92	53							

OTHER EMPLOYEES (ALL DEPARTMENTS).

Male:																				
6	Illinois.....	4	887	54.3	48.5	\$13.50	\$12.24	15	28	64	353	370	57							
7	Maine.....	5	806	58.0	52.4	14.23	13.00	17	34	78	285	218	174							
8	Massachusetts.....	52	8,980	54.2	48.9	14.19	12.70	130	326	863	3,086	4,063	512							
9	Minnesota.....	3	372	60.0	53.4	14.53	12.90		6	15	136	207	8							
10	Missouri.....	14	2,648	56.0	50.7	12.65	11.52	38	69	156	1,329	811	245							
11	New Hampshire.....	11	2,580	55.1	52.7	12.44	11.98	33	61	97	736	1,379	274							
12	New Jersey.....	3	231	55.0	54.7	14.25	14.13	1	1	1	65	101	62							
13	New York.....	14	2,953	52.9	49.5	14.19	13.24	21	67	174	951	1,240	500							
14	Ohio.....	6	1,226	57.1	49.6	11.83	10.36	18	42	149	667	271	79							
15	Pennsylvania.....	9	1,434	55.8	53.4	11.92	11.45	10	33	81	421	604	285							
16	Wisconsin.....	4	440	58.9	52.6	11.43	10.43	7	12	29	269	98	25							
17	Other States.....	4	330	55.4	50.9	12.97	12.27	3	9	10	142	153	13							
	Total.....	129	22,887	54.9	50.3	13.45	12.31	293	688	1,717	8,440	9,515	2,234							
Female:																				
18	Illinois.....	4	447	54.5	47.7	9.57	8.42	2	15	51	256	102	21							
19	Maine.....	5	621	57.9	52.9	10.59	9.86	13	23	48	259	129	149							
20	Massachusetts.....	52	5,698	53.6	47.4	10.37	9.13	65	231	601	2,227	2,489	85							
21	Minnesota.....	3	213	54.0	49.2	10.01	9.09		1	3	97	105	7							
22	Missouri.....	12	1,526	53.7	47.8	8.38	7.48	19	33	136	804	531	3							
23	New Hampshire.....	11	1,234	55.0	51.3	10.07	9.40	17	29	67	423	688	10							
24	New Jersey.....	3	180	54.6	51.4	8.57	7.98		2	9	97	47	25							
25	New York.....	14	1,713	51.6	47.5	10.53	9.67	13	46	119	632	684	219							
26	Ohio.....	7	1,090	53.8	47.4	8.62	7.64	15	30	128	477	413	27							
27	Pennsylvania.....	9	972	53.4	50.3	7.62	7.06	9	23	44	415	457	24							
28	Wisconsin.....	4	413	55.0	49.4	7.59	6.89	4	10	45	145	197	12							
29	Other States.....	4	254	55.2	51.4	8.40	7.86		6	13	138	94	3							
	Total.....	128	14,361	53.8	48.4	9.67	8.70	157	449	1,264	5,970	5,936	585							

FULL-TIME WEEKLY EARNINGS AND AMOUNTS ACTUALLY EARNED, OF FULL TIME AND EARNING EACH CLASSIFIED AMOUNT, DURING

Employees earning each classified amount during one week.															Line No.
Under \$3.	\$3 and under \$4.	\$4 and under \$5.	\$5 and under \$6.	\$6 and under \$7.	\$7 and under \$8.	\$8 and under \$9.	\$9 and under \$10.	\$10 and under \$11.	\$11 and under \$12.	\$12 and under \$14.	\$14 and under \$16.	\$16 and under \$18.	\$18 and under \$20.	\$20 and under \$25.		$25 and over.

FINISHING DEPARTMENT—Concluded.

2	1	3	6	4	10	12	21	21	25	80	67	47	17	29	.....	1
.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5

OTHER EMPLOYEES (ALL DEPARTMENTS).

25	12	29	38	44	71	70	73	65	60	115	82	65	44	57	37	6
29	14	16	15	48	38	57	87	53	38	104	82	55	42	82	46	7
174	129	*216	312	418	500	467	727	705	535	1,407	1,117	706	716	619	232	8
1	1	3	10	27	20	24	32	30	18	64	50	23	32	27	10	9
76	40	103	125	204	185	188	211	241	165	369	252	203	100	110	76	10
58	28	46	59	96	173	165	315	247	205	434	316	153	130	100	55	11
3	2	9	9	15	11	8	18	7	9	25	32	22	20	23	18	12
37	34	62	105	143	182	156	186	196	187	428	356	298	203	263	107	13
37	36	76	94	79	84	107	102	97	95	165	95	80	38	32	9	14
39	20	57	117	131	131	113	110	98	91	144	103	70	66	68	76	15
13	15	23	33	34	37	42	35	32	31	49	35	19	21	16	5	16
9	5	12	12	15	15	22	28	28	25	46	40	23	23	12	15	17
501	336	652	929	1,254	1,447	1,419	1,924	1,799	1,459	3,350	2,570	1,717	1,435	1,409	686	
13	21	42	33	57	51	46	44	47	26	37	14	11	2	3	.....	18
31	11	29	41	51	48	69	59	45	38	96	45	31	21	4	2	19
149	168	275	383	566	632	561	717	668	393	721	266	102	47	45	5	20
.....	1	8	23	34	30	19	22	20	15	23	8	6	2	2	.....	21
70	60	169	215	207	231	159	135	86	46	95	30	9	9	3	2	22
40	26	29	55	109	164	139	166	130	112	177	47	15	11	9	5	23
1	5	16	21	32	27	21	21	10	9	11	3	2	.....	.....	1	24
33	33	61	111	162	184	201	195	179	125	216	121	52	19	18	3	25
48	42	87	164	154	131	130	98	101	46	47	32	8	1	1	.....	26
40	36	106	194	197	133	75	56	34	28	36	15	14	6	2	.....	27
24	33	47	61	75	44	36	30	23	21	11	6	1	.....	.....	1	28
9	5	45	27	29	20	25	31	25	13	12	8	3	1	1	.....	29
458	441	914	1,328	1,673	1,695	1,481	1,574	1,368	872	1,482	595	254	119	89	18	

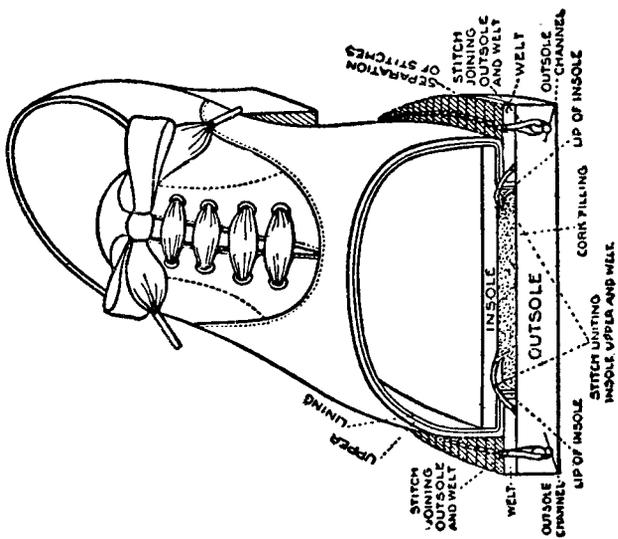


FIG. 1.—CROSS SECTION OF A GOODYEAR WELT SHOE.

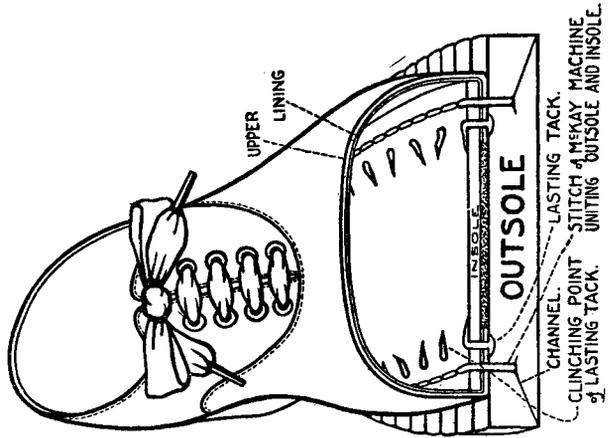


FIG. 2.—CROSS SECTION OF A McKay MACHINE SEWED SHOE.

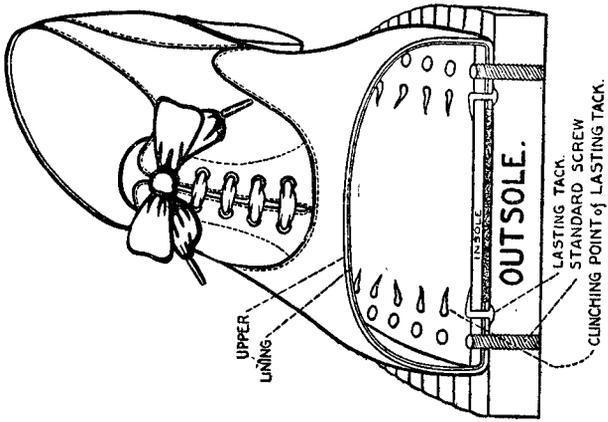


FIG. 3.—CROSS SECTION OF A STANDARD SCREWED SHOE.

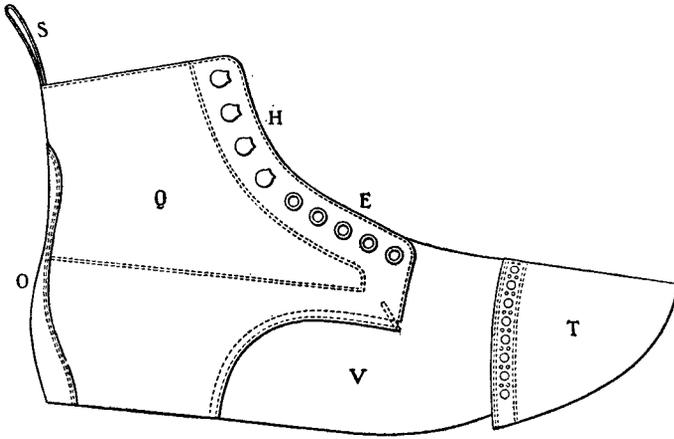


FIG. 4.—A BLUCHER SHOE.

Q, quarter; O, outside heel stay; S, strap; V, vamp; T, tip; H, hooks; E, eyelets.

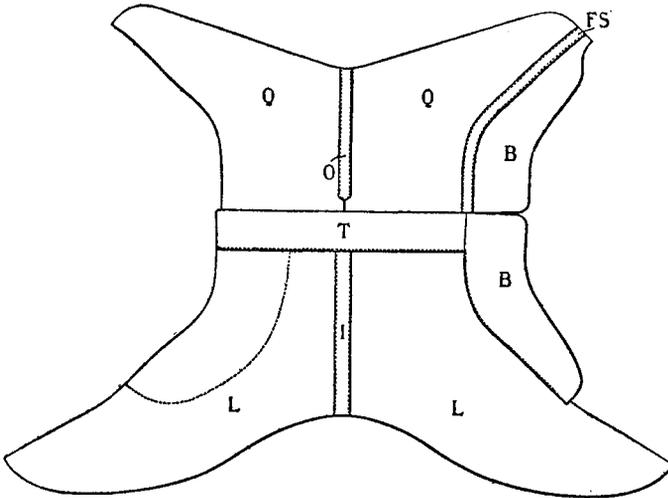


FIG. 5.—UPPER FOR WOMAN'S WHOLE VAMP BUTTON SHOE, HAVING STRAIGHT BUTTON FLY.

Q, Q, quarters; O, outside stay; L, L, lining; B, B, button fly; F, S, front stay for button fly; l, inside stay; T, top facing.



FIG. 6.—GOODYEAR WELT SHOE.

1, last; 2, upper; 3, insole; 4, shoe lasted; 5, welt partly sewed on; 6, welt entirely sewed on; 7, outsole; 8, outsole laid, channel lip turned up; 9, sole stitched on; 10, heel in place; 11, heel trimmed.

APPENDIX A.—DESCRIPTION OF OCCUPATIONS.

OUTLINE OF METHODS.

In the manufacture of shoes there are several methods of attaching the soles to the uppers, and shoes are designated as Welts McKays Turns, etc., according to the method used.

In a welt shoe a narrow strip of leather called a welt is stitched around the edge of the insole in such a manner as to fasten together the welt, upper, and insole. The stitches, however, do not extend entirely through the insole, and the inside of the sole is left perfectly smooth. The welt extends beyond the edge of the shoe, and to it the outsole is stitched.

In a McKay shoe, the outsole, upper, and insole are sewed together, without a welt, the stitches passing entirely through the insole, making a seam on the inside of the shoe. This seam is afterwards covered with a "sock lining."

In a turned shoe the sole is fastened to the upper wrong side out, and the shoe is afterward turned, whence the name.

In wood or metal fastened shoes, the soles are fastened to the uppers and insoles with wooden pegs, wire nails, or screws, instead of being sewed with thread.

The proportion of shoes manufactured by the different methods in 1914 is shown in the following table which is based on figures published by the United States Census Office. These figures do not include slippers.

PER CENT OF SHOES MANUFACTURED BY SPECIFIED METHODS, OF TOTAL SHOES MANUFACTURED, IN 1914.

	Welts.	McKays.	Turns.	Wood or metal fastened.	Total.
Men's shoes.....	65	15	1	19	100
Boys' and youths' shoes.....	19	59	(1)	23	100
Women's shoes.....	35	45	19	1	100
Misses' and children's shoes....	16	53	25	1	100
Fiber shoes.....	6	6	89	(1)	100
All kinds.....	41	37	12	10	100

¹ Less than 1 per cent.

It will be seen that by far the larger per cent of shoes are Welts and McKays, the former being the leading class in men's shoes and the latter in boys,' women's, and children's shoes. Turn shoes are

necessarily light, with soles thin and of a good quality of leather in order that they may be turned without breaking or cracking the leather. They are worn almost exclusively by women and children. Fiber shoes are largely made by the turn method. The wood or metal sole-fastening method is used on cheap shoes, for men and boys' wear. Only 1 per cent of women's and children's shoes are made by this method.

The data in this report are from establishments whose principal or only products are Welts, McKays, Turns, and standard-screw or loose-nailed shoes, for men, women, and children. No data relating to pegged shoes or to specialties, such as slippers, leggings, felt boots, etc., are included.

A shoe factory usually has the following or corresponding departments: Cutting, sole leather, fitting or stitching, lasting, bottoming, finishing, and packing.

In the cutting department are cut the several parts of the uppers, the lining, and the trimmings. These parts pass to the fitting or stitching department, where they are sewed together, forming the whole upper.

In the sole-leather department the soles are cut, and heels, counters, and toe boxes made. Frequently these parts are bought ready-made from factories making a specialty of such manufacture.

In the lasting department the upper, insole, counter, and box are assembled and fitted together on the shoe last. From this department the lasted shoe is sent to the bottoming department, where the welt (in welt shoes) is sewed on, the outer sole sewed on, the heel attached, and the heel and the edge of the sole are trimmed to shape and finished.

In the finishing department the shoe is smoothed with a hot iron, scratches are rubbed down, stains removed, and the shoe is given a final cleaning and inspection. In some factories this department, rather than the bottoming, includes the operations incident to the polishing of the edge and bottom of the soles. From this department the shoes go to the packing department, where they are boxed and cased for shipment.

A description of the occupations in a representative factory making welt shoes is given below, in, as far as possible, the order of manufacture. As several operations may be going on at the same time, it is not possible to give a strictly consecutive order. To illustrate, while the uppers are being cut, skived, and stitched in one part of the factory, the soles, counters, etc., are being prepared in another department.

The words "hand" or "machine" in connection with each occupation term indicates whether the employee works by hand or operates a machine.

The list of occupations is understood to be complete for the one representative welt-shoe factory studied, but probably it does not include all occupations that may be found in other welt-shoe factories.

Following the descriptions of the occupations in the manufacture of welt shoes, are those of McKays, Turns, etc., as found in representative factories.

The occupations named in italic type are those for which data as to wages and hours of labor are given in the tables of this report. Following the descriptions of occupations charts are also presented showing the order and relation of the several occupations.

WELT SHOES.

CUTTING DEPARTMENT.

Pattern Boys, Hand: For each vamp, top, foxing, etc., there must be a pattern, or die, and for each of these a different size, width, and style, and a right and a left. Pattern boys get out the patterns for each job of work, as shown by the order tag, and place them with the stock for each case to be cut. Dies for machine cutters are usually gotten out a few at a time, and delivered to the cutters as wanted, and those with which the cutters have finished are returned to the racks.

Vamp and Whole-Shoe Cutters, Hand: This occupation includes the men who cut by hand the entire top or upper outside of the shoe, or the men who cut the vamp and also possibly some of the other parts of the top. This term does not, however, include cutters of minor parts only. The vamp is the most important part of the upper and requires the greatest skill in cutting. It consists of the part or parts of the upper attached to the sole. The upper, according to the style of the shoe, may have other parts also, as quarters, tongue, tip, backstay, and foxing. The operator has a bench upon which he spreads the skin; he lays the pattern in the proper place and draws a knife along its edge, cutting the part to the desired shape. For each different part of the upper there is a separate pattern. Incidentally to the outside cutting care must be exercised in selecting like qualities and weights of stock for the same parts in a pair of shoes. These parts are tied up in packages, all of each style or size together. The size, etc., are marked on the outside piece of each package. These packages go next to the sorters.

Vamp and Whole-Shoe Cutters, Machine: The parts of the shoe described above are sometimes cut by machine instead of by patterns and a knife. The operators use dies operated by a power press. Different dies are required for each part of each style and size of shoe. The cutting board is similar to that used by the hand worker, but has a beam over it which can be swung either to the left or right and to any position over the board. The cutter places the die in the desired position on the leather, grasps the handle of the beam of the machine, and swings it over the die with a downward pressure. On the handle of the arm a clutch is placed in operation, which brings the beam downward, pressing the die through the leather. After the cut, the beam automatically returns to its full height, swings to the left or right out of the way of placing the next die, and remains there until the handle is pressed again.

Top Cutters, Hand: This occupation includes men who cut by hand only the top pieces of the shoe. These operators are employed only where the top is to be of a different material or grade of leather from that of the vamp or lower part of the shoe, and the matching of these parts will therefore not be necessary. The method employed in cutting is similar to that used by vamp and whole-shoe cutters, hand.

Top Cutters, Machine: These operators cut the same parts as stated for top cutters, hand. The method employed in cutting is similar to that used by vamp and whole-shoe cutters, machine.

Throaters, Hand: The throat of a vamp is the inside curved part. Vamps are sometimes cut and this part left to be trimmed out later. The cutting out of this part when done separately is known as throating. The operator uses a pattern and knife in a similar manner to that employed by cutters, vamp and whole shoe, hand.

Trimming Cutters, Hand: The remnants of upper leather from the cutters, vamp and whole shoe, are brought to these operators, who cut them into backstays, tongues, eyelet facings, etc. These are cut either in whole pieces or else in halves which are later stitched together. The operator spreads the remnants on a cutting block, places the die wherever he can cut a part, and strikes it with a maul. When the die is full of these cut parts they are removed and placed in boxes.

Upper Sorters, Hand: The sorters examine the vamps, uppers, tips, etc., to see that there are no spots, holes, or defects of any character that would spoil the finished shoe. Pieces of the same quality and color are matched so as to enter the same shoes, and thin or flabby pieces are marked to be doubled. These pieces go next to the casers.

Upper Casers, Hand: The casers count out the correct number of pieces for each case or lot, putting all pieces of each size together and in their order, as indicated by the tag for each case. These are now ready for the size painter or marker.

Cripple Cutters, Hand: This operator is a regular vamp and whole shoe cutter, hand, detailed to this work. The defective parts are returned to him and he cuts duplicate pieces to take their places.

Size Markers, Machine: The size and width are marked on each piece by means of small holes punched in the edge of the piece. The operator raises the arm of the machine by pressure on a foot lever. The pieces are placed one at a time under the arm and punched.

Upper Skivers, Machine: Skiving consists of cutting away, on the flesh side, the edge of each tip, vamp, foxing, top, etc., which shows in the completed shoe, so that the edge may be turned and pasted back, thus giving a finished rather than a raw edge, of the same thickness as the other parts of the leather. The machine used has a sharp-edged revolving disk so shaped as to cut the desired bevel or shoulder on the leather fed to it. Both men and women are employed in this occupation.

Lining Cutters, Hand: The hand cutter receives the cloth folded 8 to 12 thick. He lays the pattern on the cloth and draws a knife along the edge of the pattern, cutting through the several thicknesses of cloth.

Lining Cutters, Machine: The lining cloth comes to the cutter folded from 20 to 40 thick. It is put on the machine table, and the cutter places the die so as to cut the maximum number of pieces from the material. A foot lever is pressed, which releases a clutch, bringing the head of the machine onto the die, pressing it through the material. The head automatically returns to its original position.

Assemblers, Hand: As the operations on the several parts of the upper and lining are completed, these packages of cut parts are sent to the assembler, who arranges all packages for each job in a separate group. When all parts for a case of shoes are in, the material is ready for the stitching room.

SOLE-LEATHER DEPARTMENT.

Outsole Cutters, Machine: The operator cuts the outsole from a side of leather by means of a die and a heavy descending power beam. The leather is laid upon the cutting table, the cutter places the die, and with his foot presses a lever, releasing the beam, which comes down upon the die with sufficient force to press it through the leather, after which it automatically returns to its original position. The operator sets the die so as to have as little waste leather as possible, and to have the same quality of leather throughout the sole.

Outsole Sorters and Graders, Hand: Outsole sorters examine the grain side of all soles and separate them according to quality with regard to durability, which depends on the texture and firmness of the leather. Grading is the separation made with regard to the thickness of the sole. This is done in order that shoes of the same class may all have soles of the same thickness. The soles are now placed in cases according to the above separations.

Outsole Skivers, Machine: The operator sets the machine to skive soles to any desired thickness, or "iron," an iron being one-forty-eighth of an inch. The soles are fed into the machine, where rolls carry them under a fixed knife, which shaves off the surplus leather from the flesh side, reducing them to an even thickness.

Outsole and Insole Rounders, Machine: The operator places a pattern of the desired size and shape into the machine. A sole is placed on this and clamped by means of the foot lever. A hand lever starts a little knife which travels around the edge of the pattern, trimming the sole to conform with it.

Insole and Tap Cutters, Machine: Insoles and taps are cut from the parts left by the outsole cutter, such as shoulders, bellies, shanks, etc., which are defective as to wearing qualities. These parts are sometimes split before cutting. The operation is the same as that of cutting outsoles.

Tap Skivers, Machine: This operation is similar to that of outsole skiving.

Outsole and Tap Cementers or Splicers, Machine: The soles and taps are each coated with cement by passing them under a cement-covered roller. They are next pressed together. This tap is used to increase the thickness of the sole, and only used where heavy soles are desired. It is on the inner side of the outsole.

Insole Sorters and Graders, Hand: This operation is similar to that of sorting and grading outsoles, except that there are not so many separations nor as much care needed.

Insole Skivers, Machine: This operation is similar to that of skiving outsoles.

Insole Stampers and Slashers, Machine: The insoles are placed in this machine one at a time. A slashing device makes two straight cuts on the flesh side of the insole, extending from each edge about one-third of the distance across the insole. This slash indicates the location for the heel and serves the channeler and welter as a guide for starting and ending these subsequent operations; the end of the welt is also trimmed to this line in the butting operation. During the slashing operation this machine also imprints the size number on the upper side of the insole, and if the union trade-mark of the workers is used, it is stamped on during the same operation.

Insole Channelers, Machine: The channeler of welt insoles places the edge of each sole into the channeling machine and guides it around the entire edge, beginning at the heel. The machine cuts a little horizontal slit in the edge of the insole, extending toward its center. It also cuts a small slit and channel in the surface back from the edge, extending diagonally toward the edge.

Insole and Outsole Channelers, Machine: Data for Welt insole channelers and for McKay and Turn outsole channelers are combined in the tables of this report under the term insole and outsole channelers, machine.

Insole-Lip Turners, Machine: The channel of the insole is held against a small bevel-shaped revolving wheel, which turns up the lip of the edge slit at a right angle from the insole, forming a shoulder to which, in later operations, the upper is lasted and the upper and the welt are sewed.

Insole-Lip Stitches, Machine: The lips of low-grade insoles are usually reinforced with canvas to give them strength. The insole-lip stitcher, starting at the heel, turns up both of the lips, made by the insole channeler, at right angles from the insole, and stitches them together around the sole back to the heel. This double lip is now ready for the canvas reinforcement.

Insole Clothers-in, Hand: A long strip of gummed canvas about the width of the insole is pulled by hand through a tank of warm water and pasted to the prepared

insole. This canvas is clipped off the proper length for each insole, by use of hand shears.

Insole Reinforcers, Machine: The operator places the canvas-covered insole into a machine and guides it around the entire surface of the upturned lip. The machine presses the canvas securely to the insole and against the inner side only of the upturned lip. A trimming device cuts the canvas off even with the top of the lip.

Insole Gemmers, Machine: Gemming is a slightly different method of reinforcing insoles. The strip of gummed canvas is slightly wider than that used in the former process. In this process it covers the entire insole and is pressed down closely to the insole and *both sides* of the upturned lip. A trimming device cuts off the over-lapping canvas at the edge of the insole.

Heel-Lift Cutters, Machine: The lifts for building heels are cut from remnants of the low grades of leather or from strips of composition leatherboard. The operator places these parts on the bed of a machine and holds a die in position as the machine is operated. The descending head of the machine forces the die through the leather or board.

Heel-Lift Gougers, Machine: The forms of all heels where they fit against the shoe have concave surfaces. In order to form this hollow, two lifts for each heel are scooped out in the center. The operator feeds the lifts into the machine which gouges the center as it passes between two rollers and out on the opposite side of the machine.

Heel Builders, Hand: The operator places his fingers in paste before picking up each lift, as it is put in place on the gauge block, and by this means paste is spread on each part as the heel is built. When the heel reaches the desired height a tack is driven through the center with a hammer. Two gouged lifts are placed first in each heel in order to give the concave form to the part that fits against the shoe. The heels are placed on a board side by side and later put into a press where they remain until the paste is dry. A rand, as described below, is used on some heels instead of the gouged lifts.

Rand Tackers, Machine: A rand is a narrow strip of leather made thin on one edge. It is used to tack around the edge of the heel (except at the breast) to give it a concave form where it joins the shoe. The operator holds the rand in place on the heel and guides it around under the nailing device of the machine. Gouged lifts, as described above, are used in some heels instead of this rand.

Heel Compressers, Machine: The heels are compressed in order to force the parts closer together, thereby increasing their wearing qualities. The operator places the heels, one at a time, into the carrier of the machine which conveys them to a mold the exact size of the heels. By means of heavy gearing each heel is subjected to great pressure. As the mold returns to its original position, the compressed heel is ejected from the opposite side of the machine.

Top-Lift Cutters, Machine: A top lift is the outer layer of leather on the heel next to the ground. It is cut from remnants of the best grades of sole leather. The operator spreads these remnants out over the bed of a die machine and places the die. The machine is operated by a foot lever which brings a beam down on the die, driving it through the leather. The beam then returns to its original position.

Top-Lift Sorters and Graders, Hand: Sorting is the separation into grades according to firmness and durability of the leather as to wearing quality. Grading is the separation made with regard to thickness. This is done in order that shoes of the same class will all have heels of the same height. The lifts are placed in cases according to the above separations.

Top-Lift Skivers, Machine: The operator sets the skiving machine to fit any desired lift thickness. The lifts are fed into the machine which shaves the surplus leather from the flesh side and reduces them to one desired thickness. The operation of the machine is similar to that used in skiving outsoles.

Top-Lift Compressers, Machine: Top lifts are compressed in order to bring the fiber of the leather close together, thereby giving greater wear. The operator places the

lifts, one at a time, into the carrier of the machine which conveys it to the mold of the exact size of the lifts. By means of heavy gearing and a crank shaft, the mold is pressed upward until it meets the head of the machine, subjecting it to tremendous pressure. The mold now returns to its original position, ejecting the compressed top lift out of the opposite side of the machine. The machine is kept running until it is necessary to change the mold to another size. An imprint of the size number is stamped on each lift during this pressure.

STITCHING DEPARTMENT.

Checkers, Hand: The packages of vamps, tips, linings, etc., for each case of shoes are checked as they are received from the cutting department. This is done in order to be sure that there is a package of each designated part of the shoe, as required by the tag for each case.

Tip Punchers, Machine: Holes or other ornamental designs are punched in the tip or outer toe piece by means of dies. These dies are fastened into the arm of a machine which is controlled by a foot lever. The tips are placed in position on the machine, one at a time. The descending arm punches the desired pattern through the edge of the tip.

Vamp Markers (for tips), Machine: A mark on each side of the vamp indicates to the tip stitcher the point where the vamp and tip shall be united. The operator presses a foot lever which raises an arm of the machine to which are attached two steel pins. The vamps are placed under this arm one at a time. When the foot pressure is released, the arm drops, causing the steel points to mark the vamps. When once the machine is set, the difference in size is taken care of by a small lever on the side of the machine.

Cementers (for folding), Hand: The edges of all parts of the upper which are to be folded have already been skived. These parts are now spread on a table, each lapping over the last, with only the skived edge exposed. The cement is spread over these edges with a hand brush.

Folders, Hand: The cemented edges of the upper are folded over by the fingers of the left hand, which are followed closely by the head of the hammer controlled by the right hand. Parts that do not stick properly are pounded with the hammer.

Folders, Machine: The cemented edges of the upper are placed, one at a time, under the blunt-edge blade of the machine. Pressure on a foot lever causes the blade to drop down and under the edge of the machine, thus folding and sticking each cemented edge. A hammer is used to flatten parts that do not stick properly.

Doublers, Hand: The thin or flimsy vamps, tops, etc., are reinforced by pasting to them pieces of lining material, known as doublers; these have already been cut the same shape as the parts which are to be doubled. These doublers are covered with cement by means of a hand brush and are then stuck to the pieces to be reinforced.

Crimpers (Blucher vamp), Machine: Blucher vamps are creased at the instep in order that they will better fit the shape of the lasts. The vertical blade of the machine by which this work is done is so shaped as to give the vamps the form of the instep. This blade works up and down between two heated plates. The vamps are placed under the blade which draws them slowly down between the heated plates, thereby giving them the desired form.

Tip Stitchers, Machine: The tip is placed across the front end of the vamp at the points already marked on each side of the vamp. These parts are united with either a single or double needle machine. The tip lining is also held under and stitched with these parts.

Box-Toe Stitchers, Machine: The stiffening for the toe is placed under the tip lining and stitched to the vamp. The material used for this stiffening becomes quite hard, after being dampened by the assembler.

Heel-Seam Closers, Machine: To close the vamp at the heel it is folded inside out. The two ends are held together and against a guard which gives a semifirm seam, when

stitched. Another method of closing is to use a welt between the ends of the vamp. This gives a different finish to the shoe. The same machine is used with a welt attachment.

Seam Rubbers-Down, Machine: The heel seam of vamps is placed over the arm of a rubbing device. The hand rubbing iron (one end of which is attached to this device) is rubbed back and forth over the seam to flatten it before it is stayed.

Heel-Seam Stayers, Machine: A canvas tape is stitched over the heel-seam on the inside to give added strength. A double-needle machine is used which stitches both sides of this seam with one operation. The tape is fed automatically from a roll on the machine. The operation is continuous, the different pieces being held together by the tape and afterwards cut apart.

Vamp Inspectors, Hand: The completed vamp, or lower part of the shoe, is here examined for imperfect stitches either at the tip or heel seam.

Top Closers, Machine: The two parts of the top are placed together with the inside surface out. The two back edges are stitched together, beginning at the top. This machine can be changed at any time by the pressure of a foot lever so as to form a zigzag stitch over the parts which will be covered by the outside back stay. This zigzag stitch allows the edges to spread slightly, thus giving a flat, jointed seam instead of a ridge in the heel.

Eyelet-Row Markers, Hand: The eyelet row is a line of stitches up the front of each eyelet flap, just inside the line where the eyelets will be inserted. The pattern is placed along the edge of the upper, covering the location for the eyelets. The marker draws a pencil along the inside edge of this pattern, thus marking a line for the stitches.

Eyelet-Row Stitchers, Machine: This operator uses a single-needle machine in following the line already drawn near the edge of each eyelet flap, extending from the top of the upper to the vamp, often ending with a curve at the lower end. This row of stitches is for ornamental purposes only.

Hookers, Machine: On some men's and boys' shoes hooks instead of eyelets are placed in the upper part of the eyelet row. One side of the shoe at a time is held in the machine, which punches the hole, sets the hook, and automatically moves the upper along, setting each hook in turn. The hooks may all be set at uniform distances or the spacing may be irregular. These hooks are inserted at this time so that when the lining is stitched to the flaps it will cover the backs of the hooks.

Backstay Stitchers, Machine: The back of the shoe is usually strengthened by an additional strip or stay of leather running all or part of the way between the top and the sole of the shoe. The stay is sewed on over the back seam. This work is also called back stripping.

Lining Markers, Machine: All linings are stamped with the case number, size, and width. This marking not only serves to identify the shoe during the process of manufacture, but duplicates can be made at any time by reference to this number. The operator sets the stamp of the machine with the case number, etc. A foot pedal operates the stamping arm, which strikes alternately the inking pad and lining. The linings are held (a small quantity at a time) slightly folded in front of the machine; one piece at a time is allowed to fall under the stamping arm, each on top of the preceding. They are removed when the accumulation interferes with the stamping arm.

Lining Closers, with Heel Stay (Lining Makers), Machine: The two pieces of lining for each shoe are united at the heel with a canvas or leather stay, which is usually wider at the bottom than at the top. The lower part of this stay is not stitched, but is left loose for the easy insertion of the counter, and the adjustment of the parts around it.

Side-Facing Pastors (Lining Makers), Hand: The leather facings for the under side of each eyelet row are coated with cement by means of a hand brush. They are pasted to the lining, to which they are later stitched.

Side-Facing Stitchers (Lining Makers), Machines: The leather side facings which have been pasted to the lining are now stitched along the inside edge of the facings.

Top-Facing Stitchers (Lining Makers), Machines: The top band of leather, or ornamental cloth, is stitched to the lining across the entire top, along the lower edge of the band. The top band is fed automatically from a roll attached to the machine. The operator usually stitches one lining after the other to this band, and afterwards cuts them apart.

Lining Makers: The four preceding occupations are combined in the tables of this report under the term "Lining makers," by which term they are all known in some factories.

Top-Facing Embossers, Machine: The name or trade-mark of the manufacturer or retailer is embossed on the top facing of the shoe. The operator places each lining with the top facing attached under a stamping device which is operated by a foot lever.

Fitters (Top to Lining), Hand: The underside edge of each lining, at the side and top facings, is coated with cement by means of a hand brush. The linings are then fitted and stuck to the corresponding leather tops, to which they are afterwards stitched.

Closers-On, Machine: This operation consists of stitching the lining to the top of the upper, both of these parts having been made previously. The work is also called inseaming. This operation is not performed on all shoes. In some shops it is omitted entirely; in others the lining is pasted on to hold it to the top until the upper is top-stitched.

Top Stitchers, Machine: When the lining has been closed on to the top of the upper, it is folded inside of the upper covering the closing-on seam and passed to the top titcher who stitches, by machine, the edge of the folded-in seam. This operation is also called undertrimming. In some shops this top stitching is done without a previous closing-on, the lining being held in position or previously pasted.

Eyeletters, Machine: The eyeletter punches holes and sets the eyelets. Both sides of the upper are eyeleted at one time, the eyelets being placed directly opposite each other. This insures that the shoe will lace evenly. After setting the machine for the proper spacing, the operator places the shoe in position and starts the machine which sets and spaces the eyelets automatically.

Lacers, Machine: In order that the upper may be properly pulled over the last, it is necessary to lace each shoe. The operator places the upper on the machine with the five lower eyelets over a series of hooks which are arranged in a horizontal line. A long needle carries a thread through these hooks, thereby lacing it through the eyelets. A knot is tied, the string cut, and the upper pushed off the machine. This is all done automatically, the operator merely placing the upper on the machine.

Toe-Lining Stitchers, Machine: The two ends of the lining at the toe are placed one edge over the other, and stitched together, beginning at the top. The operator, when working on a lace shoe, also stitches the tongue to the vamp.

Vampers, Machine: The vamp is the part of the upper to which the sole is attached. Vamping is the process of sewing together the vamp or lower part of the shoe upper and the top part, known as the top or quarter. Pumps or slippers, having no tops or quarters, do not require vamping. Vamping is the most important and best-paid operation in the fitting room. The operator uses either a single or double-needle power vamp sewing machine. Either men or women may do this work. Women's shoes being light can be vamped by women, but men's shoes being heavier are usually vamped by men; however, in many plants making men's shoes there are female vampers.

Barrers, Machine: This operation consists in sewing several short rows of parallel cross or tying stitches for strengthening the shoe at the lower end of the eyelets or button fly next to the vamp, or at the blucher flap where it joins the vamp.

The following 10 occupations are found in connection with the manufacture of button shoes only, and take the place of certain of the preceding occupations which apply only to lace shoes.

Button-Fly Stay Pastors, Hand: A narrow strip of canvas tape is coated with cement with a brush. This stay is pasted near the outer edge of the fly where the button holes are to be cut, and prevents the buttons from tearing the holes.

Closers (Button Fly to Top), Machine: The fly and top which are to be closed are placed together with the wrong side out. This is now seamed with a single-needle machine. The parts are turned and the seam rubbed down before the stay next mentioned is stitched to this seam.

Button-Fly Seam Stayers, Machine: The seam of the button fly is stayed on the back with a narrow canvas tape, stitched with a double-needle machine, thus stitching both edges of the seam at one operation. A guide on the machine trails in the seam, spacing accurately the two rows of stitches. The tape is fed to the seam from a roll on the machine.

Fly-Facing Stitchers, Machine: The leather fly facing which has been pasted to the lining is now stitched along the inside edge.

Buttonhole Markers, Hand: A pattern with holes is placed over the button fly. A steel-pointed pencil is pushed through these holes, thus marking the location for each buttonhole.

Buttonhole Makers, Machine: The upper is received by the operator with the location of each buttonhole marked. The machine cuts and works the buttonhole automatically. The operator has only to hold the upper in position and press a finger lever for each buttonhole that is cut. The machine stops after working each hole.

Buttonhole Finishers, Machine: The cords used as a filling around each buttonhole (on the underside) as it is worked are not cut off, but are pulled along the edge of the button fly from one hole to the next. These cords are sewed to the under surface of the fly with a zigzag stitching machine using a curved needle which prevents the stitches from passing through and showing on the outside.

Button-Row Markers, Hand: The button fly of each shoe is pulled in position over the opposite part of the upper, to which the buttons will be fastened. A steel punch is pushed through the buttonholes, thus marking the location for each button. The buttonholes are used for locating the position of each button because if the buttonholes are spaced irregularly the buttons should be spaced in the same way.

Button Fasteners, Machine: The upper comes to the operator with the place marked for each button. These are fastened on the shoe by either thread or wire. The operator places the upper in position for the first button, starts the machine, and moves the upper by hand to the position marked for each successive button.

Buttoners, Hand: In order that the upper may be properly pulled over the last it is necessary to button each shoe, an ordinary hook being used for the purpose.

Checkers, Hand: The completed uppers are counted, checked with the tag for each case, and placed in piles to be taken to the lasting department.

LASTING DEPARTMENT. -

Upper Matchers, Hand: The packages of completed uppers from the stitching department, and the insoles and counters (counters in this plant are purchased already cut and moulded) from the sole-leather department, are matched and placed on racks ready for the lasts.

Last Pickers or Casers, Hand: The tag for each case of shoes is received by the last picker who selects from storage bins right and left lasts for each size required by the tag. These are placed in the rack, beginning with the largest sizes at the top of the rack.

Tackers (Insoles to lasts), Machine: The operator places the insole on the bottom of the last, and holds it against the nozzle end of the insole tacker which places tacks down the center of the insole, fastening it to the last. Five tacks are usually driven in each insole.

Assemblers, for Pulling-over Machine, Hand: The assembler, having received the last with the insole tacked on it, the counter, and the corresponding upper, which has come from the stitching department, wets the leather, shellacs the toe box or tip or both, places the toe box and counter between the lining and the upper, and then puts the last inside the upper. Having centered the upper on the last, he drives two tacks with the back of the pincers, one into the last through the heel seam, and the other through a bent-over edge of the upper into the heel seat, to hold the upper in place. In some factories an automatic tack-driving machine is used, but the occupation is essentially hand work.

Pullers-Over, Hand: The hand puller-over is his own assembler, which occupation is described above. With the parts assembled, he takes hand pincers and draws the upper over the last and insole, taking care that the upper keeps its proper position, and drives a tack at the toe and two on either side to hold the upper in position for the laster. In some factories the work done here is divided into two or more separate operations.

Pullers-Over, Machine: When shoes are pulled over by machine, they are first assembled and put over the last by the assembler. The machine puller-over places the shoe in the machine, the pincers of which grasp the leather at different points on each side of the shoe. The operator stands so that he can see when the upper is properly centered. He presses a foot lever closing the pincers, which draw the leather securely against the last. The machine stops at this point and the operator can start or stop it at will. The operator now examines the shoe to see whether all the parts have been evenly pulled over the last. Where a part has not been properly pulled over it can be adjusted to the desired point by levers. When satisfied that the shoe is properly adjusted, the operator presses a foot lever, the pincers move toward each other, drawing the leather around the last, and at the same time the machine automatically drives two tacks on each side and one at the top through the upper and insole into the last to hold the upper in position.

Side Lasters, Hand: Side lasters use hand pincers to pull the upper into place at the side or instep, drawing it tightly over the last and insole so that there are no wrinkles, and driving tacks with the back of the pincers to hold it in place. In some factories assembling and side lasting are done by the same operator.

Side Lasters, Machine: When side lasting is done by machine the operator uses a dismantled "consolidated hand-method laster." The toe and heel-lasting parts are taken off. The machine being used for sides only, the operator can adjust it specially for this work, thereby giving better side lasting than when it is used for the entire shoe. The operator holds the edge of the shoe so that the pincers of the machine grasp the upper and draw it evenly and closely about the last. Immediately following the pincers as fast as the upper is drawn into position a device on the machine drives tacks automatically through it into the last to hold it in place.

Bed-Machine Operators, Machine: The bed-machine operator places the shoe on the machine and by levers moves a series of wipers (friction pullers) which draw the upper over the edge of the insole at the toe and heel. Some factories designate this as toe and heel lasting. The shoe is placed with the sole up and the operator determines whether the shoe is properly lasted by placing his hand under the toe or heel. The wipers are kept in motion until the operator is satisfied that the upper has been wiped into the desired position. Under the welt system, the operator drives a tack through the upper and insole and partly into the last at one side and passes a fine wire from it around the drawn-in upper at the toe to the opposite side of the last where he drives another tack, around which he winds the wire. The wire holds the toe of the upper in position as drawn in over the last. (Under the McKay system, instead of the wire used on the toe, tacks are used). The upper at the heel is fastened by tacks driven in by hand. In case the shoe is lasted by the bed machine the side or instep has to be first lasted by hand with pincers or with the side-lasting machine.

Inspectors (after pulling over), Hand: All shoes are examined to see that they are pulled over evenly, and that the tips are back the same distance and properly centered on the last.

Tack Pullers, Machine: After the upper has been lasted and set for a few hours, it is sufficiently shaped to the last, so that most of the tacks can be pulled, only enough being left to hold it in position. The lasted shoe is held against a tack-pulling device, which has a pair of vertical-moving plyers, extracting the tacks very quickly.

Toe Trimmers, Hand: The lasting of a shoe at the toe causes an accumulation of upper and lining at this point. This surplus is cut away with a knife, to permit of a better fitting of the welt.

BOTTOMING DEPARTMENT.

Goodyear Welters, Machine: The welt is a narrow strip of leather to which the outsole is to be stitched. It extends around the edge of the sole as far back as the breast of the heel. By one operation of the machine both the welt and the upper are sewed to the insole, the thread passing from the inside channel of the insole through the lip of the insole, the upper, and the welt. This method leaves the inside surface of the shoe perfectly smooth. The outsole is stitched to the welt in a later operation.

Inseam Trimmers and Tack Pullers, Hand: After the welt has been stitched to the upper and insole, the remaining lasting tacks are pulled by means of hand plyers, and the surplus upper and lining trimmed from around the entire bottom with a knife.

Cobblers, Hand: All imperfectly sewed welts or broken stitches are repaired by the cobbler.

Insole Tack Pullers, Machine: The tacks driven through the insole to hold it in place are removed by holding the bottom of the shoe against a machine having a revolving tack-pulling device.

Welt Beaters and Slashers, Machine: The welt as stitched to the shoe is irregular, to make it stand out evenly it is guided around the welt beater under a vibrating hammer, which flattens it out. Where the welt is curved around the toe, it is tight on the outer edge. As the operator reaches this part, he brings a slashing device into operation, which makes a series of little cuts diagonally around the outer edge of the welt, thus relieving the tension.

Shank Tackers, Machine: The shank piece is a strip of metal or other stiff material used to strengthen the sole in the arch. This is inserted on the insole at the shank. It is tacked in place by holding the shoe against a tacking device of the machine.

Welt Skivers (in shank), Machine: The ends of the welt on each side of the shoe at the heel are cut off square, and are of the same thickness as the other part. These ends are placed one at a time against the trimming knife of a machine, which skives it to a bevel, thus permitting a neat fit to the outsole when it is stitched.

Bottom Fillers, Hand: The depression in the fore part of the shoe, between the welt edges, is filled with a mixture of ground cork and rubber cement. This is placed in by hand, with the aid of a wood paddle. This filling-in is done to give an even surface on which to lay the outsole.

Bottom Cementers, Machine: Before laying the outsole the entire bottom of the shoe is coated with cement. To accomplish this, the operator holds it against the cement-covered roll of his machine.

Outsole Cementers, Machine: Before placing the outsole on the shoe it is coated on the flesh side with cement by passing it under a cement-covered roller.

Sole Layers, Machine: The cement-covered outsole is placed on the shoe, and the shoe put on the spindle of the sole-laying machine. The rubber pad or mould of this machine presses the sole firmly against all parts of the shoe bottom and welt. While one shoe is under pressure the operator is preparing the other.

Heel-Seat Nailers, Machine: The heel seat is the heel end of the sole. The insole, the outsole, and the part of the upper between them are nailed together by machine.

Small nails are driven automatically through the parts and clinched on the inside of the shoe. The shoe is placed on a jack and the work of the operator is to guide it during the nailing.

Rough Rounders, Machine: This operation consists of trimming by machine the edge of the outsole and welt so that they will extend a uniform distance from the upper. It is the first operation on the edge of the sole in the Goodyear bottoming process. The machine also cuts an oblique channel in the outsole near the edge, in which the thread is embedded when the Goodyear sole stitching is done later.

Heel-Seat Trimmers, Machine: The rough rounder trims only the part of the sole to which the welt is attached. The remaining part around the heel is cut away by the heel-seat trimmer, by holding this part against the revolving knives of his machine, trimming it as indicated by a set guide on the machine.

Channel Turners, Machine: The channel in the outsole is held against a small bevel-shaped revolving wheel of a machine which turns the lip of the channel back toward the middle of the sole to permit the stitching of the sole to the welt, through the channel.

Goodyear Stitchers, Machine: The operator uses a Goodyear outsole lock-stitch machine to stitch the outsole to the welt. The seam is run in the channel in the outsole through both outsole and welt on the outside of the shoe. The stitches show on the upper surface of the welt and are covered later on the under surface of the sole by cementing down the lip of the channel.

Stitch Rubbers, Machine: The row of stitches in the channel of the outsole is flattened before the lip is cemented down. This is accomplished by holding the stitches against a small revolving wheel which fits into the channel.

Channel Cementers, Machine: The channel of the sole is coated with cement to hold the lip down, when it is returned to its place over the stitches. The open channel is passed along under the thin edge of a revolving, cement-covered brush. A continuous flow of cement is supplied to this brush from a tank above it.

Channel Layers or Turners-Down, Machine: The lip of the channel is turned down over the stitches to protect them from wear and to permit of a smooth finish to the surface of the sole. The bottom of the shoe with the upturned lip is held against the outer rough edge of the revolving wheel of the machine, which forces the lip smoothly back into place.

Shank Staplers, Machine: During the wear of a shoe there is an unusual strain at the end of the shank near the ball of the foot. To give additional strength at this point one or two tacks are driven through the outer edge of the sole and welt, thus preventing them from pulling apart. The operator places this part of the shoe under the driving device of the machine, and, by pressure on a foot lever the tack is driven and clinched with one operation.

Featherers or Welt Randers: The outside corner edges of the welt on some styles of shoes are trimmed or beveled off. This is known as feathering. The shoe is guided around the trimming knife of the machine which shaves a narrow feather edge from the outside corner of the welt, thus producing the desired effect.

Stitch Separators, Machine: To improve the appearance of the stitches around the edge of the shoe on top of the welt they are separated by indentations between them. The edge of the shoe is placed under a small notched wheel of the machine which makes the indentations as the shoe is guided around.

Stitch Wheelers, Machine: In one method of stitching the sole to the welt, the threads along the surface of the welt are drawn into the leather closely. This stitched surface is gone over in the same manner as that of stitch separating, except that a smaller wheel is used, therefore the indentations are closer together, and not so deep. This is known as wheeling.

Levelers, Machine: The operation of leveling to correct any unevenness in the bottom of the shoe is done with an automatic sole-leveling machine. The operator places the shoe on a jack or metal last, which he attaches to the machine, where it is securely held by a spindle and a toe rest. He presses a foot lever and the shoe passes automatically beneath a roll under heavy pressure. This roll moves with a vibrating motion over the middle of the sole of the shoe from the toe down to and into the shank and passes back again to the toe. The roll then cants to the right and repeats the operation on that side of the sole, returning to the toe as before. It then cants to the left, repeating the operation on that side, after which the shoe automatically drops forward and is relieved from the pressure. While one shoe is under pressure the operator is preparing another shoe.

Heeler's Helpers, Hand: While the heeler is placing the shoe on the jack, operating the machine, etc., a helper sticks the nails into the steel plate of the machine and coats the top lift with cement by the use of a hand brush. Some machines automatically feed the nails to the steel plate, and when they are used the helper places the heel in place, coats the top lift with cement by the use of a hand brush, and puts it into the carrier.

Heelers, Machine: The heels come to the heeler ready-made, except for the top lift or last layer of leather. The operator places the shoe on a jack (metal last), puts the heel in position, swings the nail plate into place over the heel where the nails are dropped into another plate over the heel. By operating a foot lever another part of the machine drives the nails down through the heel, the outsole, the upper folded between the outsole and the insole, and on through the insole, and clinches the nails back into the leather of the insole. The nails protrude slightly above the unfinished heel. The top lift, coated with cement, is then pressed down by the machine on the protruding nails. Some machines have an automatic nail-feeding device, which guides the nails by wire tubes to the nail sockets of the steel plate. When these machines are used the helper puts the heel in place and the top lift into the carrier of the machine. The operator drives the nails and places the top lift by operating a foot lever, accomplishing the same results as shown above.

Sluggers, Machine: The slugger operates a machine which drives small pieces of brass or other metal (wood pegs are used on some shoes to avoid scratching polished floors), called "slugs," into the top lift of the heel to protect it from wear. The operator adjusts the plate so as to place accurately the desired number of slugs, and the machine automatically cuts off and drives the slugs as they are drawn from a coil of wire.

Heel Trimmers or Shavers, Machine: The heel, when the shoe is received from the heeler, is rough and larger than the required size. The trimmer or shaver holds the shoe by hand in such a position that the heel comes in contact with a series of revolving knives on his machine, which cut away the heel to conform to the desired contour, as indicated by the top lift, which is of proper size when put on by the heeler. The machine has two sets of knives. With the first set the trimmer shaves that part of the heel from the top lift to the sole, then with the other set he trims the edge of the sole, taking care not to cut the upper.

Heel Breasters, Machine: The heel breaster operates a machine having a knife which cuts to shape and trims evenly the breast or front surface of the heel, cutting down to the outsole, but not cutting into it.

Edge Trimmers, Machine: The operator holds the edge of the sole against a machine having a series of revolving knives that trim the edge smooth and to the desired shape.

Jointers, Machine: The knife on the edge trimmer does not reach back quite to the heel, and that of the heel shaver also leaves this section of the sole untouched. This part is trimmed away evenly by the jointer, who holds it against the revolving knife of his machine. In some factories these operators are known as "Knifers-Up."

Edge Setters, Machine: The edge setter holds the edge of the sole against a machine having hot irons shaped to fit the edge of the sole, which irons vibrate rapidly and give a lasting polish to the edge.

Stitch Burnishers, Machine: The stitches around the edge of the sole have already been separated or wheeled. To be burnished they are first stained, or blacked by the use of a hand brush; then the stitches are traced in a manner similar to that used in separating, or wheeling, except that the wheel is heated by a gas flame attached to the machine, which gives a polish to the stitches.

Heel-Breast Scourers, Machine: The heel breast has a concave surface as well as being curved over the sole. The operator holds this part of the heel against a revolving cone-shaped disk of sandpaper, which enables him to smooth all parts of the surface.

Heel Scourers (first time), Machine: This operator holds the shoe by hand so the heel, trimmed but not yet smooth, comes in contact with rolls covered with sandpaper, which smooth the heel.

Heel Gummers, Hand: On some grades of shoes the heels are scoured twice. Between these operations the surface is dampened with a sponge with a gum solution. This wetting process is known as gumming.

Heel Scourers (second time), Machine: The second-time scouring of heels is the same as the first, except that a finer-grained sandpaper is used on the rolls. Data for first and second-time scourers are combined in the tables of this report under the term "heel scourers."

Heel Blackers, Hand: The surfaces of the heels are coated with a black solution with a brush.

Heel Burnishers, Machine: The final operation on the heel is burnishing. The operator holds the shoe with his hand in such position that the heel comes in contact with a wheel on the burnishing machine, which gives it a hard, smooth surface. Hot wax is carried to the heel by a small disk and applied by a series of rubbing blows which beat the wax thoroughly into the heel. A revolving brush on the same machine brings the heel to a perfectly smooth surface. In some factories these operators are known as "expeditors" or "stoners."

Buffers, Machine: After the shoe has been bottomed the buffer removes stains from the sole and gives it a smooth, finished appearance by holding it against a revolving roll or wheel covered with sandpaper or emery paper. A small revolving cone-shaped disk of sandpaper, attached to the machine, enables the operator to scour the curve at the shank. This operation is sometimes known as bottom and shank scouring. These parts are later either stained or blacked, depending on the finish desired.

Top-Lift Scourers, Machine: The operator holds the bottom of the heel against the revolving sandpaper-covered rolls of the machine. This removes all stains and gives it a finished appearance. This part is later either stained or blacked, depending on the finish desired.

FINISHING DEPARTMENT.

Bottom Dusters and Gummers, Machine: To dust the shoe bottom it is held against the revolving bristle brush of the finishing shaft. This surface is then dampened with a gum solution, by the use of a sponge, and held again to the revolving brush, which gives it a slight gloss.

Bottom, Shank, or Toplift Blackers, Hand: The operator uses a small brush to black any part, or all, of the bottom surface of the shoe, depending on the style finish desired.

Bottom Polishers, Machine: The shoe bottoms are polished by holding them against the various revolving pads, rolls, and brushes of the finishing shaft. Wax is used on the sole, between some of the rubbing processes.

Edge Stripers, Hand: The bottoms of some shoes which are finished in the natural leather color are decorated around the edge of the bottom with a stripe of some

desired color. The striping device is filled with ink and guided around the edge of the sole by hand. A guard near the end of the striper keeps the point of the striper a constant distance from the edge.

Shank Burnishers, Hand: In order to produce a high-grade finish to the shank part of the bottom, the operator rubs a heated burnishing iron by hand over this surface, thus giving it a very durable polish.

Last Pullers, Hand: The last has remained in the shoe during all the processes since it was placed in the upper by the assembler in the lasting department. The lace strings are now cut or the shoe unbuttoned. The lasts are pulled by placing the shoe on the last stand, or jack, with the bottom up. The operator raises the heel part of the shoe off the last, using care not to break or crack the shank. The shoe is then gripped by the forepart and pulled, leaving the last on the jack. The shoe is now placed back on the shoe rack. The lasts are put into boxes and later thrown into their respective bins according to size and width.

Tack Inspectors, Hand: The nails driven through the insole to hold it to the last were drawn by the tack puller, but in some instances they are overlooked. The tack inspector locates these nails by placing his hands inside each shoe. They are then pulled by the use of hand pincers.

Stampers, Machine: The name or trade-mark of the manufacturer or retailer is sometimes stamped on the shank or forepart of the shoe. The impression is made by a gas-heated steel die. The shoe is placed bottom up on the jack of the machine. A foot lever starts the machine, which comes down with pressure, making an imprint on the shoe.

Treers, Hand: The treer places the shoe on a form, the shape of a last, supported on a frame. By pressing a foot lever the form is expanded so that the shoe fits tight over it. The tools of the treer are a hot iron, brush, cloth, etc. The treer brushes the shoe, cleans spots and discolorations, remedies any slight cut or blemish, and rubs the upper with a hot iron to take out wrinkles and produce a smooth surface. As females are engaged in this occupation to a considerable extent, data are shown for both sexes.

Tip Scourers (Patent Leather), Machine: The tips of patent-leather shoes which have been cracked or damaged during the processes of manufacture (usually during the lasting of the toe) are scoured before being repaired. This is accomplished by holding the damaged parts against a revolving canvas-covered wheel, which cleans off the enamel and gives a smooth surface.

Tip Repairers (Patent Leather), Hand: The tips which have been scoured are repaired by applying a specially prepared patent-leather liquid. This is applied with a rag or brush. The use of a rag is known as the finger method.

Russet Repairers, Hand: Any stains of grease or oil which have gathered during the processes of manufacture are removed by gasoline or other cleaning fluid. The original finish is given by applying "repairing" fluid. Various colors are used, depending on the finish of the shoe. Colored crayons are also used.

Dull-Shoe Repairers, Hand: The cut or nicked places are either cemented down or scoured off smooth with emery paper, and then touched up with crayons or liquid dressing.

Vamp Creasers, Machine: During the ordinary wear of a shoe creases are formed across the vamp where the foot is bent. Some shoes are creased in the making. The impressions made by the machine are regular, and cause the creases formed in wear to assume much more regular lines, thereby improving the appearance of the shoe and prolonging its wear. The operator places each shoe under the creasing device and presses a foot lever which causes it to make the impression on the vamp.

Shoe Dressers, Hand: Some grades of shoes are given a coat of liquid dressing as a last finish. This liquid is applied with a sponge. The shoes when dry show a bright glossy finish.

Stitch Cleaners, Machine: The wheeled or separated stitches around the upper edge of welt become soiled by passing through many hands. This part of the shoe being difficult to reach with an ordinary brush one specially devised for the purpose is used. The operator holds the edge of the shoe against the brush, which is attached to a rapidly revolving shaft. The stitches are cleaned and given the finishing polish.

Heel-Lining Pasters, Hand: The only nails which have been driven through the insole to remain in the finished shoe are at the heel. These are hidden from view by a canvas or leather pad. This lining is coated with cement by the use of a brush and pasted over the nails. The operators are also known as heel-pad or heel-pin pasters.

Lacers, Hand: The laces for each shoe are run through the two lower holes by hand and tied so as to prevent their falling out.

Lumpers, Hand: "Lumper" is a term assigned to an employee who does odd jobs around the factory, such as getting out cartons, tracing missing shoes, etc.

PACKING DEPARTMENT.

Carton Labelers, Hand: The cartons into which the shoes are to be packed are labeled with a card on which is indicated a space for the size, width, price, etc., of each pair of shoes. These labels are coated with cement and pasted to each carton.

Stencilers, Hand: The cartons which have been labeled are to be stenciled with the style number, size, and width on each. They are marked with rubber stamps and an ink pad. The size, width, etc., are obtained from the tag which follows each case, or lot of shoes, through the factory.

Packers, Hand: Each pair of shoes is wrapped in thin paper and placed in the carton which has already been stenciled for it. As these cartons are filled they are placed into the wood shipping case, made the exact size to hold a specified number of cartons.

Box Nailers, Hand: The wood shipping cases which have been filled with the packed cartons are nailed by hand with a hammer. The box is now ready to be marked for shipment.

McKAY SHOES.

Descriptions are next given of occupations in a representative McKay shoe factory. A number of these occupations which are not found in the preceding list are due to the different organization in the factories and in the division of work, but the essential differences, however, as before stated, are confined to the manner of attaching the outsole to the upper and insole.

CUTTING DEPARTMENT.

Pattern Boys, Hand: Same as welt, page 135.

Vamp and Whole-Shoe Cutters, Hand: Same as welt, page 135.

Vamp and Whole-Shoe Cutters, Machine: Same as welt, page 135.

Top Cutters, Hand: Same as welt, page 135.

Top Cutters, Machine: Same as welt, page 136.

Upper Sorters and Casers, Hand: Same as upper sorters and upper casers, welt, page 136. The two operations are performed by one person in this factory.

Trimming Cutters, Hand: Same as welt, page 136.

Trimming Casers, Hand: Tongues, back stays, etc., are stored in boxes or bins, each containing one size. The operator selects from these bins a sufficient number for each case, according to the order tag. They are tied in bundles to keep them in order.

Cripple Cutters, Hand: Same as welt, page 136.

Size Painters, Hand: On the outside piece of each bundle is marked the size. The operator paints across the edge of each bundle (thereby staining the edge of each piece), using a hand brush with various colors, each color denoting a size, according to the code existing in the factory. Example: One red stripe indicates size 7, two red stripes, 7½; one green stripe, 8; two green stripes, 8½, etc. This occupation corresponds to size markers, welt, page 136.

Upper Skivers, Machine: Same as welt, page 136.

Edge Stainers or Blackers, Hand: The color of leather is not uniform throughout its thickness, therefore all raw edges which show in the finished shoe are stained the color of the surface of the leather. The operator with the use of a hand brush stains the designated edges or parts, by painting the edge surface of the tied bundles. The edges of the packages of perforated tips are dipped into buckets of stain in order to color the inside edges of the holes.

Lining Cutters, Machine: Same as welt, page 136.

Lining Casers, Hand: Linings are stored in cases, each section containing one size of a designated style. Selections are made from these cases and arranged according to the order tag; the linings for each case of shoes are tied in a separate bundle.

Checkers, Hand: Same as assemblers, welt, page 136. In this establishment the checking is done in the cutting department before the packages are sent to the stitching department. In the factory for which the operations on a welt shoe are shown, the assembled material is rechecked after the packages have been received by the stitching department.

SOLE-LEATHER DEPARTMENT.

Outsole Cutters, Machine: Same as welt, page 136.

Outsole Sorters, Hand: Same as welt, page 137.

Outsole Buffers, Machine: All soles must be smooth and free from imperfections, otherwise they are only good for the inside of a double sole. Those with wrinkles, spots, cracks, etc., are smoothed by holding them against revolving sandpaper-covered rolls.

Outsole Gummers and Polishers, Machine: Outsoles which have been buffed, and consequently have lost the natural finish of the leather, must have some of this finish restored. The operator applies the gum (a thick polishing paste) by hand with the aid of a sponge. The sole is then held against the revolving bristle brush until lustre is restored.

Outsole Graders and Skivers, Machine: With a grading and skiving machine soles are skived without previous grading by hand. The operator feeds the soles into the machine, which automatically finds the thinnest part by means of several metal fingers. These fingers set the skiving knife, for each sole as it is fed into the machine, and the entire sole is skived uniformly to the thinnest part. As each sole leaves the machine, the thickness in irons (one-forty-eighth of an inch) is automatically printed on the heel end of the sole with a steel stamp. The operator feeds the soles into the machine with one hand and with the other arranges them (as they come out) in a near-by rack according to thickness, as indicated by the number of irons printed on the heel. When the grading is done by hand the skiving is done in the same manner as is shown under "Outsole skivers, machine," page 137.

Outsole Casers, Hand: The caser receives a tag on which appears a memorandum of the order. This shows the number of pairs by sizes, and the shape, quality and thickness (in irons) of the soles to be used. These soles are selected from storage bins, rights and lefts of each size are placed together, and in order, by sizes. All soles for each case of shoes are tied in one package.

Tap and Sole Wetters, Hand: In order to get the soles and taps into condition, so that they will work easily and not crack when sewed or nailed, these parts are placed into a tank of water for a short while and then set aside to drain in an air-tight closet, or are

covered with burlap, where they remain about 12 hours. This process is also known as mulling or tempering.

Outsole Compressors, Machine: Soles are compressed in order to bring the fibers of the leather close together, thereby giving greater wear. The operator feeds them into the machine one at a time, where they are subjected to great pressure as they pass between the heavy rolls.

"Offal" Rollers, Machine: "Offal" is the term used for the parts of the hide left by the outsole cutter, such as shoulders, shanks, bellies, etc. These pieces are rolled to make the leather firm and to flatten the wrinkles so that it can more easily be cut. The roller of the machine is attached to the end of an arm, which moves back and forth over the bed of the machine without touching it. The operator places the pieces of "offal" one at a time under the moving arm; foot pressure on a pedal raises the bed of the machine against the moving roller with the piece of "offal" between. The amount of pressure is regulated by the energy of the operator placed on the foot pedal. Sometimes a machine is used into which the operator feeds the "offal," one piece at a time. The pieces pass between heavy rolls, where they are subjected to great pressure.

"Offal" Skivers, Machine: The blade of the machine is set so as to skive the entire piece of leather to a uniform thickness. The operator places one piece at a time into the machine. The fluted rolls carry the leather under a long knife which is set to skive at the desired thickness.

Skiving Sorters, Hand: The skivings are the shavings which have been trimmed from the thick or uneven pieces. The sorter throws these pieces into bags, each designated for some particular grade or quality. This material is used for insoles, heel lifts, etc. The very thin parts are ground into pulp and made into leatherboard.

Tap Cutters, Machine: Same as welt, page 137.

Tap Sorters, Hand: The sorting of taps is similar to that of outsoles, except that they are not separated into as many grades.

Tap Graders and Skivers, Machine: The grading and skiving of taps is similar to that of outsoles.

Tap Casers, Hand: The casing of taps is similar to that of outsoles.

Tap Butters, Machine: In order to form a smooth and practically invisible joint between the ends of the tap and shank welt where they meet, these parts are both skived on the same bevel at their junction. The operator feeds one at a time into the machine. They pass under a knife which trims them to the desired bevel.

Outsole and Tap Cementers, Machine: Same as welt, page 137.

Outsole and Tap Tackers, Machine: Tacking the tap and outsole together accomplishes the same purpose as that of cementing them. The operator places the two parts together with their edges even and holds them against the tacking device of a machine which drives small staples through the parts to hold them in place until stitched. The machine automatically cuts and forms the staples from a coil of wire mounted upon it.

Outsole and Insole Rounders, Machine: Same as welt, page 137.

Outsole Channelers, Machine: Outsoles for the McKay shoes are channeled along the surface edge with a slanting cut towards the center. In a later process the stitches of the McKay sewer pass through the sole from the bottom of this channel and through the insole, uniting the two with the upper between them. This channel protects the stitches from wear by having them below the surface and permits of a smooth finish to the sole. The operator places the edge of the sole into the machine and guides it around as it is channeled. In the tables of this report data relating to this occupation are combined with those relating to welt insole channelers and turn outsole channelers, under the term "Insole and outsole channelers."

Sole Fleshers (at heel), Machine: The sole is fleshed at the heel in order to remove the rough surface at this point. This smooth surface enables the heel trimmer to give a better finish to his work. The operator places the sole on the bed of his machine.

The trimming knife on the machine glides over the heel surface and trims off a thin skiving.

Shank-Welt Cutters, Machine: The shank welt is a narrow strip of leather, which is fastened to each edge of the sole at the shank and fills the outer edges of the space between the end of the tap and the heel. The shank piece is later tacked between these welts. These parts are cut from small remnants of leather. The operator spreads these remnants on the bed of his machine and places the die wherever one can be cut. The machine is operated by a foot lever in the same manner as the machine for cutting outsoles.

Shank-Welt Tackers, Machine: The operator places the shank welt with the beveled end against that of the tap, and the edge even with that of the sole. These parts are held against the tacking device of the machine which drives nails to hold them in position until they are stitched. The shank welt with the tap forms a continuous strip of leather around the surface edge of the sole. These parts serve not only to increase the thickness, but give the McKay sole the appearance of a welt. The machine automatically cuts the nails (as they are driven) from the end of a narrow band of flat steel, coiled on the machine. The width of this band determines the length of the nail.

Toe Gougers (for toe plaits), Machine: When the shoe is lasted a surplus amount of the upper is pulled over at the toe. In order to make room for part of this surplus on the top side of the double sole, the tap is gouged out at this point. The operator holds the tap side against a revolving knife of his machine which trims out a small space near the toe end of the double sole.

Shank Tacker, Machine: Same as welt, page 144.

Outsole and Insole Molders, Machine: Soles are molded in order that they will better fit the shape of the last. The operator places them into the mold of the machine one at a time. While one sole is being held under pressure the operator is placing the other. The soles are dampened with water before placing them into the mold so as better to attain and hold the new shape.

Outsole or Tap Paraffiners, Hand: The upper side of each outsole or tap which will fit next to the insole is given a coat of melted paraffin, by means of a hand brush. This coat of paraffin prevents the well-known squeaking sound of some shoes. This is caused by the parts rubbing together.

Channel Turners, Machine: Same as welt, page 145.

Fairstitchers, Machine: The operator holds the double soles, or those with the tap and shank pieces attached, into the fairstitching machine, and guides them around the entire edge. A device on the machine keeps the seam at the proper distance from the edge. These stitches hold the pieces firmly in place. They show on the upper edge of the sole and give the appearance of the welt-sole stitching process.

Inspectors, Hand: The soles are inspected for any defects in the operations in this department. Imperfect work is returned for correction to the operator responsible for it.

Insole Cutters, Machine: Same as welt, page 137.

Insole Sorters, Hand: The sorting of insoles is similar to that of outsoles, except that they are not separated into as many grades.

Insole Graders and Skivers, Machine: The grading and skiving of insoles is similar to that of outsoles.

Insole-Doubler Cutters, Machine: Doublers used to reinforce thin or defective insoles are cut from canvas or composition leatherboard. The canvas material comes to the operator folded from 18 to 24 pieces thick. The leatherboard comes in sheets about 40 inches square. Several of these (depending on thickness) are clamped together to be cut. The operator places either of these materials on the bed of the

machine, and places the die so as to cut the maximum amount from the material. Pressure on a foot lever brings the head of the machine down on the die, driving it through the material. The beam then returns to its original position.

Insole Doublers, Hand: This is usually team work; one operator applies the cement to the insole by hand with a brush and passes it to her partner, who sticks it to the doubler. These doubled soles are placed in piles ready for the press. McKay insoles are not channeled, and the reinforcement is pasted flat to the surface instead of to the sides of an upturned lip as in the welt shoe.

Insole Pressers, Machine: The piles of reinforced insoles are placed in presses which are screwed down by hand. They remain there until dry.

Insole Casers, Hand: Casing of insoles is similar to that of outsoles.

Box-Toe Cutters, Machine: The material for use as box-toe stiffening is of a canvas texture, and is purchased of firms that make a specialty of its manufacture. This material is pulled across the bed of the machine, from 4 to 16 pieces at a time being cut, depending on the thickness. The method of operating the machine is similar to that used in cutting linings.

"Heeling" Trimmers, Hand: By the term "heeling" is meant the small pieces of sole leather which remain after the soles and taps have been cut. Some of these pieces have narrow or irregular ends, too small for use. These ends are trimmed off with a hatchet by hand, and go into the waste, which is ground into pulp, and manufactured into leatherboard. The usable parts are thrown to the sorters.

"Heeling" Sorters, Hand: The "heeling" which has been trimmed is passed to the sorter, who arranges it into grades depending on the size and the quality of the pieces. The best quality is used for the top lifts; the other is used for shank welts, shank pieces and heel lifts.

"Heeling" Graders, Hand: The pieces of "heeling" which have been trimmed and sorted are next separated into grades depending upon thickness. The operator inserts each piece about which she is in doubt into the grading iron to determine the number of irons of thickness. Experienced operators become skilled in their judgment and use the eye almost exclusively.

"Heeling" Skivers, Machine: Each grade of "heeling" which has been separated is next skived to reduce all parts of each piece to an even thickness. The pieces are fed into the machine one at a time. The machine is adjusted by set screws for each particular grade that is skived.

Heel-Lift Cutters, Hand: The drop dies of various sizes are mounted on the operator's bench with the cutting edges up. Each die is open at the bottom and fastened over a hole in the bench. An open bag is attached to the under side of each of these holes. The operator places the pieces of "heeling," one at a time, on whatever die he judges will cut to best advantage. The piece is hit with a wooden maul, which cuts out a heel lift the size of the die. Each lift as it is cut falls through the die into the bag beneath it. Some of the dies cut only quarter and half-heel lifts, which later are placed together in the heel to form an entire lift.

Heel-Lift Cutters, Machine: Pieces of leather board to be cut into heel lifts are clamped together before cutting. These pieces are cut in a similar manner to that used in cutting insole doublers from leatherboard. Another method of cutting leatherboard into heel lifts is by the use of the automatic "dinker." The pieces of leatherboard about 40 inches square are guided into the machine one thickness at a time. As the board is guided along, a revolving shear trims off a strip just the width of the desired heel lifts; as this strip is being trimmed off fluted rolls carry it under a cutting block. The die attached to the machine comes up and cuts through the material. As each lift is cut the die drops and the strip of leatherboard is moved forward by the fluted rolls, just the correct distance for a lift. The die automatically moves up and down when the machine is once started. The operator guides the

sheet of leatherboard across the machine repeatedly until the entire board has been cut into lifts.

Heel-Lift Gougers, Machine: Same as welt, page 138.

Heel Builders, Machine: The operator places the cut heel lifts, one at a time, into the mold of the machine and applies a coat of paste to each layer as it is placed in the mold. When the heel has been built to the correct height a foot pedal is pressed which closes the sides of the mold tightly and drives a nail through the pieces to hold them in place. The nails are inserted in the bottom of the mold before the heel is built. By the use of some machines the operator cuts the lifts and builds the heel at the same time. The mold of the machine is in the form of a die with the cutting edge up. The pieces of "heeling" are placed on the sharp edges of this mold. Pressure on a foot lever causes a plunger to force the leather into the mold, thereby cutting and placing the heel lift with one operation. Each lift is coated with glue by the use of a hand brush after it is in the mold. The completed heels drop out of the bottom of the mold.

Rand Tackers, Machine: Same as welt, page 138.

Top-Lift Cutters, Machine: Same as welt, page 138.

Top-Lift Sorters, Hand: The sorting of the top-lifts is similar to that of outsoles except that they are not separated into as many grades.

Top-Lift Graders, Hand: The top-lift graders separate the pieces into groups according to their approximate thickness preparatory to being skived. This is done in order that shoes of the same class will have heels of the same height. The degree of thickness (number of irons) is determined by inserting each piece into the opening of the grading iron, which is graduated in width. The number of irons are indicated along the edge of this opening. Experienced operators become skilled in their judgment, and seldom use the grading iron.

Top-Lift Skivers, Machine: Same as welt, page 138.

Top-Lift Compressors, Machine: Same as welt, page 138.

Fiberboard-Edge Trimmers, Machine: Fiberboard which is to be made into counters, to stiffen the shoe at the heel, comes from the manufacturer in pieces about one yard square. The edges of these pieces are uneven. In order to get a straightedge before they are cut into strips the operator feeds them into his machine, between fluted rolls which draw them under a revolving knife at one end of the rolls. The trimmed pieces drop to a truck on the opposite side of the machine.

Fiberboard Strippers, Machine: The stripper feeds a sheet of fiberboard into his machine which trims off a strip the proper width for the desired counter. This operation is repeated until the entire sheet is cut into strips.

Counter Cutters, Machine: The operator feeds the strips of fiberboard which have been cut the proper width into his machine, which cuts them into pieces of the correct length for each counter. As each piece is being cut, a knife on the machine also bevels off the upper edge and both ends of the counter.

Counter Stackers (for end skivers), Hand: As the counters are cut they drop into a box near the machines. They are then arranged into piles with all of the beveled edges in one direction. They are now ready to be placed into the edge-skiving machine.

Counter-End Skivers, Machine: The piles of cut counters which have been stacked are placed by the operator into his machine, which automatically pushes them forward. One at a time is forced into position and held there while knives skive off both ends. As each is skived it passes out of the machine and another automatically takes its place.

Counter-Edge Skivers, Machine: The counters are skived in order that the edges will fit closely where placed in position between the lining and upper. The operator feeds them into his machine, end first, and the rolls of the machine carry them over a knife which skives off the top edge as it passes along.

Counter Temperers, Hand: In order to render the counters more flexible and more easily molded, they are placed in wire baskets, and dipped into a tank of water, then set aside to drain.

Counter Rollers, Machine: The operator feeds the counters into his machine, end first. They pass between rolls which bend them into a curved shape. This enables the molder to place them into the mold easily. The rolls of this machine are kept waxed, so that the counters are also given a waxed finish during the rolling process.

Counter Molders, Machine: The operator places the curved counter into the mold of his machine. A small part of the entire bottom edge of the counter projects outside of the mold. By pressure on a foot pedal, a device on the machine bends in, at right angle, first the sides and then the back of this projecting edge, thus molding it into the shape of the heel.

Counter Sorters and Packers, Hand: The counters which have been molded are sorted for imperfect ones and packed into boxes according to style, grade, and size. These boxes are then placed in storage racks.

STITCHING DEPARTMENT.

Tip Punchers, Machine: Same as welt, page 139.

Tip, Vamp, Foxing, etc., Perforators, Machine: The perforating of tips, vamps, etc., is for decorative purposes only. The results accomplished are the same as those of punching the tips. The perforator is operated much like an ordinary sewing machine. The vertical-moving die punches holes through the material as it passes along. The presser foot of the machine automatically moves it the correct distance for the spacing of each hole. At the curves this spacing is controlled by a lever. The operator guides each piece into the machine, on top of a moving band of paper which aids in making a clean perforation. The holes may all be of the same size or a combination of sizes and may be made around the edge of any shaped material.

Vamp Markers (for tips), Machine: Same as welt, page 139.

Cementers (for folding), Hand: Same as welt, page 139.

Cementers (for folding), Machine: When cementing is done by machine, the operator places the skived edge which is to be cemented into the feed roll of the machine. This carries it over a small cement-covered roll, which revolves in a tank of cement.

Folders, Machine: The operator feeds the cemented edge of the vamps, or other parts to be folded, into the machine. A small vibrating foot and hammer folds this edge and pounds it down tightly at the same time. This machine can be used on curves.

Doublers, Machine: The thin vamps, tops, etc., are reinforced and made thicker by pasting to each a piece of canvas, known as a doubler, which has already been cut the same size as the piece of leather to which it is to be pasted. In order to cover the doubler with cement, the operator presses it against a cement-covered roll, which revolves in a tank of this liquid, after which it is immediately stuck to the leather. The employees who do this work are called doublers.

Vamp-Extension Seamers, Machine: A vamp extension is a toe piece of felt or stiff leather which is stitched to the end of a cut-off vamp under where the tip will be placed. To obviate the necessity of skiving and lapping, the operator butts the two edges together and holds them in place on the machine while they are united with zigzag stitches across the open seam.

Crimpers (blucher vamp), Machine: Same as welt, page 139.

Tip Stitchers, Machine: Same as welt, page 139.

Box-Toe Stitchers, Machine: Same as welt, page 139.

Box-Toe Staplers, Machine: In some styles of shoes the stiffening for the toe is held in place by staples instead of stitches. These staples are formed automatically, as they are driven, from a coil of wire on the machine. The operator holds the piece of stiffening to the end of the vamp under the tip and pressure on a foot lever forms and drives each staple.

Tongue Stitchers (to blucher vamp), Machine: The blucher vamp differs from others by extending up over the instep and to which is attached the tongue. The quarters are extended forward and are laced across this extended vamp and tongue. To stitch the tongue to this vamp, the operator places it under the instep end of the vamp and holds the pieces together while they are being stitched.

Foxing and Vamp Seamers or Closers, Machine: The foxings are the two pieces of upper leather below the top in the rear of a circular vamp, extending back and uniting at the heel. To close a foxing to the vamp the operator places the two parts together inside out with their ends even. A guide on the machine regulates the width of the seam as the two parts are stitched together.

Seam Rubbers-Down, Machine: Same as welt, page 140.

Heel-Seam Closers, Machine: Same as welt, page 139.

Heel-Seam Stayers, Machine: Same as welt, page 140.

Top Seamers, Machine: Same as top closers, welt, page 140.

Eyelet-Row Markers, Hand: Same as welt, page 140.

Eyelet-Row Stitchers, Machine: Same as welt, page 140.

Hookers, Machine: Same as welt, page 140.

Backstay Stitchers, Machine: Same as welt, page 140.

Lining Stencilers, Machine: Same as lining markers, welt, page 140.

Lining Closers (with heel stay), Machine: Same as welt, page 140.

Eyelet-Facing Stitchers (to Lining), Machine: Same as side-facing stitchers, welt, page 140. The parts are held in place without having been previously pasted.

Top-Facing Stitchers (to Linings), Machine: Same as welt, page 141.

Top Stitchers, Machine: Same as welt, page 141. The parts are held in place without previous pasting or stitching.

Eyeletters, Machine: Same as welt, page 141.

Lacers, Machine: Same as welt, page 141.

Toe-Lining Stitchers, Machine: Same as welt, page 141.

Vampers, Machine: Same as welt, page 141.

Barrers, Machine: Same as welt, page 141.

Upper Tiers, Machine: When the uppers for a case of shoes are completed they are tied in a bundle to be sent to the lasting department. The operator folds each upper flat and piles them with the creases alternately back and front one on top of the other in the rack of an upper press. When all for a case are in, he presses a foot lever which forces them down tightly together. A strap is then placed around the bundle to hold them in place until they reach the lasting department.

The following 10 occupations are found in connection with the manufacture of button shoes only, and take the place of certain of the preceding occupations which apply only to lace shoes.

Tape Stitchers (to button fly), Machine: To prevent the tearing out of the buttonholes a stay is stitched by machine along the edge of the fly, where the buttonholes will be cut. On some shoes this stay is pasted in by hand.

Button-Fly Closers (to top), Machine: Same as welt, page 142.

Button-Fly Seam Stayers, Machine: Same as welt, page 142.

Fly-Facing Stitchers, Machine: Same as welt, page 142.

Buttonhole Markers, Hand: Same as welt, page 142.

Buttonhole Makers, Machine: Same as welt, page 142.

Buttonhole Finishers, Machine: Same as welt, page 142.

Button-Row Markers, Hand: Same as welt, page 142.

Button Fasteners, Machine: Same as welt, page 142.

Buttoners, Hand: Same as welt, page 142.

Checkers, Hand: The material for each case of shoes is checked before leaving this department, to ascertain if it is complete. If any parts are missing they are looked up. Each case is expected to be complete before it is sent to another department.

LASTING DEPARTMENT.

Upper Matchers, Hand: The uppers from the stitch room and the counters and insoles from the sole-leather department are matched by the tag on each package. These are placed on a rack ready for the last pickers.

Last Pickers, Hand: Same as welt, page 142.

Tackers (Insoles to Lasts), Hand: The operator holds the proper insole to each last and fastens it by driving two tacks through it into the last. These tacks are driven by hand with the hammer.

Last Chalkers, Hand: The toe and heel of each last is painted with a chalky preparation to prevent the upper from sticking to the last and tearing the lining.

Upper and Counter Sizers, Hand: Each upper is placed with the corresponding last by size, and right and left. Each counter is placed in the compartment opposite the corresponding size last. The operators who do this work are known as upper and counter sizers. They are sometimes called counter and upper "Casers-up."

Box-Toe Wetters, Hand: When a certain kind of stiffening is used in a box toe, the toe of the shoe is dipped into water in order to soften this stiffening material, thus preventing it from being cracked or broken when the shoe is pulled-over.

Box-Toe Shellackers, Hand: The toe box or tip is coated with a clay gum or shellac preparation, thus causing it to become more stiff when dry. This preparation is applied by the use of a brush.

Assemblers, for pulling-over machine, Machine.—The assembler receives the last with the insole tacked on it. He wets the leather and shellacs the toe box or the tip or both (unless these operations have already been performed), places the toe box and counter between the lining and the upper and then puts the last inside the upper. Having centered the upper on the last, he places the last on the spindle of the assembling machine and pushes it into the heel jaws of the machine. As it enters a small portion of the upper, leather is bent over the back edge of the heel seat. The foot lever is now used and with one stroke two tacks are driven, one through the bent-over portion of the upper into the heel seat and the other into the last through the heel seam about halfway down. The duties of the assembler are often divided among several operators, each doing a specified part.

Pullers-Over, Machine: Same as welt, page 143.

"Hand-Method" Lasting-Machine Operators, Machine: In this method of lasting, which is done on a machine known either as "consolidated" or "niggerhead," the operator holds the edge of the shoe so that the pincers of the machine grasp the upper and draw it evenly and closely about the last. Immediately following the pincers as fast as the upper is drawn into position, there is a device on the machine that drives tacks automatically into the last to hold the upper in its proper place. In case any part of the shoe has not been properly lasted, the operator pulls the tacks and does the work over. The entire shoe is lasted with this machine. Under the welt system previously described this machine is often used to last only the side or instep, after which the bed machine lasts the toe and heel, thus cutting out the operation of hand lasting the side or instep, which is necessary in plants using only the bed machine.

Tip Inspectors (after pulling-over), Hand: Same as inspectors (after pulling-over), hand, welt, page 144.

Cobblers, Hand: When the upper parts of the shoe are cut so small that the pincers of the lasting machines can not readily grasp them these shoes are handed to the cobbler who lasts them by hand. Those with spoiled insoles are given him to replace the insoles and relast the shoes by hand. He makes other minor repairs which do not require a new upper.

Rack Pushers, Hand: The racks of shoes which have been lasted are now pushed to another part of the lasting room to be transferred to a dryer.

Shoe Handlers (at Steam Dryer), Hand: After the shoes have been lasted, they are removed from the racks by hand and placed on drying shelves with the tip of each

shoe under a steam pipe. This is done in order to dry the box-toe stiffening. The shoes remain in this dryer for about 30 minutes and are then returned to the movable racks by the same operators.

Insole-Tack Pullers, Machine: The tacks are pulled by holding the sole against the tack-pulling device of the machine.

Pounders, Machine: When the shoe is lasted, a surplus amount of leather is gathered on the sole around the toe. In order to trim off this surplus the operator holds it against a revolving grater (a sheet-iron band full of punctures) and then against pounding rolls which smooth out the parts and tend to draw the upper more tightly over the toe.

Outsole Handlers (put on rack with uppers), Hand: The desired number of outsoles required by each order tag are awaiting the arrival of the lasted shoe. These are now arranged in pairs with each size number out, and placed on the lower shelf of the rack which contains the lasted uppers.

Outsole Tackers, Machine: The outsole tacker puts the sole in place on the shoe and holds it against the tacking device of his machine, which drives a few nails through it into the insole to hold it in place until it is permanently fastened. The machine automatically cuts the nails as they are driven from the end of a narrow band of flat steel coiled on the machine. The width of this band determines the length of the nail.

Last Pullers, Hand: Same as welt, page 148.

Last Sorters, Hand: The operator takes the lasts from the movable racks where they have been placed by the puller, and throws them into the proper bin, in accordance with the size printed on each last. This work is sometimes done by the last pullers.

Cripple Boy, Hand: The cripple boy looks up all missing shoes, such as those which have been repaired by the cobbler. These are placed with their respective cases before they leave this department.

BOTTOMING DEPARTMENT.

Heel-Seat Nailers, Machine: Same as welt, page 144.

McKay Sewers, Machine: This operator uses a McKay sewing machine to sew together the outsole, the upper, and the insole—the three parts being sewed together in one operation, except the heel seat, which is nailed. No welt is used in the McKay process, the seam being embedded in the channel of the outsole; the opposite side of the seam is on the inside of the shoe instead of on the top of the welt outside the shoe, as in the welt process of manufacture.

Channel Cementers, Machine: Same as welt, page 145.

Channel-Lip Wetters, Hand: In order to prevent the lip of the channel from cracking when it is cemented down it is dampened slightly. The employee has a pail of water into which he dips each sole.

The four following occupations apply to shoes in which the soles have been "fair stitched," or the bottoming done by the "McKay welt" method.

Stitch Wheelers, Machine: Same as welt, page 145.

Stitch Separators, Machine: Same as welt, page 145.

Edge Blackers (over welt Stitches), Hand: After the stitches on top of the welt or double sole (if fair stitched) have been wheeled or separated, this upper edge of the sole or welt is coated with paint by hand with the aid of a brush. After blacking this edge the stitches are sometimes burnished with a hot wheel similar to the one used for stitch wheeling or separating, by tracing over the same corrugations on the edge.

Stitch Burnishers, Machine: Same as welt, page 147.

Channel Layers, Machine: Same as welt, page 145.

Levelers, Machine: Same as welt, page 146.

Heelers' Helpers, Hand: Same as welt, page 146.

Heelers, Machine: Same as welt, page 146.

Sluggers, Machine: Same as welt, page 146.

Heel Trimmers or Shavers, Machine: Same as welt, page 146.

Heel Scourers, (first time), Machine: Same as welt, page 147.

Heel Breasters, Machine: Same as welt, page 146.

Shank Randers, Hand: In order to give a smooth appearance to the upper edge of the sole at the shank the operator bevels this corner of the edge by hand with a knife devised for this purpose.

Hole Fillers (In Heel), Hand: On some grades of shoes the heels are built partly of half-lifts, and holes sometimes appear where the lifts or half-lifts come together. These holes are filled after the heel has been attached to the shoe and its sides trimmed and breasted. The operator fills them with a thick paste which is applied by hand with a putty knife.

Edge Trimmers, Machine: Same as welt, page 146.

Heel Wetters, Hand: Same as heel gummings, welt shoes, page 147.

Heel Scourers, (second time), Machine: Same as welt, page 147. Data for first and second-time scourers are combined in the tables of this report under the term "Heel scourers."

Heel-Breast Scourer, Machine: Same as welt, page 147.

"Knifers Up," *Hand:* The knife on the edge trimmer does not quite cut back to the heel, and that of the heel shaver also leaves this part untouched. This slight hump on the edge of the sole is trimmed off by hand, with a knife specially devised for the purpose. When a McKay welt, described later, is used, this operator also trims the end of it where it fits under the heel.

Edge Setters, Machine: Same as welt, page 147.

Edge Brushers, Machine: After edge setting, the edge of the sole is brushed in order to clean and give an added polish. The operator holds the shoe against the revolving bristle brushes of his machine, going around the entire edge of the sole.

Heel Stainers or Blackers, Machine: The operator holds the heel of each shoe against the slowly revolving brushes of his machine, thus coating it with blacking or stain. The lower edge of the brushes pass through a supply of the liquid stain or blacking as they revolve.

Heel Burnishers, Machine: Same as welt, page 147.

FINISHING DEPARTMENT.

Heel-Pin Pasters, Hand: The heel pin is a small piece of material which has been cut the size and shape of the heel inside the shoe. It is cut from either paper, canvas, or leather. The operator coats it with cement by means of a hand brush, and sticks it to the heel end of the sock lining which is later pasted in the shoe. In turn and Goodyear welt shoes the sock lining is pasted to the inside of the shoe, at the heel only, to cover the nails there. In all other methods of manufacture, either nails or stitches appear around the sole on the inside of the shoe. These are covered with a sock lining. The heel pin is pasted to this and in a later operation gets in position over the heel nails when this sock lining is pasted into the shoe.

Sock-Lining Pasters, Hand: The sock lining is a piece of material which has been cut the size and shape of the insole. It is cut from either paper, canvas, or leather. The operator coats it with cement by means of a hand brush and sticks it over the entire insole to cover the stitches and nails.

Heel-Nail Grinders, Machine: The nails which extend through the top lift on the bottom of the heel are ground off, in order to give a smooth surface. The operator holds the heel of each shoe against the revolving emery wheel of his machine, which grinds off these projecting nails.

Buffers, Machine: Same as welt, page 147.

Bottom Dusters and Gummings, Machine: Same as welt, page 147.

Cracked-Channel Repairers: When the lip of a channel has been broken or chipped off it is repaired by filling in the broken space with a thick paste. This is applied by means of a putty knife.

Shank Cutters or Markers, Hand: When the shank or forepart of the sole is to be blacked, a mark across the shank indicates where this painted section shall end. The employee generally uses a knife to draw this line across the sole.

Bottom, Shank, or Top-Lift Blackers, Hand: Same as welt, page 147.

Bottom, Shank, or Top-Lift Polishers, Machine: Same as bottom polishers, welt, page 147.

Bottom Stampers, Machine: Same as stampers, welt shoes, page 148.

Edge Stripers, Hand: Same as welt, page 147.

Bottom Wheelers, Hand: The bottoms of shoes which have been stained are sometimes decorated around the edge with a series of slight indentations. This decoration is burned into the leather by means of an electrically heated tracing wheel, which the operator passes around the bottom edge of the sole.

Bottom Inspectors, Hand: The inspector of bottoms examines each sole to ascertain if there are any defects in their finished surface.

TREEING DEPARTMENT.

Maters-out (for treers), Hand: The shoe forms on a treeing machine are made in whole sizes only. Therefore, for the convenience of the operator, the shoes are separated into groups. All of each size and its corresponding half-size are placed together.

Treers, Hand: Same as welt, page 148.

Treers, Machine: Treeing is sometimes done on a machine. A treeing machine has two arms which cross each other at right angles and revolve horizontally at a point where these arms intersect. There are four shoe forms, one on the end of each cross arm. The rubbing device of this machine is stationed at an exact distance from the revolving center, so that a shoe placed on any one of these arms can be swung to this point to be rubbed. There are two operators to each machine. One operator places the shoe on the form, cleans it off with a dry brush, rubs in a filler, and swings it into the rubbing device, which consists of two heated rolls, one for each side of the shoe. This device operates up and down the lower half of the shoe from toe to heel, ironing the creases from these parts. When started it operates a set number of times and automatically stops. This shoe is then swung around to the other operator, who uses a treeing iron by hand on the top, in the shank, and over the vamp and tip where the machine does not touch. The shoe is then swung to the first operator, who applies a coat of dressing, removes it from the form, and places on another shoe. The operators and the machine are all working on different shoes at the same time.

Tack Inspectors, Hand: Same as welt, page 148.

Vamp Creasers, Machine: Same as welt, page 148:

Lining Cleaners, Hand: The linings which have become soiled during the processes of manufacture are cleaned with naphtha or gasoline. This is rubbed in by hand with a rag or brush.

Tip Scourers (Patent Leather), Machine: Same as welt, page 148.

Tip Fillers (Patent Leather), Hand: Same as tip repairers, welt shoes, page 148.

Russet Repairers, Hand: Same as welt, page 148.

Shoe Dressers, Hand: Same as welt, page 148.

PACKING DEPARTMENT.

Lacers, Hand: Same as welt, page 149.

Buttoners, Hand: The method of buttoning the shoe is the same as in the stitching department, but the purpose is for packing, instead of lasting the shoe.

Button-Top Pounders, Machine: In order to make the tops of button shoes stand up straight when exhibited, the operator holds the folded edge of the button fly and heel seam under a pounding device of his machine which flattens out these edges.

Strap-Cover Strippers, Hand: The loops which are stitched to the tops of men's shoes at the back to assist the wearer in pulling them on are covered with paper to prevent them from being soiled during the processes of shoe making. These loops are purchased with their paper covers already on. They are inserted between the lining and upper, and fastened in place by the seam of the top stitcher. The paper coverings of these loops are now pulled off by hand, shortly before the final inspection of the shoe.

Stitch Brushers or Cleaners, Machine: Same as welt, page 149.

Mate out for Inspectors: Before final inspection shoes are mated by sizes, as well as into pairs of like appearance, with regard to tips being set back on the vamp about equal distance, color, and texture of the upper, etc.

Inspectors, Hand: Before packing, all shoes are examined for defects in construction or finish. Those with flaws are returned to the proper department for repair.

Case Assemblers, Hand: When the shoes are ready to be packed, the assembler transfers the cases or boxes in which the cartons have already been placed, from the storage room to the packing room, by the use of a truck.

Carton Stencilers, Hand: Same as welt, page 149.

Packers, Hand: Same as welt, page 149.

Case Nailers, Hand: Same as welt, page 149.

Case Stencilers, Hand: When the shoes have been packed into cases, and the cases nailed, they are ready for shipment. The address of the purchaser is printed on the lid of the case by means of a brush and paint cup or by use of a stencil.

Shippers, Hand: The shipping clerk compares the contents of each case of shoes, as shown by the order tag (which has followed them through the factory), with the original order, in regard to sizes, width, etc., before the shoes are shipped.

TURN SHOES.

The occupations in the sole-fitting and lasting departments of a representative factory making turn shoes are next described. The work of the cutting and stitching departments, the making and attaching of the heel, and the finishing, are the same in turned as in other shoes.

SOLE-FITTING DEPARTMENT.

Outsole Skivers, Machine: Same as welt, page 137.

Outsole Rounder, Machine: Same as welt, page 137.

Outsole Channelers, Machine: The method of channeling outsoles for turn shoes is similar to that used on the Goodyear welt insoles. A channel is cut around the surface into which the stitches are embedded. A slit is also cut along the edge of the sole, but the part of the sole which would form the lip is cut away entirely by this channeling machine, thus forming a shoulder instead of a lip, to which in a later operation the upper is lasted and still later stitched. In the tables of this report data for this occupation are combined with those for McKay outsole channelers and welt insole channelers, under the term "Insole and outsole channelers."

Shankers Out, Machine: Shankng out is the beveling, or trimming away, of the edge of the sole at the shank. The operator feeds the shank edge of the sole, one side at a time, to his machine which skives off this part, thus giving a thin appearance to the sole at this point.

Outsole-Edge Molders, Machine: The edge of the sole from which the lip portion has been trimmed is bent down in order to avoid the needle when the upper is sewed to the shoulder. The operator guides the entire edge of the sole around his machine which bends it down to an angle of about 45 degrees.

Outsole and Counter Temperers, Hand: In order to get the outsoles and counters in condition so that they will bend readily, and without cracking, the various packages of each are placed into a tank of water for a short while and then set aside to drain in an air-tight closet or are covered with burlap. They remain in this condition about 12 hours.

LASTING DEPARTMENT (MACHINE METHOD).

Upper Matchers, Hand: Same as welt, page 142.

Last Pickers, Hand: Same as welt, page 142.

Outsole Molders, Hand: Soles for turn shoes are molded by hand. The operator places each sole over an iron concave mold, and pounds it with a round-headed hammer in order to make it fit the shape of the last.

Outsole Tackers (sole to last), Machine: There are no insoles used on turn shoes. The method of tacking the outsoles to the lasts is the same as that of tacking insoles to lasts on other shoes.

Assemblers, Hand: The assembler places the counter at the heel between the lining and upper. The last with its attached sole is put into the upper which has the lining side out. A portion of the upper is bent over the heel seat and tacked by hand with a hammer. Another tack is driven into the last through the heel seam. The box-toe stiffening is then dipped into water and placed between the toe lining and upper.

Pullers-Over, Machine: This is the regular pulling-over machine. but the pulling and tack-driving devices are arranged so as to last the front end of the shoe instead of pulling over the entire shoe.

Turn Lasters (first laster), Hand: After the toe has been lasted (or pulled over) by machine, the remaining parts are pulled into place by use of hand pliers and tacks are driven to hold them in place. At the heel the lining is not lasted with the upper, but is cut and turned back, thus avoiding wrinkles when the shoe is turned. At this point it goes to the turn sewer.

Turn Sewers, Machine: The operator places the edge of the shoe into his machine and guides it along the entire length of the channel beginning and ending at the heel. The threads pass from the channel, through the shoulder of the sole, and through the upper (which is lasted to it), uniting these parts.

Tack Pullers and Trimmers, Machine: In order to remove the lasting tacks, the operator guides the lasted edge of the shoe, with its projecting tacks, against a pulling device on his machine, which consists of a rotary-moving claw which extracts the tacks very rapidly. The surplus upper on the bottom at the toe and sides is then cut away by holding it to the trimming knife of the same machine.

Turn Lasters (second laster), Machine: To turn a shoe by machine the operator places it over the heel form and presses a foot lever. The arm of the machine forces the heel seat down inside of the form thereby turning the heel. The shoe is then transferred to an arm of the forepart turner, with the sole down. The foot lever of this machine causes pressure on the sole, which assists the operator in turning the sole. The shoe is now pulled by hand to the opposite arm of the machine thus turning the fore part.

Turn Lasters (second laster), Hand: This operator receives the shoe from the machine twin laster and straightens out the upper lining, inserts a filler for the fore part and the shank piece, each of which has been coated with glue to give added stiffness, thus filling in the space on the inside surface of the sole between the lapping edges of the upper. Two tacks are driven into the shank piece. The lasts are now returned

to the shoes with the aid of a shoe horn, but placed into opposite shoes; the last which was taken from the left is returned to the right shoe on account of the turning inside out of the shoe.

Pounders, Machine: After the shoe has been turned, the bottom is then put in its proper shape. The operator holds the bottom, heel, and other parts against the vibrating rolls of his machine which pound them to the shape of the last.

Crowners, Hand: The crowner examines the shoes for flaws of any character which may have occurred in the lasting department.

LASTING DEPARTMENT (HAND METHOD).

Upper Matchers, Hand: Same as welt, page 142.

Last Pickers, Hand: Same as welt, page 142.

Turn Lasters (first laster), Hand: The sole for a turn shoe is fitted to the shape of last by placing it over an iron concave mold and pounding it by hand with a specially devised hammer. In the next process it is tacked to the last. The operator then takes the stitched upper with the lining side out and places the counter at the heel under the lining. The last, with its attached sole, is placed in position inside the upper. A portion of the upper is bent over the heel seat and tacked by hand with a hammer; another tack is driven into the last through the heel seam. The box-toe stiffening is dipped into water and placed between the toe lining and upper. The shoe is then placed on the lasting jack (last rack with toe rest), the upper is pulled in place over the last by use of hand pliers, and tacks are driven to hold it in position beginning at the toe. The lining is not lasted with the upper at the heel, but is cut on each side and turned back so as to avoid wrinkles when the shoe is turned. At this point the shoe is taken to the turn sewer. After being stitched it is returned to the same turn laster who pulls the sole and lasting tacks with a notched knife and trims with a sharp knife the surplus upper from the sole. The shoe is now passed to the second laster.

Turn Sewers, Machine: Same as machine method, page 162.

Turn Lasters (second laster), Hand: In order to turn the shoe, the operator pulls the last, then places it over the turning iron which is attached to his bench. He pulls the heel first, and then the toe, against the end of this iron, turning the shoe right side out, straightens out the upper and lining, and inserts a filler for the fore part and the shank piece, each of which has been coated with cement, thus filling the space on the inside surface of the sole between the lapping edges of the upper. Two nails are driven into the shank to give added stiffness. The lasts are now returned by means of a shoe horn, each to the opposite shoe from which it was taken, on account of the shoes having been turned. He now uses a leveling iron on the sole and toe, and also pounds them with a hammer to adjust all parts to the shape of the last.

'Turn Lasters, Hand: Data for the above first and second lasters, and for the first and second lasters shown under machine method, are combined in the tables of this report under the term "Turn lasters, hand."

McKAY WELT SHOES—BOTTOMING DEPARTMENT.

McKay Welters, Machine: A "McKay Welt" is a combination of the McKay and welt types of shoes in which a welt is attached to the insole in the same way that the outsole is sewed to the insole in a regular McKay shoe; that is, the stitches pass directly through the welt, upper, and insole, making a seam on the inside of the shoe. This is accomplished by the use of a machine with a welt attachment which guides the welt into position as it is stitched around the bottom edge of the lasted shoe as far back as the breast of the heel. The outsole is afterwards sewed to this welt by the Goodyear stitcher. With the exception of the method of attaching the welt, the operations on this style of shoe are the same as on other welt shoes.

NAILED WELT SHOES—BOTTOMING DEPARTMENT.

Loose-Nail Welters, Machine: A "nailed welt" shoe is one in which the welt is nailed to the upper and insole instead of being sewed. This is accomplished by the use of a machine with a welt attachment which guides the welt into position around the bottom edge of the lasted shoe, nailing the parts together, and clinching the nails on the inside of the shoe. The outsole is afterwards sewed to the welt by the Good-year stitcher. With the exception of the method of attaching the welt, the operations on this style of shoe are the same as on other welt shoes.

LOOSE-NAILED SHOES—BOTTOMING DEPARTMENT.

Outsole Loose Nailers, Machine: "Loose-nailed" shoes differ from the ordinary McKay shoes in that the outsole is nailed to the upper and insole instead of being sewed. In doing this work the operator places the shoe with the sole in place, bottom up on the horn of his machine, and guides it around the entire sole as the nails are driven. Each nail passes through the outsole, upper, and insole, uniting these parts. (In some instances the nails are driven along a channel cut in the outsole, the lip of which is later cemented down, thus hiding the nail heads from view, and permitting of a smooth finish to the sole.) When the nail reaches the inside of the shoe it comes in contact with the tip of the horn, which is slightly concave. This causes the point of the nail to curve and reenter the insole, thus forming a smooth and strong clinch on the inside of the shoe. With the exception of the method of attaching the outsole, the operations on this style of shoe are the same as on ordinary McKay shoes.

STANDARD-SCREW SHOES—BOTTOMING DEPARTMENT.

Standard-Screw Machine Operators, Machine: "Standard-screw" shoes differ from ordinary McKay and loose-nailed shoes in that the outsole is fastened to the upper and insole by means of wire screws. In doing this the operator places the shoe with the sole in place, on the horn of his machine, and guides it around the entire sole as the wire screws are driven. This threaded screw is formed from a coil of wire in the revolving cylinder of the machine. The end of the horn inside of the shoe is always opposite the driven screw, as it passes through the outsole, upper, and insole. When it reaches the inside of the shoe it necessarily stops against the tip of the horn, is automatically cut off, and feeds to the next fastening place. The insole for this style fastening has to be of thicker material than that used for others, as the outsole is held in place only by the threads which are embedded in the insole. With the exception of the method of attaching the outsole, the operations on this style of shoes are the same as on ordinary McKay shoes.

Loose-Nail and Standard-Screw Machine Operators, Machine: Data relating to the two preceding occupations are combined in the tables of this report under the term "Loose-nail and standard-screw machine operators." The operation of the two machines is very much alike, and in many factories the same person operates either machine as required.

The accompanying charts present a graphic view of the operations in the manufacture of welt, McKay, and turn shoes, respectively. In studying these charts and the descriptions of occupations given above it should be borne in mind that the presentation in each instance is for one representative factory and that the processes and occupations vary in different factories, even those making the same kind of shoe.

CHART A.—OUTLINE OF PROCESSES IN A SHOE FACTORY: WELT METHOD.

[This chart outlines the processes of manufacture of a certain kind of shoe in a representative factory. It lists in order the processes of manufacture of a "lace" shoe. For a "button" shoe substitute in place of the stitching department for a lace shoe the stitching department for a button shoe, printed at the bottom of the chart. The lines leading down from each part named indicate the point of assembling with other parts. The processes of manufacture vary in different factories and for different kinds of shoes in the same factory, hence for any other factory this chart is but a suggestive guide, which must be amended to conform to the processes of such other factory.]

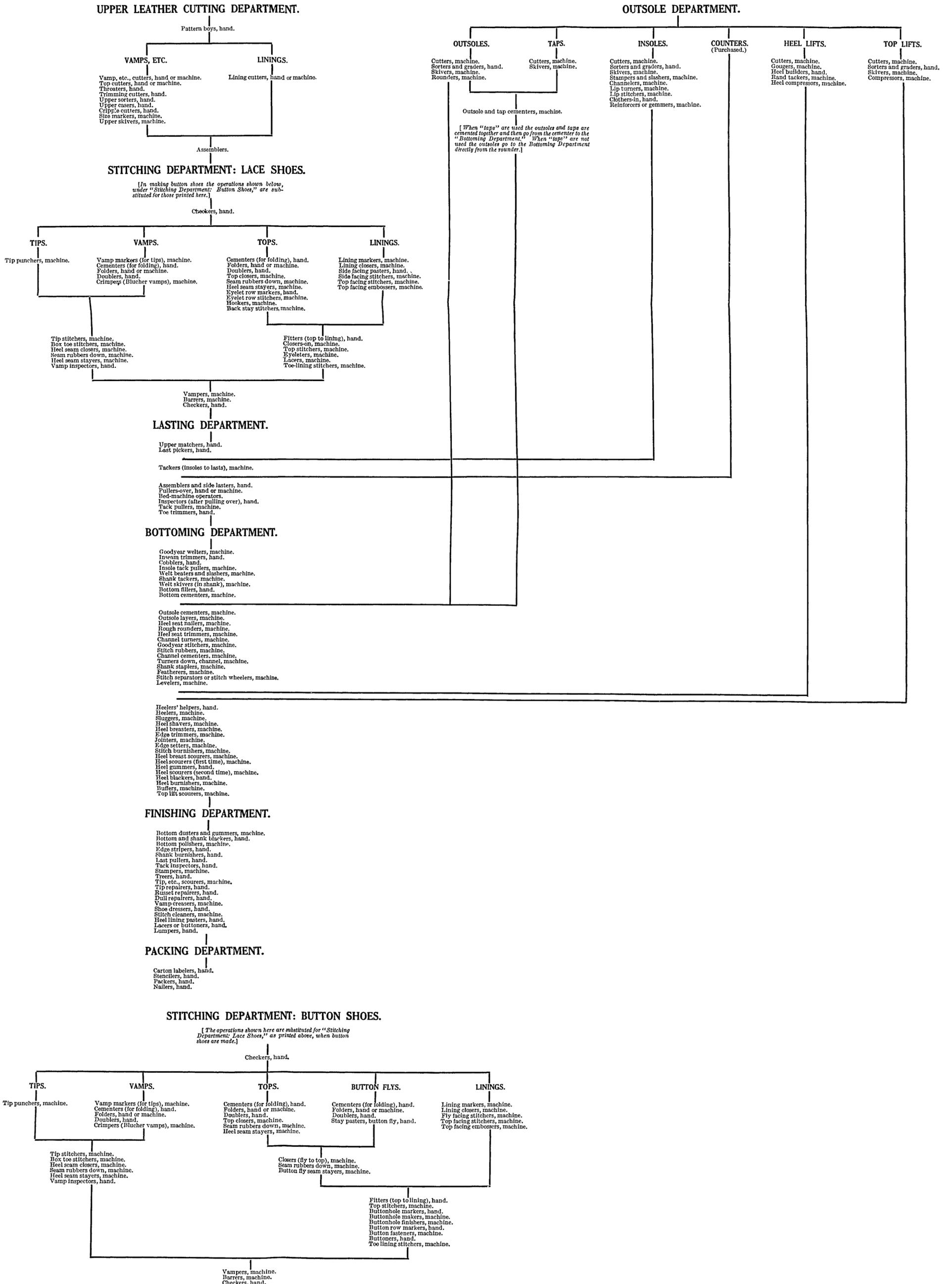
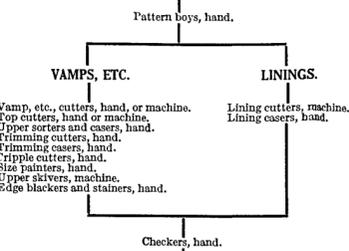


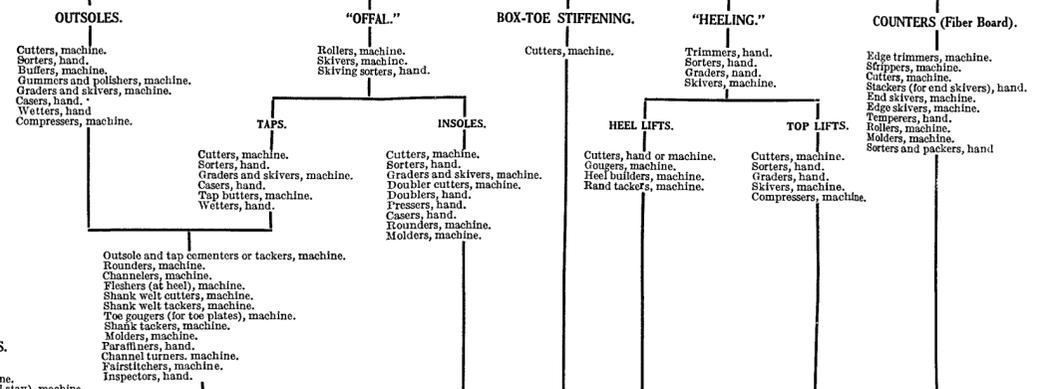
CHART B.—OUTLINE OF PROCESSES IN A SHOE FACTORY: MCKAY METHOD.

[This chart outlines the processes of manufacture of a certain kind of shoe in a representative factory. It lists in order the processes of manufacture of a "lace" shoe. For a "button" shoe, substitute in place of the stitching department for a button shoe the stitching department for a button shoe, printed at the bottom of the chart. The lines leading down from each part would indicate the point of assembling with other parts. The processes of manufacture vary in different factories and for different kinds of shoes in the same factory; hence for any other factory this chart is but a suggestive guide, which must be amended to conform to the processes of such other factory.]

UPPER LEATHER CUTTING DEPARTMENT.

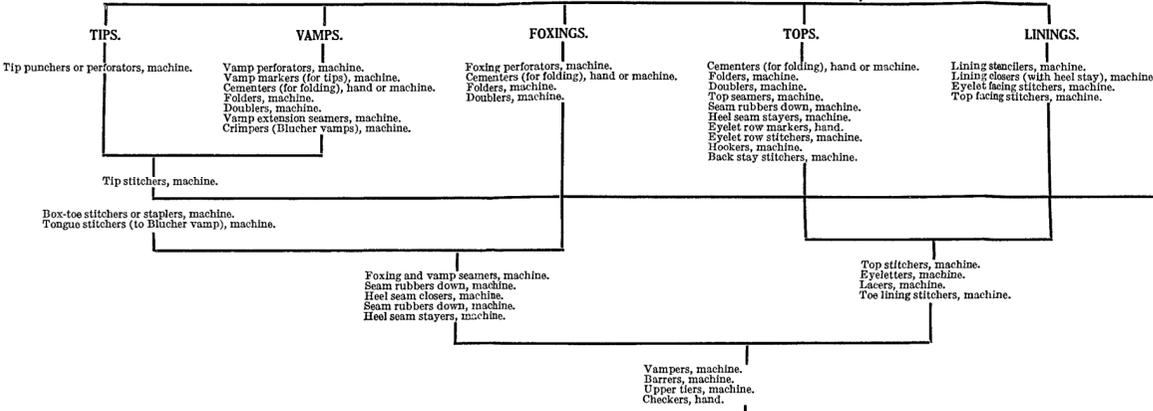


SOLE LEATHER DEPARTMENT.

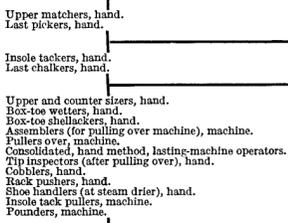


STITCHING DEPARTMENT: LACE SHOES.

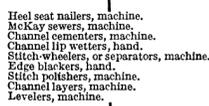
[In making button shoes the operations shown below, under "Stitching Department: Button Shoes," are substituted for those printed here.]



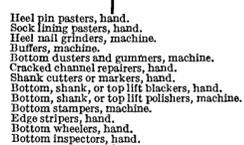
LASTING DEPARTMENT.



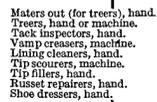
BOTTOMING DEPARTMENT.



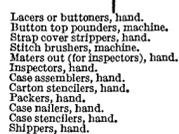
FINISHING DEPARTMENT.



TREEING DEPARTMENT.



PACKING DEPARTMENT.



STITCHING DEPARTMENT: BUTTON SHOES.

[The operations shown here are substituted for "Stitching Department: Lace Shoes," as printed above, when button shoes are made.]

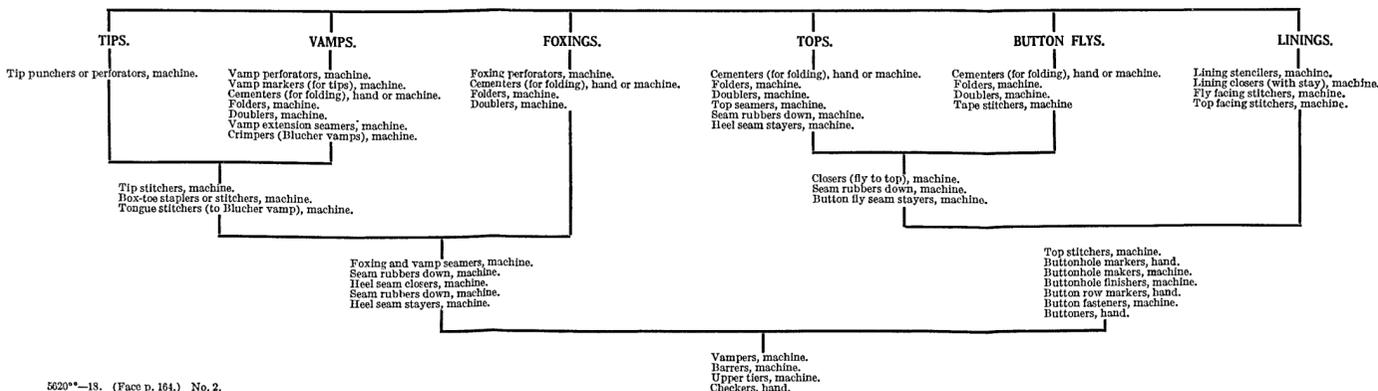
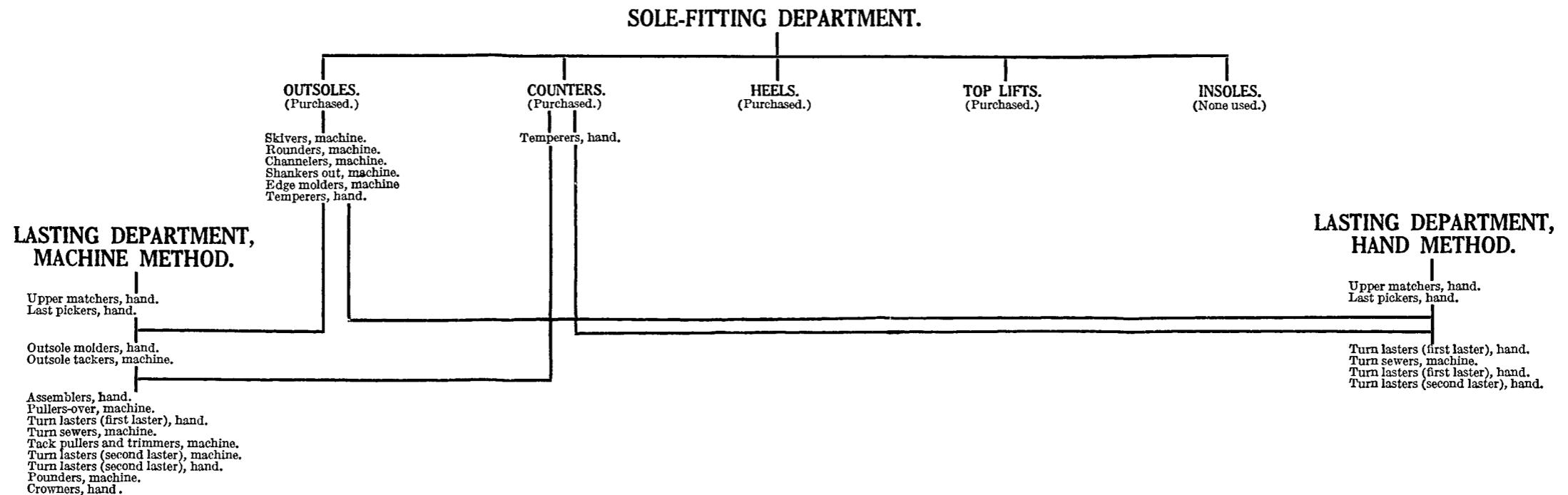


CHART C.—OUTLINE OF PROCESSES IN THE MANUFACTURE OF TURN SHOES.

[This chart outlines the processes in the Sole-fitting and Lasting Departments, in the manufacture of a turn shoe. The processes in the other departments are similar to those shown in the charts for Welt and McKay shoes.]



APPENDIX B.—TIME AND LABOR COST IN MAKING 100 PAIRS OF SHOES.

In this appendix is presented a table showing the time cost and labor cost, by occupations, in the manufacture of 100 pairs of welt shoes, the rate of wages or earnings per hour of the employee, and the number of pairs of shoes worked on per hour, by the employee in a representative shoe factory.

The table presents most forcibly the minute specialization of work in a modern shoe factory, the many hands through which a shoe passes in the course of manufacture, the great number of repetitions of a single operation in an hour, and the comparatively short time consumed, and the small labor cost in the making of a pair of shoes.

The total time cost, as shown by the total at the end of the table, for making 100 pairs of shoes, is, in this establishment, 8,574.78 minutes, or 142.9 hours, and the total labor cost \$36.8334. Reduced to a single pair of shoes, the time cost is 1 hour and 25 $\frac{3}{4}$ minutes, and the labor cost \$0.368. One man in one hour makes seven-tenths of a pair of shoes.

Under each department of the factory the occupations are given in the order of the operation. At the end of each department are shown the cost of "daywork" and of "organization." The "daywork" includes operations that can not be carried under a piece-rate system nor easily separated into specific individual operations. "Organization" includes the work of superintendents, assistants, foremen, laborers, clerks, firemen, and others whose work is more or less general, the cost of which has been apportioned to the several departments according to the amount of time determined as devoted to each.

The column "Time cost" shows the time in minutes required for one person to perform the work of the occupation on 100 pairs of shoes. The "labor cost" is the amount paid for the work done by the operator in the time given in the time-cost column.

The hourly wages is the amount earned per hour by the employee in the occupation named.

The number of pairs worked on per hour is the number of pairs of shoes for which the given operation is performed in one hour.

To illustrate: The first operation in order of process in the upper-leather department is that of "tongue cutter." It requires 36.65 minutes for this operator to cut the tongues for 100 pairs of welt shoes of a given style, and for this work he is paid \$0.1519. This amount is equivalent to an hourly rate of \$0.2487, and, in one hour the operator will cut the tongues for 163.71 pairs of shoes.

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TIME AND LABOR COST, BY OCCUPATIONS, IN THE MANUFACTURE OF 100 PAIRS OF WELT SHOES, THE RATE OF WAGES OR EARNINGS PER HOUR, AND THE NUMBER OF PAIRS WORKED ON PER HOUR.

Department and occupation.	Time cost of 100 pairs (minutes).	Labor cost of 100 pairs.	Hourly wages.	Number of pairs worked on per hour.
UPPER-LEATHER DEPARTMENT.				
Tongue cutters	36.65	\$0.1519	\$0.2487	163.71
Eyeflet-facing cutters, top section	44.00	.1799	.2453	136.36
Eyeflet-facing cutters, toe section	29.38	.1200	.2451	204.22
Backstay cutters	17.10	.0720	.2526	350.88
Remnant sorters	10.19	.0417	.2455	588.81
Eyeflet-facing skivers, top section	6.65	.0242	.2133	902.26
Eyeflet-facing skivers, toe section	14.62	.0534	.2192	410.40
Tongue skivers	3.21	.0117	.2187	1,839.16
Backstay skivers	3.21	.0117	.2187	1,839.16
Eyeflet-facing cementers	33.01	.1200	.2181	181.76
Eyeflet-facing sorters	9.77	.0266	.1634	614.12
Tongue sorters	2.42	.0067	.1661	2,479.34
Cloth folders and rollers	2.04	.0083	.2441	2,941.18
Cloth-lining and doubler cutters	5.65	.0333	.3536	1,061.95
Lining casers	4.58	.0167	.2188	1,310.04
Doubler casers	2.52	.0092	.2190	2,380.95
Packers	1.56	.0042	.1615	3,846.15
Vamp and tip cutters	151.93	.9963	.3935	39.49
Top cutters	119.05	.4865	.2452	50.40
Die distributors	8.26	.0225	.1634	723.39
Vamp sorters and casers	36.65	.1333	.2182	163.71
Tip sorters and casers	9.17	.0333	.2179	654.31
Top sorters and casers	21.77	.0792	.2183	275.61
Vamp painters and sizers	3.06	.0083	.1627	1,960.78
Tip painters and sizers	1.22	.0033	.1623	4,918.03
Top painters and sizers	3.36	.0092	.1643	1,785.71
Vamp recounters	6.21	.0167	.1614	966.18
Tip recounters	2.42	.0067	.1661	2,479.34
Top recounters	6.21	.0167	.1614	966.18
Vamp tiers-up	1.56	.0042	.1615	3,846.15
Tip tiers-up	1.22	.0033	.1623	4,918.03
Top tiers-up	1.56	.0042	.1615	3,846.15
Refinishers	7.86	.0250	.1908	763.36
Tongue casers	2.07	.0075	.2174	2,898.55
Eyeflet-facing casers	6.19	.0225	.2181	939.31
Heel-stay casers	2.52	.0092	.2190	2,380.95
Backstay casers	3.44	.0125	.2180	1,744.19
Daywork	199.88	.7299	.2191	30.02
Organization	242.70	1.0913	.2698	24.72
SOLE-LEATHER DEPARTMENT.				
Outsole-stock sorters, skivers, etc.	4.60	.0188	.2452	1,304.35
Side dippers	1.43	.0052	.2182	4,195.80
Pilers (near machine) .....	.66	.0024	.2182	9,090.91
Pilers (on machine) .....	.61	.0022	.2164	9,836.06
Cleaners-up (around machine) .....	.83	.0030	.2167	7,228.92
Outsole cutters	19.65	.1250	.3817	305.34
Pilers (under machine) .....	.97	.0035	.2165	6,185.57
Insole cutters	19.72	.1075	.3271	304.26
Gem-duck cutters, insole	2.00	.0100	.3000	3,000.00
Burlap cutters, insole	6.60	.0300	.2727	909.09
Tap-stock sorters, skivers, etc.	30.25	.1240	.2460	198.35
Tap cutters	27.50	.1500	.3273	218.18
Top-lifts stock sorters, skivers, etc.	15.15	.0620	.2455	396.04
Top-lift cutters	23.10	.1260	.3273	259.74
Box-toe cutters	2.20	.0100	.2727	2,727.27
Outsole graders and skivers	12.73	.0425	.2003	471.33
Outsole sorters	17.89	.0975	.3270	335.38
Outsole grade painters	14.90	.0475	.1913	402.68
Tap graders and skivers	12.56	.0400	.1911	477.71
Tap butters	5.50	.0175	.1909	1,090.91
Tap sorters	9.02	.0450	.2993	665.19
Tap casers	5.70	.0233	.2453	1,052.63
Tap wirers	2.34	.0096	.2462	2,564.10
Putters-away (tap)	2.25	.0113	.3013	2,666.67
Insole graders and skivers	12.58	.0400	.1907	476.95
Insole-split sorters	11.93	.0650	.3269	502.93
Insole grade painters .....	.63	.0020	.1905	9,523.81
Putters-away (insole)	1.84	.0067	.2185	3,260.87
Insole casers	6.73	.0275	.2452	891.53
Insole buffers	7.33	.0300	.2456	818.55
Insole gem-duck sorters and putters-away	1.57	.0050	.1911	3,821.66

TIME AND LABOR COST, BY OCCUPATIONS, IN THE MANUFACTURE OF 100 PAIRS OF WELT SHOES, THE RATE OF WAGES OR EARNINGS PER HOUR, AND THE NUMBER OF PAIRS WORKED ON PER HOUR--Continued.

Department and occupation.	Time cost of 100 pairs (minutes).	Labor cost of 100 pairs.	Hourly wages.	Number of pairs worked on per hour.
SOLE-LEATHER DEPARTMENT--concluded.				
Insole gem-duck casers	4.70	\$0.192	\$0.2451	1,276.60
Putters-away (insole buckram)	.52	.0018	.2077	11,538.46
Insole buckram casers	6.73	.0275	.2452	891.53
Collectors and shippers	1.65	.0075	.2727	3,636.36
Box-toe skivers	5.62	.0230	.2456	1,067.62
Box-toe sorters	4.35	.0138	.1903	1,379.31
Counter fiber-edge trimmers	3.30	.0120	.2182	1,818.18
Counter fiber strippers	2.83	.0105	.2226	2,120.14
Counter cutters	5.50	.0200	.2182	1,090.91
Counter stackers (for end trim)	2.36	.0075	.1907	2,542.37
Counter-end trimmers	2.47	.0090	.2186	2,429.15
Counter skivers	2.62	.0088	.2015	2,290.08
Counter temperers	.28	.0020	.4286	21,428.57
Counter rollers	5.06	.0138	.1636	1,185.77
Counter molders	22.68	.0825	.2183	264.55
Dryer-box emptiers	.92	.0025	.1630	6,521.73
Counter sorters	7.68	.0250	.1953	781.25
Counter waterproofers	.69	.0025	.2174	8,695.65
Welt casers	1.32	.0042	.1909	4,545.45
Welt groovers and bevelers	5.00	.0250	.3000	1,200.00
Welt hankers	4.97	.0158	.1907	1,207.24
Welt splicers	2.70	.0098	.2178	2,222.22
Welt packers and shippers	.69	.0025	.2174	8,695.65
Putters-away (outsole)	4.09	.0167	.2450	1,466.99
Outsole casers	9.43	.0428	.2723	636.27
Outsole shippers	.24	.0011	.2750	25,000.00
Box-toe casers	3.67	.0150	.2452	1,634.88
Box-toe tiers-up	1.70	.0054	.1906	3,529.41
Box-toe shippers	.47	.0019	.2426	12,765.96
Putters-away (counters)	.28	.0010	.2143	21,428.57
Counter casers	4.48	.0183	.2451	1,339.29
Counter shippers	.44	.0018	.2455	13,636.36
Daywork	86.98	.3133	.2161	68.98
Organization	143.66	.7656	.3198	41.77
HEEL DEPARTMENT.				
Heeling-stock skivers, sorters, etc.	58.65	.2400	.2455	102.30
Heel builders	167.17	.7600	.2728	35.89
Rough sorters	13.44	.0550	.2455	446.43
Heel gougers	5.66	.0180	.1908	1,060.07
Heel skivers	4.72	.0150	.1907	1,271.19
Heel compressors	9.03	.0288	.1914	664.45
Heel sorters	8.80	.0400	.2727	681.82
Top-lift graders	3.44	.0125	.2180	1,744.19
Top-lift skivers	2.75	.0075	.1636	2,181.82
Top-lift compressors	8.66	.0275	.1905	692.84
Top-lift sorters	6.73	.0275	.2452	891.53
Top-lift casers	5.70	.0233	.2453	1,052.63
Heel casers	5.70	.0233	.2453	1,052.63
Daywork	48.73	.1840	.2266	123.13
Organization	58.99	.2924	.2974	101.71
MANUFACTURING DEPARTMENT.				
Markers (for tips)	22.91	.0625	.1637	261.89
Vamp cut-off skivers	11.45	.0416	.2180	524.02
Heal-seam skivers	22.91	.0833	.2182	261.89
Vamp-extension pasters	27.42	.0625	.1368	218.82
Vamp doublers	53.35	.1250	.1406	112.46
Side liners	27.59	.0666	.1448	217.47
Top skivers (corner of heel)	22.91	.0625	.1637	261.89
Top skivers (at bottom)	22.91	.0625	.1637	261.89
Top doublers	25.28	.0625	.1483	237.34
Reinforced-stay pasters	53.35	.1250	.1406	112.46
Stencil liners	13.09	.0416	.1907	458.37
Lasting-tape stitchers	68.72	.1875	.1637	87.31
Tip stitchers	83.05	.1875	.2121	113.10
Box-toe to vamp stitchers	53.51	.1458	.1635	112.13
Vamp seamers	39.28	.1250	.1909	152.75
Vamp stayers	41.09	.1250	.1825	146.02
Top seamers	29.21	.0938	.1927	205.41
Top rubbers	15.27	.0116	.1635	392.93
Backstay stitchers	114.58	.4166	.2182	52.37

TIME AND LABOR COST, BY OCCUPATIONS, IN THE MANUFACTURE OF 100 PAIRS OF WELT SHOES, THE RATE OF WAGES OR EARNINGS PER HOUR, AND THE NUMBER OF PAIRS WORKED ON PER HOUR—Continued.

Department and occupation.	Time cost of 100 pairs (minutes).	Labor cost of 100 pairs.	Hourly wages.	Number of pairs worked on per hour.
MANUFACTURING DEPARTMENT—continued.				
Heel-stay stitchers.....	76.42	\$0.2083	\$0.1635	78.51
Top-facing stitchers.....	39.28	.1250	.1909	152.75
Eyelet-facing stitchers.....	95.99	.2917	.1823	62.51
Stitchers and trimmers.....	223.58	.9166	.2490	26.84
Eyeletters.....	40.74	.1668	.2457	147.28
Lacers.....	26.19	.0833	.1908	229.10
Toe-lining seamers.....	45.83	.1250	.1636	130.92
Vampers.....	341.46	1.5832	.2782	17.57
Sizers-out.....	18.33	.0416	.1362	327.33
Outsole shankers-out.....	20.37	.0556	.1638	294.55
Outsole size stampers.....	9.17	.0250	.1636	651.31
Tap cementers.....	10.83	.0278	.1540	554.02
Heel dippers (in waterproofing).....	15.28	.0416	.1634	392.67
Tap scourers.....	10.83	.0278	.1540	554.02
Outsole cementers.....	12.21	.0333	.1636	491.40
Outsole counters and craters.....	6.55	.0208	.1905	916.03
Insole putters-up (for rounders).....	4.58	.0125	.1638	1,310.04
Insole rounders.....	15.28	.0625	.2454	392.67
Insole channelers.....	33.37	.1668	.2999	179.80
Insole-lip cutters (at toe).....	7.64	.0208	.1634	785.34
Insole dippers (in stiffener).....	3.82	.0104	.1634	1,570.68
Insole-lip turners.....	38.20	.1041	.1635	157.07
Insole-lip reinforcers.....	45.83	.1250	.1636	130.92
Insole scourer and size stamper.....	9.17	.0208	.1361	654.31
Insole welt-line markers and casers.....	12.21	.0278	.1366	491.40
Insole formers (in cloth).....	65.53	.1582	.1448	91.56
Insole-lip trimmers.....	30.59	.0833	.1634	196.14
Insole-lip straighteners.....	16.26	.0500	.1845	369.00
Insole-lip stiffeners.....	15.28	.0416	.1634	392.67
Insole counters and casers.....	8.62	.0208	.1448	696.06
Last casers-up.....	13.09	.0417	.1911	458.37
Insole tackers (to last).....	32.74	.1041	.1908	183.26
Insole trimmers (at heel).....	13.09	.0416	.1907	458.37
Last chalkers.....	18.34	.0500	.1636	327.15
Upper maters.....	15.27	.0417	.1639	392.93
Assemblers.....	86.48	.3541	.2157	69.38
Box shellackers.....	34.40	.0938	.1636	174.42
Vamp wetters (for pull-over).....	15.27	.0417	.1639	392.93
Pullers-over (Rex machine).....	104.76	.6665	.3817	57.27
Side lacers (C. H. M. machine).....	125.00	.6250	.3000	48.00
Heel and toe laster.....	269.61	1.5832	.3523	22.25
Toe-tack pullers.....	32.79	.1041	.1905	182.98
Trimmers-out.....	22.91	.0625	.1637	261.89
Stiffeners.....	11.45	.0362	.1897	524.02
Case assemblers.....	9.83	.0362	.2210	610.37
Checkers-out.....	11.94	.0375	.1884	502.51
Tack pullers.....	72.08	.2292	.1908	83.24
Welters.....	97.00	.7498	.4638	61.86
Side-tack pullers.....	20.37	.0552	.1626	294.55
Inseam trimmers.....	81.50	.3333	.2454	73.62
Welt beaters.....	29.41	.0938	.1914	204.01
Insole-tack knockers.....	30.56	.0833	.1635	196.34
Stickers-in (shank).....	29.41	.0938	.1914	204.01
Bottom fillers.....	54.38	.1668	.1840	110.33
Bottom cementers.....	22.91	.0625	.1637	261.89
Sole layers.....	40.74	.1668	.2457	147.28
Heel-seat nailers.....	34.38	.1250	.2182	174.52
Maters (for levelers).....	22.91	.0416	.1089	261.89
Outsole rounders.....	65.07	.4791	.4418	92.21
Heel-seat rounders.....	19.65	.0625	.1908	305.34
Channel openers.....	45.83	.1250	.1636	130.92
Stitchers.....	162.24	.9583	.3544	36.98
Channel cementers.....	30.56	.0833	.1635	196.34
Channel layers.....	45.83	.1668	.2184	130.92
Wheel stitchers.....	34.85	.1108	.1908	172.17
Upper-edge blackers.....	22.91	.0625	.1637	261.89
Levelers.....	30.56	.1250	.2454	196.34
Last pullers.....	39.30	.1250	.1908	152.67
Last throwers (into bins).....	10.48	.0333	.1906	572.52
Heel tenders.....	58.39	.1771	.1820	102.76
Heelers.....	56.41	.3333	.3545	106.36
Sluggers.....	40.74	.1668	.2457	147.28
Heel trimmers.....	35.98	.2292	.3822	166.76
Heel breasters.....	30.56	.1250	.2454	196.34

TIME AND LABOR COST, BY OCCUPATIONS, IN THE MANUFACTURE OF 100 PAIRS OF WELT SHOES, THE RATE OF WAGES OR EARNINGS PER HOUR, AND THE NUMBER OF PAIRS WORKED ON PER HOUR—Concluded.

Department and occupation.	Time cost of 100 pairs (minutes).	Labor cost of 100 pairs.	Hourly wages.	Number of pairs worked on per hour.
MANUFACTURING DEPARTMENT—concluded.				
Heel-breast scourers	34.38	\$0.0938	\$0.1637	174.52
Edge trimmers	171.34	1.1666	.4085	35.02
Knifers-up (machine)	54.38	.1668	.1840	110.33
Heel scourers (first)	41.22	.1875	.2729	145.56
Edge setters	114.58	.6252	.3274	52.37
Edge brushers-up	17.46	.0552	.1897	343.64
Stitch polishers	30.56	.0833	.1635	196.34
Heel scourers (second)	32.05	.1459	.2731	187.21
Heel blackers	18.34	.0416	.1361	327.15
Heel burnishers	45.83	.2083	.2727	130.92
Shank and top-lift scourers	100.73	.4580	.2728	59.57
Dusters and gummers	38.20	.1041	.1635	157.07
Painters	54.38	.1668	.1840	110.33
Gummers and polishers	71.34	.2918	.2454	84.10
Stripers	36.66	.1002	.1640	163.67
Heel-breast painters	20.95	.0667	.1910	286.40
Top-lift rollers	41.92	.1334	.1909	143.13
Bottom waxers	28.64	.1041	.2181	209.50
Shank nailers	19.65	.0625	.1908	305.34
Forepart stampers	19.65	.0625	.1908	305.34
Shank stampers	19.65	.0625	.1908	305.34
Maters (for treers)	15.27	.0417	.1639	392.93
Treers (machine)	18.90	.7608	.2415	317.46
Putters-in (heel pins)	29.29	.0667	.1366	204.85
Dull leather repairers	68.75	.1875	.1636	87.27
Fillers (tip)	26.19	.0833	.1908	229.10
Oilers	78.57	.2500	.1909	76.37
Stitch brushers	22.91	.0558	.1461	261.89
Dressers	78.57	.2500	.1909	76.37
Lacers	30.56	.0833	.1635	196.34
Brushers	38.20	.1041	.1635	157.07
Maters (for inspectors)	15.27	.0417	.1639	392.93
Packers	34.85	.1108	.1908	172.17
Daywork	138.88	.4629	.2000	43.20
Organization	763.47	4.4806	.3521	7.86
	¹ 8,574.78	36.8334	.2577	0.70

¹ 142.9 hours.

