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## LEATHER AND ITS FINISHED PRODUCTS

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# THE LEATHER INDUSTRY.

## SUMMARY AND ANALYSIS.

**Scope of the report.**—This report presents the statistics for the manufacture of leather and for several industries in which leather is the chief material, and comprises the industries classified as (1) Leather, tanned, curried, and finished; (2) Boots and shoes; (3) Boot and shoe cut stock; (4) Boot and shoe findings; (5) Leather gloves and mittens; (6) Saddlery and harness; (7) Leather belting; (8) Trunks and valises; (9) Pocketbooks; and (10) Leather goods, not elsewhere specified.

In addition to the general statistics for these industries, detailed data are presented concerning materials and products for leather, tanned, curried, and finished, and concerning products for boots and shoes and leather gloves and mittens.

**Principal statistics for leather and its finished products.**—Table 1 gives the number of establishments, average number of wage earners, wages, cost of materials, and value of products for the industry group as a whole, and for the several component industries for 1919, 1914, and 1909. This industry group represents approximately 4.2 per cent of the value of all products for all industries for 1919, as compared with 4.6 per cent for 1914 and 4.8 per cent for 1909. Some establishments in the "leather, tanned, curried, and finished" industry worked on a contract basis, the hides or skins being furnished by other tanners or dealers in the industry, and the value of the product reported was the amount received for the work done, and not the value of the manufactured leather.

TABLE 1.—PRINCIPAL STATISTICS FOR LEATHER AND ITS FINISHED PRODUCTS: 1919, 1914, AND 1909.

INDUSTRY.	Census year.	Number of establishments.	WAGE EARNERS.		Cost of materials.	Value of products.
			Average number.	Wages.		
Total.....	1919	6,397	349,362	\$303,453,419	\$1,713,807,336	\$2,610,230,727
	1914	6,758	307,060	109,357,500	753,135,354	1,104,594,557
	1909	5,728	309,766	155,110,878	609,874,518	992,713,822
Leather, tanned, curried, and finished.....	1919	680	72,476	88,205,473	640,521,527	928,591,701
	1914	741	55,936	31,914,497	284,245,420	807,201,705
	1909	919	62,202	32,102,845	248,278,933	827,874,187
Boots and shoes.....	1919	1,449	211,049	210,734,610	715,269,315	1,155,041,436
	1914	1,355	191,555	105,095,404	310,353,586	601,760,455
	1909	1,343	185,116	92,359,152	277,467,743	442,030,726
Boot and shoe cut stock.....	1919	252	9,715	9,124,778	133,887,276	161,203,310
	1914	236	7,819	4,052,123	51,450,498	59,064,523
	1909	232	6,693	3,156,400	36,919,919	44,061,497
Boot and shoe findings.....	1919	427	8,941	8,187,196	40,428,347	62,825,408
	1914	369	6,714	3,225,683	20,304,183	28,303,186
	1909	343	6,488	2,947,083	18,350,551	25,505,419
Saddlery and harness.....	1919	1,823	10,411	10,849,066	52,442,907	83,713,010
	1914	2,551	12,969	7,995,612	33,080,442	53,558,612
	1909	1,347	14,632	8,071,484	33,177,937	54,224,602
Trunks and valises.....	1919	597	11,470	12,463,767	33,222,432	63,932,266
	1914	561	9,911	5,540,157	13,625,457	26,471,527
	1909	524	11,122	5,537,329	14,629,065	28,027,964
Gloves and mittens, leather.....	1919	355	10,685	8,150,784	26,288,129	40,940,511
	1914	352	10,608	4,558,800	12,170,694	21,614,109
	1909	377	11,354	4,763,830	13,203,001	23,630,598
Belting, leather.....	1919	172	2,765	3,260,439	28,156,711	40,480,654
	1914	151	2,951	2,069,545	15,480,110	23,035,951
	1909	139	3,006	1,860,880	15,622,603	23,691,887
Pocketbooks.....	1919	139	2,905	3,061,903	7,557,155	14,540,659
	1914	84	1,406	702,314	1,783,840	3,350,552
	1909	79	1,472	683,615	1,620,327	3,628,161
Leather goods, not elsewhere specified.....	1919	503	8,945	9,415,403	30,035,537	52,952,772
	1914	378	7,071	3,603,865	10,632,124	19,333,924
	1909	425	7,081	3,623,200	10,290,439	18,838,281

# LEATHER, TANNED, CURRIED, AND FINISHED.

## GENERAL STATISTICS.

**Comparative summary.**—Table 2 summarizes the general statistics for the industry for each census from 1879 to 1919 inclusive, with percentages of increase for the census periods.

**Principal states, ranked by value of products.**—Table 3 presents the statistics for the number of establishments, average number of wage earners, value of products, and value added by manufacture, by states, ranked according to value of products, 1919.

**Persons engaged in the industry.**—The age classification of the average number of wage earners in Table 4 is estimated by the method described in the "Explanation of terms." Figures for states will be found in Table 23.

**Wage earners, by months.**—The statistics for wage earners, Table 5, are intended to show the steadiness of employment, or the reverse, in accordance with the industrial conditions existing during the year. Females constituted 8.2 per cent of the wage earners in 1919. The range between the minimum and maximum months was somewhat greater in 1919 than in 1914 and 1909, the number reported for the minimum month, February, being 82.9 per cent of the maximum month, December. The greatest variation was in Delaware, minimum 42.9 per cent of maximum, and the least variation in Wisconsin, minimum 96.1 per cent of maximum.

**Prevailing hours of labor.**—The statistics presented in Table 6 show a marked movement toward shortening the working day. In 1909, 49.8 per cent of the wage earners were employed in establishments where the prevailing hours of labor per week were 60 and over, in 1914 this proportion was reduced to 34.4 per cent, and in 1919 to 7.3 per cent. On the other hand, in 1909 only 3.5 per cent of the wage earners were employed in establishments where the prevailing hours of labor were fewer than 54 per week, whereas in 1914 this proportion increased to 7.4 per cent, and in 1919 to 75.3 per cent. In 1919, 46.1 per cent of all wage earners were in establishments where the prevailing hours of labor per week were 48 and under, a marked change over the small percentage for this class in prior census years, namely, 1.6 per cent in 1914, and less than 1 per cent in 1909. In Massachusetts and Pennsylvania, which reported practically 40 per cent of the wage earners, the changes are notably marked.

**Size of establishments, by average number of wage earners.**—In 1919 the average number of wage earners for all establishments was 107 and in 1914, 75. Table 7 shows that the industry includes a number of large units; in 1919, 61 establishments, or 9 per cent of the total number, accounted for 50.6 per cent of all wage earners and in 1914, 39 establishments, or 5.3 per cent of the total number, reported 38.3 per cent of all wage earners.

**Size of establishments, by value of products.**—The average value of products per establishment was \$357,000 in 1909, \$496,000 in 1914, and \$1,366,000 in 1919. The increase from 1914 to 1919 is essentially due to the increase in prices and this accounts to a large degree for the changes from lower to higher groups, as shown in Table 8. On a wage-earner basis, although there was an increase in average number during this period, the increase was only 29.6 per cent, and on a quantity-production basis, the increase in volume of business, measured by number of hides and skins, was but 22.1 per cent.

**Character of ownership.**—Table 9 presents statistics concerning the character of ownership, or the legal organization, of the establishments for 1919, 1914, and 1909. Comparative figures are given, by states, for 1919 and 1914. Although the industry includes a relatively large number of plants owned by individuals and by firms or other forms of ownership, not incorporated, the growth has been in the corporations, which represented 89.3 per cent of the value of all products in 1919 as compared with 78.2 per cent in 1914 and 76.3 per cent in 1909.

**Number and horsepower of types of prime movers.**—Table 10 presents the statistics concerning power. Of the total primary power, 27 per cent was purchased or rented electric power in 1919 compared with 13.1 per cent in 1914 and 5.3 per cent in 1909. Not only has the use of electric rented power increased but a large part of the owned power was transformed into electric power, this proportion representing 53.6 per cent of the total owned power reported in 1919. The horsepower statistics represent the rated power capacity of equipment, whether utilized all or part time.

**Fuel consumed.**—Table 11 presents the statistics for fuel, by kind and by states, for 1919 and 1914. The figures for gas include both natural and manufactured gas.

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TABLE 2.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, 1899, 1889, AND 1879.

	1919	1914	1909	1904	1899	1889	1879	PER CENT OF INCREASE. <sup>1</sup>					
								1914-1919	1909-1914	1904-1909	1899-1904	1889-1899	1879-1889
Number of establishments.....	680	741	919	1,049	1,306	1,787	5,628	-8.2	-19.4	-12.4	-19.7	-28.9	( <sup>2</sup> )
Persons engaged.....	79,292	60,780	67,100	61,602	56,024	( <sup>3</sup> )	( <sup>3</sup> )	30.5	-9.4	8.9	10.0	.....	.....
Proprietors and firm members.....	398	560	784	1,112	1,473	( <sup>3</sup> )	( <sup>3</sup> )	-29.7	-27.8	-23.5	-24.5	.....	.....
Salaried employees.....	6,418	4,278	4,114	3,251	2,442	( <sup>3</sup> )	( <sup>3</sup> )	50.0	4.0	26.5	38.1	.....	.....
Wage earners (average number).....	72,476	55,936	62,202	57,239	52,109	42,892	40,282	29.6	-10.1	8.7	8.8	22.9	( <sup>3</sup> )
Primary horsepower.....	218,238	172,712	148,140	117,450	88,890	60,031	( <sup>3</sup> )	26.4	16.6	26.1	32.2	48.0	.....
Capital.....	\$671,341,553	\$332,180,085	\$332,720,952	\$242,584,254	\$173,977,421	\$98,088,698	\$73,383,911	102.1	-0.2	37.2	39.4	77.4	33.7
Salaries and wages.....	108,384,445	39,290,725	38,846,481	31,501,058	25,749,933	23,985,879	16,503,828	175.9	1.1	23.3	22.3	7.4	45.3
Salaries.....	20,178,972	7,376,228	6,743,636	4,451,906	3,158,842	( <sup>3</sup> )	( <sup>3</sup> )	173.6	9.4	51.5	40.9	.....	.....
Wages.....	88,205,473	31,914,497	32,102,845	27,049,152	22,591,091	( <sup>3</sup> )	( <sup>3</sup> )	176.4	-0.6	18.7	19.7	.....	.....
Paid for contract work.....	2,337,011	1,152,642	473,869	881,168	53,396	( <sup>3</sup> )	( <sup>3</sup> )	102.8	143.3	-46.2	1,550.3	.....	.....
Rent and taxes.....	27,230,391	2,205,023	1,579,445	4,102,263	4,864,300	( <sup>3</sup> )	( <sup>3</sup> )	1,134.0	39.7	.....	.....	.....	.....
Cost of materials.....	646,521,527	254,245,420	248,278,933	191,179,073	155,000,004	122,946,721	156,384,117	127.5	14.5	29.9	23.3	26.1	( <sup>3</sup> )
Value of products.....	928,591,701	367,201,705	327,874,137	252,620,989	204,038,127	172,136,092	200,264,944	152.9	12.0	29.8	23.8	18.5	( <sup>3</sup> )
Value added by manufacture.....	282,070,174	82,956,285	79,595,254	61,441,913	49,038,123	49,189,371	43,880,827	240.0	4.2	29.5	25.3	-0.9	( <sup>3</sup> )

<sup>1</sup> A minus sign (-) denotes decrease.

<sup>2</sup> Figures not strictly comparable.

<sup>3</sup> Figures not available.

<sup>4</sup> Exclusive of internal revenue.

<sup>5</sup> Value of products less cost of materials.

TABLE 3.—PRINCIPAL STATES, RANKED BY VALUE OF PRODUCTS: 1919.

STATE.	Number of establishments.	WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
		Average number.	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribution.	Rank.
United States.....	680	72,476	100.0	.....	\$928,592	100.0	.....	\$282,070	100.0	.....
Pennsylvania.....	92	13,749	19.1	2	211,389	22.8	1	64,984	23.0	1
Massachusetts.....	131	15,180	20.9	1	129,595	14.0	2	47,678	16.8	2
New York.....	94	7,056	9.7	3	98,095	10.6	3	27,608	9.8	3
Wisconsin.....	25	6,825	9.4	4	94,762	10.2	4	25,256	9.0	5
New Jersey.....	73	5,499	7.6	5	78,012	8.4	5	26,426	9.0	4
Illinois.....	29	4,434	6.1	6	60,324	6.5	6	17,671	6.3	7
Delaware.....	18	4,251	5.9	7	50,138	5.4	7	21,797	7.7	6
Michigan.....	28	3,464	4.8	8	45,801	4.9	8	13,349	4.7	8
Ohio.....	24	1,565	2.2	10	25,008	2.7	9	6,190	2.2	9
West Virginia.....	17	1,520	2.1	11	23,827	2.6	10	4,748	1.7	12
Virginia.....	21	1,066	2.3	9	21,591	2.3	11	5,375	1.9	10
California.....	21	1,453	2.0	12	21,416	2.3	12	4,945	1.8	11
North Carolina.....	11	1,385	1.9	13	17,849	1.9	13	3,567	1.3	13
Kentucky.....	10	661	0.9	15	8,748	0.9	14	2,957	1.0	14
New Hampshire.....	7	709	1.0	14	7,309	0.8	15	1,343	0.5	17
Tennessee.....	10	608	0.8	16	6,710	0.7	16	1,682	0.6	16
Maryland.....	7	517	0.7	17	6,263	0.7	17	1,907	0.7	15
Indiana.....	9	396	0.5	18	4,730	0.5	18	1,274	0.5	18
Missouri.....	7	265	0.4	21	3,770	0.4	19	824	0.3	20
Maine.....	9	306	0.4	19	3,359	0.4	20	684	0.2	21
Georgia.....	3	301	0.4	20	3,242	0.3	21	813	0.3	19
All other states.....	34	666	0.9	.....	6,654	0.7	.....	2,092	0.7	.....

TABLE 4.—PERSONS ENGAGED IN THE INDUSTRY: 1919, 1914, AND 1909.

CLASS.	Cen-sus year.	Total.	Male.	Fe-male.	PER CENT OF TOTAL.		CLASS.	Cen-sus year.	Total.	Male.	Fe-male.	PER CENT OF TOTAL.	
					Male.	Fe-male.						Male.	Fe-male.
All classes.....	1919	79,292	71,995	7,297	90.8	9.2	Clerks and other subordinate salaried employees.	1919	3,560	2,267	1,293	63.7	36.3
	1914	60,780	58,289	2,491	95.9	4.1		1914	2,843	2,298	545	80.8	19.2
	1909	67,100	64,439	2,661	96.0	4.0		1909	2,567	2,092	475	81.5	18.5
Proprietors and officials.....	1919	3,256	3,187	69	97.9	2.1	Wage earners (average number).....	1919	72,476	66,541	5,935	91.8	8.2
	1914	2,001	1,945	56	97.2	2.8		1914	55,936	54,046	1,890	96.6	3.4
	1909	2,331	2,293	38	98.4	1.6		1909	62,202	60,054	2,148	96.5	3.5
Proprietors and firm members.....	1919	398	373	25	93.7	6.3	16 years of age and over.....	1919	72,042	66,208	5,834	91.9	8.1
	1914	560	528	32	93.3	6.7		1914	55,774	53,926	1,848	98.7	3.3
	1909	784	759	25	96.8	3.2		1909	61,753	59,674	2,079	98.0	3.4
Salaried officers of corporations...	1919	816	794	22	97.3	2.7	Under 16 years of age.....	1919	434	333	101	76.7	23.3
	1914	581	567	14	97.6	2.4		1914	162	120	42	74.1	25.9
	1909	629	618	11	98.2	1.8		1909	449	380	69	84.6	15.4
Superintendents and managers...	1919	2,042	2,020	22	98.9	1.1							
	1914	854	850	4	99.5	0.5							
	1909	918	916	2	99.8	0.2							



## MANUFACTURES.

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR SELECTED STATES: 1919.

[Month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

STATE.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
United States:														
1919.....	72,478	65,519	<i>65,516</i>	65,979	67,423	69,655	72,725	72,902	77,202	77,586	77,855	78,341	79,010	82.9
Males.....	66,541	<i>60,032</i>	60,324	60,925	62,231	64,104	66,821	66,995	70,678	71,008	71,291	71,703	72,380	82.9
Females.....	5,935	5,487	5,191	<i>5,054</i>	5,192	5,551	5,904	5,907	6,524	6,578	6,564	6,638	6,630	76.1
1914.....	55,936	58,250	58,455	58,743	58,001	57,009	56,530	55,216	54,294	53,715	<i>53,491</i>	53,793	53,735	81.1
1909.....	62,202	62,063	62,373	61,726	60,095	<i>60,075</i>	60,559	61,039	61,166	62,049	63,353	65,174	66,694	90.1
California.....	1,453	1,455	1,423	1,408	1,428	<i>1,401</i>	1,438	1,503	1,509	1,483	1,487	1,438	1,460	93.6
Delaware.....	4,251	2,681	<i>2,300</i>	2,528	3,093	3,573	4,297	5,023	5,328	5,511	5,518	5,540	5,501	42.9
Illinois.....	4,434	<i>4,144</i>	4,189	4,235	4,264	4,241	4,363	4,578	4,080	4,573	4,633	<i>4,694</i>	4,614	83.3
Kentucky.....	661	636	646	644	659	665	679	690	701	676	652	<i>628</i>	656	89.6
Maryland.....	517	<i>405</i>	457	460	440	504	576	538	574	581	555	547	507	69.7
Massachusetts.....	15,180	13,878	13,861	13,598	13,658	14,375	15,195	<i>15,241</i>	16,355	16,736	16,791	17,093	<i>17,379</i>	76.2
Michigan.....	3,464	<i>5,502</i>	3,306	3,303	3,547	3,406	3,392	3,527	3,622	3,511	3,518	3,525	3,549	91.2
New Hampshire.....	709	601	590	582	619	631	622	744	819	796	731	805	968	60.1
New Jersey.....	5,499	<i>4,869</i>	5,001	5,059	5,365	5,563	5,714	5,807	5,761	5,920	5,802	5,583	5,757	82.0
New York.....	7,056	6,307	<i>6,980</i>	6,252	6,358	6,545	6,933	7,335	7,538	7,664	7,755	7,980	<i>8,025</i>	74.5
North Carolina.....	1,385	<i>1,451</i>	1,391	1,380	1,360	1,405	1,442	1,420	1,412	1,370	1,347	<i>1,322</i>	1,340	91.1
Ohio.....	1,605	<i>1,363</i>	1,419	1,402	1,424	1,526	1,562	1,610	1,663	1,580	1,701	1,764	1,726	78.1
Pennsylvania.....	13,749	<i>12,287</i>	12,538	12,643	12,818	13,316	14,026	14,313	14,431	14,520	14,577	14,727	<i>14,787</i>	83.1
Tennessee.....	608	<i>568</i>	597	610	646	606	625	643	655	620	589	564	578	83.9
Virginia.....	1,666	<i>1,494</i>	1,498	1,557	1,549	1,647	1,756	1,791	1,819	1,716	1,708	1,729	1,728	82.1
West Virginia.....	1,620	1,489	1,611	1,577	1,542	1,512	1,568	1,579	1,513	1,528	1,519	1,476	<i>1,460</i>	90.3
Wisconsin.....	6,825	6,780	6,851	6,948	6,862	6,922	<i>6,676</i>	6,810	6,803	6,784	6,812	6,836	6,818	96.1

TABLE 6.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED STATES: 1919 AND 1914.

STATE.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48. <sup>1</sup>	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
United States.....	1919	72,476	2,505	2,503	28,393	21,153	7,617	5,028	4,342	935
	1914	55,936	( <sup>2</sup> )	( <sup>2</sup> )	909	3,241	10,355	22,205	19,209	17
	1909	62,202	( <sup>2</sup> )	( <sup>2</sup> )	572	1,578	4,380	24,682	30,981	9
California.....	1919	1,453			1,436		11	6		
	1914	1,361	( <sup>2</sup> )	( <sup>2</sup> )	2		1,314	45		
Delaware.....	1919	4,251	1,468	1,779	800	143		61		
	1914	2,382				1,093	36	324	929	
Illinois.....	1919	4,434			1	3,287	246	82	187	631
	1914	2,678				102	78	2,138	360	
Kentucky.....	1919	661	( <sup>2</sup> )	( <sup>2</sup> )		228	310	25	98	
	1914	600			12	66	254	40	228	
Maryland <sup>3</sup> .....	1919	517	1			278	71	66	101	
Massachusetts.....	1919	15,180	288	68	11,240	2,829	298	462		
	1914	10,164	( <sup>2</sup> )	( <sup>2</sup> )	244	283	4,071	5,043	523	
Michigan.....	1919	3,464			674	1,021	1,641		128	
	1914	2,773				11	972	563	1,227	
New Hampshire <sup>2</sup> .....	1919	709			373	331	5			
New Jersey.....	1919	5,499	104		2,220	2,183	253	459	280	
	1914	5,108	( <sup>2</sup> )	( <sup>2</sup> )	110	341	283	3,592	782	
New York.....	1919	7,056	131	636	2,403	1,837	1,553	421	75	
	1914	5,360	( <sup>2</sup> )	( <sup>2</sup> )	194	282	1,398	2,464	1,022	
North Carolina.....	1919	1,385			95	242		149	595	304
	1914	877						139	738	
Ohio.....	1919	1,565				680	322	197	366	
	1914	1,605					503	290	812	
Pennsylvania.....	1919	13,749	512		7,146	3,142	1,434	1,253	262	
	1914	11,988	( <sup>2</sup> )	( <sup>2</sup> )	174	649	856	5,259	5,050	
Tennessee <sup>3</sup> .....	1919	608				1		92	515	
Virginia.....	1919	1,666		25	321		339	187	794	
	1914	1,205	( <sup>2</sup> )	( <sup>2</sup> )	20			94	1,089	2
West Virginia.....	1919	1,520			752	3	574		191	
	1914	1,072				80	139		853	
Wisconsin.....	1919	6,825			591	4,564	97	985	588	
	1914	5,869	( <sup>2</sup> )	( <sup>2</sup> )	20		67	1,319	4,448	15

<sup>1</sup> Includes 48 and under for 1914 and 1909.<sup>2</sup> Corresponding figures not available.<sup>3</sup> Not shown separately in 1914.

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TABLE 7.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED STATES: 1919.

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—																
	Establishments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		251 to 500 wage earners, inclusive.		501 to 1,000 wage earners, inclusive.		Over 1,000 wage earners.	
			Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
United States:																			
1919.....	680	72,476	23	75	190	124	1,566	131	4,368	140	9,078	126	19,687	37	13,003	19	12,662	5	11,002
1914.....	741	55,936	18	113	289	152	1,982	141	4,677	175	12,229	103	15,346	24	8,655	12	7,708	3	5,050
California.....	21	1,453	.....	.....	.....	5	65	6	224	6	401	3	454	1	300	.....	.....	.....	.....
Delaware.....	18	4,251	.....	.....	.....	3	25	4	139	6	476	1	108	1	377	2	1,347	1	1,770
Illinois.....	29	4,434	1	2	5	3	37	5	134	6	421	6	945	3	1,117	3	1,775	.....	.....
Kentucky.....	10	661	.....	1	4	1	10	4	139	2	146	2	356	.....	.....	.....	.....	.....	.....
Maryland.....	7	517	.....	2	2	1	7	.....	.....	3	230	.....	.....	1	278	.....	.....	.....	.....
Massachusetts.....	131	15,180	1	10	25	32	431	37	1,203	20	1,533	22	3,354	3	938	4	2,560	2	5,136
Michigan.....	28	3,464	1	.....	.....	2	18	3	95	8	611	12	2,010	2	730	.....	.....	.....	.....
New Hampshire.....	7	709	.....	2	6	.....	.....	.....	.....	2	142	2	253	1	308	.....	.....	.....	.....
New Jersey.....	73	5,499	1	8	26	15	164	22	753	12	854	10	1,534	3	972	2	1,196	.....	.....
New York.....	94	7,056	2	20	51	18	227	17	541	18	1,112	15	2,336	3	1,041	.....	.....	1	1,748
North Carolina.....	11	1,385	1	1	2	.....	.....	.....	.....	4	343	4	736	1	304	.....	.....	.....	.....
Ohio.....	24	1,565	1	3	10	7	102	5	149	4	289	2	291	2	724	.....	.....	.....	.....
Pennsylvania.....	92	13,749	4	3	8	14	189	11	425	10	1,323	24	3,360	12	4,247	5	3,697	.....	.....
Tennessee.....	10	608	1	1	1	2	21	.....	.....	4	308	2	278	.....	.....	.....	.....	.....	.....
Virginia.....	21	1,666	3	3	3	1	11	2	58	4	282	8	1,312	.....	.....	.....	.....	.....	.....
West Virginia.....	17	1,520	2	2	5	1	12	2	95	4	230	5	761	1	417	.....	.....	.....	.....
Wisconsin.....	25	6,825	.....	2	2	2	28	3	91	7	490	4	541	3	1,241	3	2,087	1	2,339

TABLE 8.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS: 1919, 1914, AND 1909.

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1910	1914	1909	1919	1914	1909	1910	1914	1909	1919	1914	1909
All classes.....	680	741	919	72,476	55,936	62,202	\$928,591,701	\$367,201,705	\$327,874,187	\$282,070,174	\$82,956,285	\$79,595,254
Less than \$5,000.....	33	69	121	11	98	132	73,939	180,367	270,300	44,854	89,260	135,748
\$5,000 to \$20,000.....	42	63	117	137	355	573	460,307	640,153	1,242,071	206,420	330,471	560,276
\$20,000 to \$100,000.....	105	161	193	1,408	2,997	3,652	5,790,209	8,238,478	9,875,058	3,070,169	3,238,078	3,806,722
\$100,000 to \$500,000.....	175	257	410	6,888	22,031	28,082	46,759,832	75,079,776	158,569,294	18,559,062	32,427,785	37,676,527
\$500,000 to \$1,000,000.....	103	88	78	6,997	.....	.....	73,571,900	63,803,259	.....	21,311,457	.....	.....
\$1,000,000 and over.....	222	103	78	57,037	30,455	29,163	801,926,424	219,259,672	167,911,458	268,782,212	46,820,681	37,415,981
PER CENT DISTRIBUTION.												
All classes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5,000.....	4.9	9.3	13.2	(1)	0.2	0.2	(1)	0.1	0.1	(1)	0.1	0.2
\$5,000 to \$20,000.....	6.2	8.5	12.7	0.2	0.6	0.9	0.1	0.2	0.4	0.1	0.4	0.7
\$20,000 to \$100,000.....	15.4	21.7	21.0	1.9	5.4	5.9	0.6	2.2	3.0	1.1	4.0	4.8
\$100,000 to \$500,000.....	25.7	34.7	44.6	9.5	39.4	46.1	5.0	23.4	48.4	6.6	39.1	47.3
\$500,000 to \$1,000,000.....	15.1	11.9	.....	9.7	.....	.....	7.9	17.4	.....	7.6	.....	.....
\$1,000,000 and over.....	32.6	13.9	8.5	78.7	54.4	46.9	86.4	59.7	48.2	84.7	55.4	47.0

1 Less than one-tenth of 1 per cent.

## MANUFACTURES.

TABLE 9.—CHARACTER OF OWNERSHIP, BY STATES: 1919 AND 1914.

STATE.	Cen- sus year.	NUMBER OF ESTABLISH- MENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
					Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.						
		Indi- vid- uals.	Cor- pora- tions.	All oth- ers.		Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Indi- vid- uals.	Cor- pora- tions.	All oth- ers.		Indi- vid- uals.	Corpora- tions.	All others.	Indi- vid- uals.	Corpora- tions.	All oth- ers.				
United States....	1910	114	453	113	72,476	2,353	61,624	5,499	3.2	89.2	7.6	\$928,591,701	\$22,513,661	\$828,803,606	\$77,274,434	2.4	89.3	8.3				
	1914	162	414	165	55,936	3,821	43,349	8,766	6.8	77.5	15.7	367,201,705	16,369,359	287,158,754	63,073,592	4.5	78.2	17.3				
	1909	259	454	206	62,202	4,326	46,391	11,482	7.0	74.6	18.5	327,874,187	16,745,360	250,296,374	60,832,453	5.1	76.3	18.6				
California.....	1919	2	16	5	1,453	1,280	164	88.7	11.3			21,416,302	18,783,500	2,632,802		87.7	12.3					
	1914	2	21	6	1,361	1,192	169	87.6	12.4			10,020,739	8,610,506	1,410,233		85.9	14.1					
Delaware.....	1919	3	16	2	4,251	4,251		100.0				50,138,251	50,138,251		100.0							
	1914	3	13	4	2,382	201	1,570	611	8.4	65.9	25.7	9,183,205	502,798	5,835,910	2,844,497	5.5	63.6	31.0				
Illinois.....	1919	1	19	9	4,434	3,941	1,493	88.9	11.1			60,323,659	53,013,152	17,310,507		87.9	12.1					
	1914	4	15	9	2,678	283	2,064	331	10.6	77.1	12.3	17,509,256	2,285,422	13,142,836	2,080,998	13.0	75.1	11.9				
Kentucky.....	1919	1	9		661	1,661		100.0				8,747,872	18,747,872		100.0							
	1914	2	9		600	1,600		100.0				4,198,575	4,198,575		100.0							
Maryland.....	1919	1	4	2	517	517		100.0				6,263,468	6,263,468		100.0							
Massachusetts.....	1919	30	75	26	15,180	1,028	13,098	1,054	6.8	86.3	6.9	129,594,962	8,500,681	114,746,529	6,347,752	6.6	88.5	4.9				
	1914	39	61	26	10,164	1,228	7,742	1,194	12.1	76.2	11.7	45,263,434	2,428,279	38,741,662	4,095,493	5.4	85.6	9.0				
Michigan.....	1919	1	27		3,464	3,464		100.0				45,800,786	45,800,786		100.0							
	1914	21	2		2,773	2,773		100.0				25,503,573	25,503,573		100.0							
New Hampshire.....	1919	7			709	709		100.0				7,309,472	7,309,472		100.0							
New Jersey.....	1919	16	51	6	5,499	316	4,829	354	5.8	87.8	6.4	78,012,101	3,014,744	68,789,265	5,308,092	5.0	88.2	6.8				
	1914	23	48	13	5,108	470	3,784	854	9.2	74.1	16.7	31,651,831	2,489,572	23,120,483	6,041,776	7.9	73.0	19.1				
New York.....	1919	26	47	21	7,056	470	5,617	933	6.8	80.0	13.2	98,094,503	4,329,537	82,793,776	10,906,190	4.4	84.4	11.2				
	1914	30	32	36	5,360	816	2,604	1,940	15.2	48.6	36.2	36,018,342	3,234,642	17,003,237	15,780,463	9.0	47.2	43.8				
North Carolina.....	1919	2	7	2	1,385	1,082	1,303	78.1	21.9			17,848,526	12,281,314	5,567,212		68.8	31.2					
	1914	5	6	6	877	613	1,264	69.9	30.1			7,182,400	4,241,239	2,941,161		59.1	40.9					
Ohio.....	1919	2	17	5	1,565	1,488	1,77	95.1	4.9			25,008,070	24,052,918	1,955,152		96.2	3.8					
	1914	4	19	5	1,605	25	1,504	76	1.6	93.7	4.7	11,627,916	189,889	10,840,933	597,094	1.6	93.2	5.1				
Pennsylvania.....	1919	9	64	19	13,749	360	11,559	1,824	2.7	84.0	13.3	211,389,349	3,771,932	173,044,274	34,573,143	1.8	81.8	16.4				
	1914	14	77	29	11,988	191	9,706	2,091	1.6	81.0	17.4	85,252,532	802,688	65,781,277	18,068,587	0.9	77.2	21.9				
Tennessee.....	1919	2	6	2	608	586	122	96.4	3.6			6,700,970	6,546,070	163,900		97.6	2.4					
Virginia.....	1919	6	15		1,066	3	1,663		0.2	99.8		21,590,902	9,390	21,581,512		(*)	100.0					
	1914	4	13	4	1,205	4	1,000	141	0.3	85.0	11.7	9,834,439	5,378	8,472,385	1,356,676	0.1	86.1	13.8				
West Virginia.....	1919	2	13	2	1,520	1,515	15	99.7	0.3			23,827,131	23,734,733	192,348		99.6	0.4					
	1914	3	12	3	1,072	985	187	91.9	8.1			11,014,540	10,093,088	192,452		91.6	8.4					
Wisconsin.....	1919	1	21	3	6,825	6,796	129	99.6	0.4			94,762,270	94,580,612	120,618		99.8	0.2					
	1914	2	16	9	5,869	5,087	1,782	86.7	13.3			42,204,202	37,214,165	4,990,047		88.2	11.8					

\* Includes the group "Individuals."

\* Includes the group "All others."

\* Includes the groups "Individuals" and "All others."

\* Not shown separately in 1914.

\* Less than one-tenth of 1 per cent.

TABLE 10.—NUMBER AND HORSEPOWER OF TYPES OF PRIME MOVERS: 1919, 1914, AND 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909
Primary power, total.....	5,063	2,908	2,065	218,238	172,712	148,140	100.0	100.0	100.0
Owned.....	1,334	1,332	1,590	159,267	150,164	140,238	73.0	86.9	94.7
Steam.....	1,239	1,210	1,440	159,800	140,299	131,451	69.1	81.2	88.7
Engines.....	1,116	(2)	(2)	124,891	(2)	(2)	57.2		
Turbines.....	123	(2)	(2)	25,909	(2)	(2)	11.9		
Internal-combustion engines.....	69	91	104	6,438	7,997	7,231	3.0	4.6	4.9
Water wheels, turbines, and motors.....	26	31	46	2,029	1,868	1,556	0.9	1.1	1.1
Rented.....	4,329	1,570	475	58,971	22,548	7,902	27.0	13.1	5.3
Electric.....	4,329	1,570	475	58,494	21,670	6,487	26.8	12.5	4.4
Other.....				477	878	1,415	0.2	0.6	0.9
Electric.....	10,601	4,838	2,340	143,935	73,424	35,919	100.0	100.0	100.0
Rented.....	4,329	1,570	475	58,494	21,670	6,487	40.6	29.4	18.1
Generated by establishments reporting.....	6,272	3,262	1,865	85,441	51,854	29,432	50.4	70.6	81.9

\* Figures for horsepower include for 1909 the amount reported under the head of "Other" owned power.

\* Not reported separately in 1914 and 1909.

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TABLE 11.—FUEL CONSUMED, BY STATES: 1919 AND 1914.

STATE.	Cen- sus- year.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (bar- rels).	Gasoline and other vola- tile oils (bar- rels).	Gas (1,000 cubic feet).	STATE.	Cen- sus- year.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (bar- rels).	Gasoline and other vola- tile oils (bar- rels).	Gas (1,000 cubic feet).
		Anthra- cite <sup>1</sup> (tons, 2,240 pounds).	Bitumi- nous (tons, 2,000 pounds).							Anthra- cite <sup>1</sup> (tons, 2,240 pounds).	Bitumi- nous (tons, 2,000 pounds).				
United States....	1919	89,722	1,448,166	3,740	78,415	10,817	211,404	New Hampshire.....	1919	1,289	5,258	.....	.....	.....	.....
	1914	89,140	1,124,444	2,489	67,252	(?)	527,657								
California.....	1919	.....	864	.....	69,273	.....	.....	New Jersey.....	1919	15,033	76,704	2,302	40	12	130
	1914	.....	1,209	.....	65,088	(?)	.....		1914	25,966	63,320	71	1,394	(?)	558
Connecticut.....	1919	.....	2,112	.....	.....	.....	.....	New York.....	1919	5,733	149,319	5	38	1,883	18,155
	1914	.....	.....	.....	.....	.....	.....		1914	14,831	90,782	369	3	(?)	18,032
Delaware.....	1919	.....	26,939	.....	5,131	.....	337	North Carolina.....	1919	.....	41,413	.....	.....	.....	.....
	1914	291	25,373	.....	10	(?)	933		1914	.....	17,504	510	1	(?)	.....
Georgia.....	1919	.....	3,832	.....	.....	7	.....	Ohio.....	1919	.....	42,087	1,228	.....	216	11,176
	1914	.....	.....	.....	.....	.....	.....		1914	.....	45,001	271	10	(?)	9,091
Illinois.....	1919	351	100,851	.....	10	.....	.....	Pennsylvania.....	1919	31,366	360,324	.....	.....	55	134,614
	1914	.....	64,146	.....	10	(?)	70		1914	23,153	333,819	111	284	(?)	405,411
Indiana.....	1919	.....	12,477	.....	.....	.....	.....	Tennessee.....	1919	.....	14,382	.....	.....	443	.....
	1914	.....	30,812	.....	.....	.....	14,578	Texas.....	1919	.....	55	.....	50	.....	.....
Kentucky.....	1919	.....	27,009	.....	.....	.....	80,920								
	1914	.....	.....	.....	.....	.....	.....	Virginia.....	1919	.....	37,964	.....	.....	7	.....
Maine.....	1919	392	2,107	.....	.....	.....	.....		1914	.....	25,419	.....	211	(?)	133
Maryland.....	1919	2	13,577	.....	.....	.....	.....	West Virginia.....	1919	10	64,716	.....	.....	.....	7,215
	1914	.....	.....	.....	.....	.....	.....		1914	.....	40,016	.....	1	(?)	5,174
Massachusetts.....	1919	35,421	145,000	152	25	8,188	723	Wisconsin.....	1919	113	164,233	47	.....	.....	953
	1914	24,170	108,311	682	154	(?)	355		1914	42	129,946	7	7	(?)	825
Michigan.....	1919	.....	128,837	.....	31	2	23,518	All other states.....	1919	12	10,744	.....	2,764	.....	.....
	1914	63	84,275	.....	41	(?)	.....		1914	1,118	64,305	488	38	(?)	155
Missouri.....	1919	.....	7,499	6	1,644	.....	.....								

<sup>1</sup> Includes some semianthracite.

<sup>2</sup> Included in figures for fuel oils.

## SPECIAL STATISTICS.

Number of hides and skins treated.—The statistics for number of hides and skins treated during the census years 1919, 1914, and 1909 are given in Table 12.

TABLE 12.—HIDES AND SKINS TREATED: 1919, 1914, AND 1909.

MATERIAL AND CENSUS YEAR.	Aggregate.	BY ESTABLISHMENTS ASSIGNED TO THE INDUSTRY "LEATHER, TANNED, CUR- RIED AND FINISHED."			By estab- lish- ments as- signed to other indus- tries.
		Total.	Purchased.	Treated under contract for others.	
Hides and skins:					
1919 <sup>1</sup> .....	169,166,788	169,052,169	123,328,726	45,725,443	114,610
1914.....	138,547,692	137,839,363	113,841,035	23,998,328	708,329
1909.....	146,328,586	145,881,151	116,040,936	29,840,165	447,435
Hides:					
1919.....	31,808,641	31,787,526	24,478,825	7,308,701	21,115
1914.....	20,867,820	20,434,344	18,598,637	1,835,707	433,476
1909.....	20,510,332	20,263,693	18,380,415	1,903,278	252,639
Skins:					
1919.....	137,358,147	137,264,643	98,847,901	38,416,742	98,504
1914.....	117,679,872	117,405,019	95,242,398	22,162,621	274,853
1909.....	125,812,254	125,617,458	97,680,571	27,936,887	194,796

<sup>1</sup> The number of hides and skins treated in 1919 contains duplications to the extent that the hides and skins treated under contract were those treated by "tanners" for other "tanners."

Materials.—Table 13 shows for 1919, 1914, and 1909 the number of establishments represented, the number and cost of hides and skins treated, by kinds, and the cost of other materials used. The figures cover all establishments for which information is avail-

able, including establishments assigned to other industries, but which do some tanning, currying, or finishing. The total cost of all materials used can not be given, as the cost of hides and skins treated under contract for others who were not tanners, curriers, or finishers, was not reported. The total cost of materials used in 1919, so far as reported, was \$647,339,238, or 123 per cent more than in 1914, the figures for 1914 showing an increase of 14.3 per cent with respect to 1909.

The number of cattle hides treated in 1919 increased by 4,414,874 hides, or 24.8 per cent, as compared with 1914, while their value increased \$153,478,390, or 101.2 per cent. The number of horsehides tanned increased by 1,044,063, or 83.5 per cent, while the cost increased \$8,917,640, or 220.9 per cent. The number of calf and kip skins tanned in 1919 was 3,173,519, or 19.8 per cent, less than in 1914, and 6,841,275, or 34.7 per cent, less than in 1909. The cost of the skins, however, more than doubled during the period from 1914 to 1919. Purchased rough leather used and all other materials both show a large increase over previous censuses. "All other skins" include cabretta, kangaroo, wallaby, deer, elk, pig, hog, colt, ass, and mule skins. "All other raw stock" includes buffalo hides, skivers, fleshers, etc.

## MANUFACTURES.

TABLE 13.—MATERIALS: 1919, 1914, AND 1909.

	1919	1914	1909
Number of establishments.....	689	768	953
Classified as "Leather, tanned, curried, and finished".....	680	741	919
Assigned to other industries, but producing leather for use in further manufacture in the same establishment.....	9	27	34
Materials, total cost.....	\$647,339,238	\$289,807,774	\$253,457,030
The classified industry.....	\$640,521,527	\$284,245,420	\$248,278,933
Establishments assigned to other industries.....	\$817,711	\$5,562,354	\$5,178,097
Hides and skins, aggregate number.....	1,100,166,783	138,547,002	140,328,586
Hides, total number.....	1,31,808,641	20,867,820	20,516,332
Cattle—			
Number.....	22,191,432	17,776,558	18,613,054
Cost.....	\$305,087,031	\$151,609,541	\$121,260,814
Horse—			
Number.....	2,294,308	1,250,245	(2)
Cost.....	\$12,954,273	\$4,036,033	(2)
Treated for others, number.....	17,322,901	1,841,017	1,903,278
Skins, total number.....	1,137,358,147	117,679,872	125,812,254
Calf and kip—			
Number.....	12,894,274	16,067,793	19,735,549
Cost.....	\$74,334,355	\$33,117,713	\$31,798,263
Goat and kid—			
Number.....	55,428,830	37,755,897	48,193,848
Cost.....	\$82,500,845	\$23,916,965	\$27,928,019
Sheep and lamb—			
Number.....	22,869,751	40,364,926	23,148,336
Cost.....	\$20,541,846	\$19,339,258	\$12,268,487
All other skins—			
Number.....	7,758,550	1,328,540	3,797,034
Cost.....	\$9,370,133	\$1,385,701	\$3,802,401
Treated for others, number.....	138,419,742	22,102,746	27,936,887
All other raw stock, cost.....	\$8,305,003	\$2,991,795	
Purchased rough leather used, cost.....	\$16,026,430	\$8,051,061	\$12,329,841
Tanning materials:			
Vegetable, cost.....	\$46,616,202		
Chemicals, cost.....	\$20,985,006		
Fats, oils, and other greases, cost.....	\$11,342,269	\$44,759,117	\$44,063,116
All other materials, cost.....	\$29,673,785		

<sup>1</sup> This contains duplications to the extent that the hides or skins treated for others were those treated by "tanners" on contract for other "tanners."

<sup>2</sup> Not reported separately.

*Hides and skins, by states.*—Table 14 presents, by states, the statistics for hides and skins. Figures for quantity and cost are given for 1919, with the quantity for 1914 and 1909. Materials in this table do not include the hides and skins treated by tanners, curriers, or finishers for those who were not tanners, curriers, or finishers, nor the hides and skins treated by establishments assigned to other industries.

TABLE 14.—MATERIALS—HIDES AND SKINS, BY STATES: 1919, 1914, AND 1909.

	NUMBER.			Cost, 1919.
MATERIAL AND STATE.	1919	1914	1909	
Cattle hides, total.....	22,184,517	17,457,501	18,360,415	\$304,994,752
California.....	734,800	541,049	611,421	11,189,410
Illinois.....	2,023,824	892,256	663,028	22,769,561
Indiana.....	194,532	246,008	180,485	2,408,599
Kentucky.....	240,044	230,694	285,998	4,425,632
Maryland.....	186,714	207,128	184,648	3,440,849
Massachusetts.....	1,634,538	764,636	1,251,036	18,958,933
Michigan.....	1,260,741	1,708,952	1,430,885	17,295,185
Missouri.....	160,732	176,382	100,318	2,193,693
New Hampshire.....	375,882	111,831	(1)	3,652,016
New Jersey.....	1,289,141	699,054	771,193	20,326,491
New York.....	2,679,977	2,050,403	1,639,467	20,588,884
North Carolina.....	604,936	435,627	364,766	10,579,192
Ohio.....	594,193	460,521	514,220	11,006,508
Pennsylvania.....	5,056,843	4,657,229	5,449,826	73,196,302
Tennessee.....	216,647	164,180	105,164	3,704,283
Virginia.....	683,246	660,526	626,712	12,609,507

<sup>1</sup> Included in "All other states."

TABLE 14.—MATERIALS—HIDES AND SKINS, BY STATES: 1919, 1914, AND 1909—Continued.

	NUMBER.			Cost, 1919.
MATERIAL AND STATE.	1919	1914	1909	
Cattle hides—Continued.				
West Virginia.....	969,762	816,240	1,038,368	\$15,146,103
Wisconsin.....	2,664,982	2,185,178	2,471,848	34,671,873
All other states.....	598,983	449,797	580,180	7,831,716
Calf and kip skins, total.....	12,894,274	16,067,793	19,732,638	74,334,355
Illinois.....	1,136,318	1,885,276	3,008,616	5,959,289
Massachusetts.....	4,112,790	5,630,003	5,439,226	22,021,470
New York.....	2,032,919	2,000,623	2,107,584	11,573,365
Wisconsin.....	3,718,508	4,650,803	6,986,673	24,016,327
All other states.....	1,893,739	1,841,028	2,190,539	10,763,904
Goat and kid skins, total.....	55,428,830	37,755,897	48,077,664	82,500,845
Delaware.....	14,147,615	6,778,452	11,121,120	22,087,787
Massachusetts.....	5,739,256	5,137,413	6,299,952	10,260,366
New Jersey.....	6,152,040	4,910,279	6,373,704	6,550,880
Pennsylvania.....	27,769,243	20,019,153	23,117,712	38,238,645
All other states.....	1,620,676	910,570	1,165,176	3,208,177
Sheep and lamb skins, total.....	22,766,247	40,090,198	28,082,060	29,415,744
California.....	691,498	1,577,740	1,328,712	1,472,623
Illinois.....	1,005,368	1,069,914	1,562,628	1,895,676
Massachusetts.....	9,006,655	10,012,063	8,730,684	9,237,327
New Jersey.....	1,110,901	5,353,064	2,645,040	1,647,626
New York.....	5,551,181	8,309,020	6,491,352	8,451,390
Pennsylvania.....	3,092,412	3,756,551	2,445,024	6,507,480
All other states.....	1,608,232	3,111,846	2,878,620	1,833,216

*Tanning materials, cost, by states.*—The expense for tanning materials used, distributed by states, is given in Table 15. The figures are segregated to show the cost of vegetable tanning materials; chemicals, including acids, alkalies, chromates, dyes and dye-stuffs, etc.; and fats, oils, and greases.

TABLE 15.—TANNING MATERIALS—COST, BY STATES: <sup>1</sup> 1919.

VEGETABLE TANNING MATERIALS.						
STATE.	Total cost.	Woods, barks, etc.	Tanning extracts.		Chemicals. <sup>2</sup>	Fats, oils, and greases.
			Liquid.	Solid.		
United States.	\$46,564,536	\$12,043,633	\$23,134,710	\$11,386,193	\$20,985,006	\$11,342,269
Pennsylvania...	13,503,928	2,969,238	6,294,640	4,330,050	3,853,505	1,729,403
Michigan.....	5,051,696	1,618,141	2,395,736	1,037,819	902,948	932,097
New York.....	3,898,366	548,340	1,978,556	1,371,470	2,746,565	1,516,445
Massachusetts...	3,542,646	751,913	1,721,217	1,069,516	4,171,832	1,740,008
West Virginia....	2,800,609	498,411	1,570,381	731,817	217,831	323,571
New Jersey.....	2,514,780	162,073	2,052,785	299,922	2,015,640	910,924
Virginia.....	2,444,753	1,222,400	1,168,727	53,626	268,732	170,797
Wisconsin.....	2,352,378	527,502	733,529	1,091,347	2,069,423	1,060,924
Ohio.....	1,515,783	177,428	1,235,244	103,111	506,637	423,805
Kentucky.....	1,300,074	177,835	983,413	198,826	64,966	198,280
California.....	1,335,411	1,092,185	133,448	109,778	243,317	499,333
Tennessee.....	848,726	343,957	385,382	119,387	26,393	20,543
Illinois.....	744,294	132,006	370,819	241,469	1,791,764	724,434
Maryland.....	565,212	195,246	121,188	248,778	109,895	75,335
Missouri.....	430,879	142,874	214,217	79,788	27,843	113,316
Maine.....	374,986	126,293	236,427	12,266	57,105	33,567
Indiana.....	325,536	55,005	246,624	23,907	43,203	141,123
Georgia.....	260,634	201,066	55,637	12,931	15,309	49,897
New Hampshire...	263,933	26,095	165,101	72,677	255,100	121,433
All other states..	2,414,912	1,076,625	1,161,579	177,708	1,597,920	650,592

<sup>1</sup> Not including materials used by establishments assigned to other industries.

<sup>2</sup> Comprise: Acids, \$1,335,955; alkalies, \$3,460,302; chromates, \$3,082,015; dyes and dye-stuffs, \$5,249,361; and other chemicals, \$7,356,473.

*Tanning materials, by kinds.*—Tables 16 and 17 present detailed statistics for 1919 in regard to quantities and cost of tanning materials by kinds of woods, barks, extracts, etc.

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TABLE 16.—TANNING MATERIALS—WOODS, BARKS, ETC., BY KINDS: 1919.

	Quantity.	Cost.
<b>Woods:</b>	<i>Cords.</i>	
Chestnut.....	32,526	\$306,681
Spruce.....	156	1,593
<b>Barks:</b>	<i>Tons.</i>	
Hemlock.....	284,323	4,389,863
Logwood.....	955	110,020
Mangrove.....	2,078	125,750
Oak.....	227,602	4,427,345
Quebracho.....	2,342	252,665
<b>Miscellaneous:</b>		
Blended (chestnut-oak).....	33,817	656,487
Divi-divi.....	4,985	381,698
Gambier.....	180	51,034
Myrobalans.....	8,354	488,982
Sumac.....	2,328	203,458
Valonia.....	303	22,303
Sulphite cellulose.....	60	2,400
Other, including not specified.....	9,268	623,354

TABLE 17.—TANNING MATERIALS—EXTRACTS, BY KINDS: 1919.

KIND.	Total cost.	LIQUID.		SOLID.	
		Pounds.	Cost.	Pounds.	Cost.
<b>Total.....</b>	<b>\$34,520,903</b>	<b>619,510,490</b>	<b>\$23,134,710</b>	<b>173,466,585</b>	<b>\$11,386,193</b>
Chestnut.....	10,273,635	338,302,354	13,203,454	43,156,856	3,070,181
Oak.....	1,092,870	21,231,276	1,053,426	4,798,102	39,444
Blended (chestnut-oak).....	1,210,644	29,641,087	1,140,165	1,998,922	70,479
Divi-divi.....	511,794	1,458,381	62,666	11,314,412	449,128
Gambier.....	648,847	654,562	75,663	3,467,954	571,184
Hemlock.....	874,142	14,076,694	731,635	12,958,221	142,507
Larch.....	221,544	5,677,251	199,298	298,765	22,246
Logwood.....	265,397	626,925	59,493	1,052,868	225,904
Mangrove.....	269,437	3,060,316	171,688	1,908,124	94,749
Myrobalans.....	99,000	716,857	44,444	2,256,449	51,556
Quebracho.....	10,713,399	78,858,533	4,719,881	80,109,705	5,998,518
Spruce.....	756,049	46,962,837	683,204	1,098,450	72,845
Sumac.....	386,923	2,203,477	115,013	4,466,165	271,910
Valonia.....	10,021	9,427,777	147,623	174,504	10,021
Sulphite cellulose.....	151,234	9,427,777	147,623	75,549	3,611
All other.....	1,018,967	16,712,163	727,057	4,331,541	291,910

Work done under contract.—Table 18 gives the number of hides and skins, sides and splits, treated under contract in 1919, 1914, and 1909 by establishments in the industry. The table carries the estimated value of the products after being tanned, curried, or finished, as the case may be. The quantity and cost of the raw stock were reported in each case by the owners, and the amount received for the contract work was reported by the tanners and included in the general statistics for products.

TABLE 18.—WORK DONE UNDER CONTRACT—KIND, QUANTITY, AND VALUE: 1919, 1914, AND 1909.

CLASS OF WORK.	Number.	Estimated value.
<b>Hides tanned:</b>		
1919.....	3,172,719	\$56,154,763
1914.....	1,953,407	19,165,887
1909.....	2,203,088	19,365,901
<b>Skins tanned:</b>		
1919.....	18,122,453	37,047,942
1914.....	14,815,436	12,069,273
1909.....	12,323,117	8,909,512
<b>Sides curried or finished:</b>		
1919.....	8,271,963	77,643,146
1914.....	3,804,792	15,619,184
1909.....	2,971,000	11,777,440
<b>Splits curried or finished:</b>		
1919.....	3,343,872	5,544,177
1914.....	2,005,471	2,174,662
1909.....	1,907,659	1,880,537
<b>Skins curried or finished:</b>		
1919.....	20,294,289	47,633,938
1914.....	16,188,445	14,938,410
1909.....	22,939,052	18,197,438

Products.—Table 19 presents for 1919, 1914, and 1909 comparative statistics for products in detail, inclusive of production reported by establishments assigned to other industries but producing leather for use in further manufacture in the same establishment. The increase in total value of products in 1919, with respect to 1914, was 148.3 per cent and in the value of the leather, which amounted to \$849,356,028 in 1919, 143.4 per cent, the abnormal increase being due to the higher price of hides and skins, materials, and labor expense.

TABLE 19.—PRODUCTS: 1919, 1914, AND 1909.

	1919	1914	1909
Products, total value.....	\$929,785,619	\$374,512,936	\$334,105,561
The classified industry, value of all products.....	\$928,591,701	\$367,201,705	\$327,874,187
Establishments assigned to other industries, value of leather products.....	\$1,193,918	\$7,311,231	\$6,231,374
Leather, value.....	\$849,356,028	\$348,956,872	\$312,571,826
Sole—			
Sides.....	19,715,821	18,097,665	17,857,708
Value.....	\$218,829,831	\$116,347,196	\$88,481,147
Hemlock—			
Sides.....	1,731,545	5,626,696	7,970,200
Value.....	\$16,179,564	\$31,007,435	\$32,288,692
Oak—			
Sides.....	10,083,228	5,275,936	3,850,595
Value.....	\$117,522,070	\$38,432,618	\$20,178,886
Union—			
Sides.....	7,314,834	6,588,799	5,756,227
Value.....	\$79,917,866	\$42,457,765	\$28,375,816
Chrome—			
Sides.....	583,214	606,234	280,686
Value.....	\$5,210,325	\$4,449,388	\$1,042,764
Belting—			
Butts.....	1,503,467	973,591	817,838
Value.....	\$33,348,522	\$12,876,554	\$10,647,078
Harness—			
Sides.....	1,720,764	2,943,720	3,968,703
Value.....	\$24,217,046	\$21,745,808	\$24,930,284
Case, bag, and strap—			
Sides.....	1,225,577	1,004,581	(*)
Value.....	\$11,880,763	\$5,383,255	(*)
Upholstery leather (automobile, furniture, and carriage)—			
Whole hide grains—			
Number.....	934,943	654,053	
Value.....	\$18,277,694	\$8,172,698	
Whole hide splits—			
Number.....	1,511,128	1,104,561	1,398,842
Value.....	\$13,960,142	\$6,155,660	\$14,266,742
Upper leather (other than patent)—			
Cattle—			
Sides.....	16,693,073	8,257,645	8,053,357
Value.....	\$120,897,283	\$38,003,690	\$24,061,614
Horse—			
Sides.....	1,720,507	490,068	(*)
Value.....	\$10,561,999	\$1,615,084	(*)
Skins.....			
Number.....	79,663,981	60,268,840	(*)
Value.....	\$268,547,194	\$83,009,160	(*)
Patent (other than upholstery)—			
Sides.....	2,716,980	2,827,031	(*)
Value.....	\$23,447,147	\$9,594,110	(*)
Skins.....	828,870	4,871,588	(*)
Value.....	\$3,179,650	\$5,512,449	(*)
Glove—			
Skins.....	5,890,398	4,277,636	(*)
Value.....	\$11,637,821	\$3,031,683	(*)
Sides.....	5,380,939	614,447	(*)
Value.....	\$8,893,024	\$1,582,578	(*)
Finished splits (not elsewhere specified), value.....	\$16,461,933	\$8,558,424	(*)
Sold in the rough, value.....	\$3,712,687	\$4,511,251	\$6,351,439
All other, value.....	\$63,666,089	\$27,698,412	\$143,233,522
All other products, value.....	\$28,629,954	\$13,269,324	\$8,707,566
Amount received for tanning, currying, or finishing for others, value.....	\$51,799,637	\$12,286,740	\$12,766,169

\* Excluding estimated value of hides and skins tanned, curried, or finished for others, not tanners, curriers, or finishers, included in figures published at prior censuses.

\* Figures not available.

\* Includes the value of kinds shown separately, where quantities were not reported.

Under an act of Congress, approved June 5, 1920, a monthly census of leather production is taken, but 1921 is the first calendar year covered by this census,

and the following tabular statement, which has been compiled from the monthly reports for 1921, is given as a matter of interest. The figures in some respects are not strictly comparable with the data furnished by the census of manufactures, 1919. Consideration should be given to the difference in business conditions as they existed in 1919 compared with 1921.

	PRODUCTION OF LEATHER IN 1921. <sup>1</sup>	
	Unit.	Quantity.
<b>Sole and belting leather:</b>		
Sole.....	Backs, bands, and sides.	18,063,096
Belting.....	Butts	1,195,116
Offal.....	Pounds	100,103,807
Harness leather.....	Sides	811,424
Case, bag, and strap leather.....	Sides	820,855
Skirting and collar leather.....	Sides	410,474
Latigo leather.....	Sides	24,906
Lace leather.....	Sides	150,591
<b>Welting leather:</b>		
Cattle sides.....	Number	76,498
Pigskin strips.....	Pounds	1,573,766
Upholstery leather.....	Hides	1,089,837
<b>Upper leather:</b>		
Cattle (including foreign tanned).....	Sides	12,595,982
Calf.....	Sides	12,607,607
Kip (exclusive of foreign tanned).....	Skins	2,159,518
Goat and kid (including foreign tanned).....	Skins	34,355,968
Cabretta.....	Skins	2,809,850
Sheep and lamb (including foreign tanned).....	Skins	13,358,885
Deer and elk.....	Skins	555,365
Kangaroo and wallaby.....	Skins	902,958
Horse (including colt, ass, and mule)—		
Hides.....	Number	56,263
Half fronts.....	Number	250,518
Whole fronts.....	Number	40,369
Butts.....	Number	469,708
Shanks.....	Number	187,448
Other upper leather.....	Pieces	16,539
<b>Patent leather (other than upholstery):</b>		
Cattle (including foreign tanned).....	Sides	2,277,607
Calf and kip (exclusive of foreign tanned).....	Skins	37,407
Goat and kid.....	Skins	488,048
Sheep and lamb.....	Skins	117,198
Horse and colt—		
Half fronts.....	Number	182,027
Whole fronts.....	Number	6,586
<b>Glove leather:</b>		
Cattle (including foreign tanned kips)—		
Grains.....	Sides	16,507
Splits.....	Sides	2,089,518
Calf and kip (exclusive of foreign tanned).....	Skins	4,862
Horse—		
Hides.....	Number	32,291
Whole fronts.....	Number	226,550
Butts.....	Number	36,174
Shanks.....	Number	575,630
Pig and hog.....	Skins	101,713
Goat and kid.....	Skins	47,896
Cabretta.....	Skins	559,960
Sheep and lamb.....	Skins	3,812,622
Deer and elk.....	Skins	369,646
Other glove leather.....	Pieces	1,376
<b>Splits, not elsewhere specified:</b>		
Cattle and kip—		
Sides.....	Number	7,457,416
Whole hides.....	Number	319,785
Horse—		
Butts.....	Number	36,368
Fronts.....	Number	97,608
<b>Fancy and bookbinders' leather:</b>		
Cowhide.....	Sides	79,804
Buffings.....	Hides	73,006
Goat and kid.....	Skins	165,114
Cabretta.....	Skins	4,625
Sheep and lamb.....	Skins	1,089,897
Calf and kip.....	Skins	119,080
Pig and hog.....	Skins	17,623
Seal.....	Skins	147,035
Alligator.....	Skins	82,580
All other.....	Pieces	7,981
Chamois.....	Skins	2,932,069
Shearings.....	Skins	1,242,877
Roller leather.....	Skins	511,224
Hat sweats.....	Skins	1,144,517
Skivers.....	Pieces	2,478,018
Fleishers.....	Pieces	370,314
Rough leather, equivalent.....	Sides	60,643
Rough grains (splits), equivalent.....	Sides	44,006
Rough splits:		
Sides.....	Number	2,452,180
Whole splits.....	Number	174,362
Butt splits.....	Butts	178,832
All other leather.....	Pieces	21,139

<sup>1</sup> Taken under the act approved June 5, 1920.

Principal products, by states.—Table 20 presents, by states, the quantity statistics for the principal

kinds of leather, with values for 1919. The state figures are confined to states where the number of establishments involved is sufficient to permit of the figures being published. With respect to the kinds of leather for which quantity figures are not given, for example, upholstery leather, patent leather, and glove leather, etc., values are given for all three census years. The products shown in this table do not include the value of the leather made on contract by tanners, curriers, or finishers for those who were not tanners, curriers or finishers, or the leather made in establishments assigned to other industries.

TABLE 20.—PRINCIPAL PRODUCTS, BY STATES: 1919, 1914, AND 1909.

PRODUCT AND STATE.	1919		1914	1909
	Value.	Quantity.	Quantity.	Quantity.
<b>Sole leather, total.....</b>	\$218,820,831	10,715,821	18,076,482	17,805,252
California.....	8,702,496	683,420	402,780	472,234
Michigan.....	11,646,441	1,149,381	1,871,940	1,603,512
New York.....	22,353,884	2,605,045	1,358,240	1,138,461
Pennsylvania.....	101,041,783	9,130,971	8,475,596	9,207,352
Virginia.....	8,687,212	536,464	936,781	673,767
West Virginia.....	20,429,088	1,791,766	1,426,584	1,033,037
Wisconsin.....	13,247,813	1,187,545	1,122,044	839,371
All other states.....	32,721,114	2,572,199	2,481,517	1,937,528
<b>Hemlock, total.....</b>	16,179,564	1,731,545	5,626,696	7,063,728
Michigan.....	7,685,320	821,899	1,520,296	1,372,938
Pennsylvania.....	6,714,229	718,761	3,624,274	4,752,303
All other states.....	1,780,015	190,885	582,126	1,838,452
<b>Oak, total.....</b>	117,522,076	10,086,228	5,267,936	3,805,861
California.....	8,102,849	625,070	391,502	429,716
New York.....	16,461,366	1,919,614	(1)	(1)
Pennsylvania.....	47,334,599	4,093,311	899,753	730,222
Virginia.....	8,687,212	536,464	845,073	673,767
West Virginia.....	6,504,352	544,523	276,524	163,495
All other states.....	30,371,698	2,317,246	2,855,084	1,818,671
<b>Union, total.....</b>	79,917,866	7,314,834	6,588,799	5,750,227
Michigan.....	1,403,525	134,663	(1)	(1)
Pennsylvania.....	46,002,955	4,327,899	3,945,085	3,675,892
West Virginia.....	13,864,736	1,247,273	1,150,060	1,096,360
Wisconsin.....	12,436,812	1,100,446	694,474	(1)
All other states.....	5,220,838	504,553	709,180	1,014,065
<b>Chrome, total.....</b>	5,210,325	583,214	592,051	279,436
<b>Upper leather (other than patent):</b>				
Cattle, total.....	120,897,283	16,693,073	8,245,064	7,946,769
California.....	3,027,052	400,230	200,863	24,268
Illinois.....	30,274,697	3,647,664	1,106,277	932,482
Massachusetts.....	11,936,255	1,637,765	980,809	1,509,748
Michigan.....	5,753,845	854,772	(1)	(1)
New Jersey.....	5,297,045	597,230	(1)	(1)
New York.....	21,775,075	3,346,473	2,255,504	1,569,259
Wisconsin.....	31,165,645	4,457,524	2,262,882	2,741,257
All other states.....	11,667,669	1,745,401	1,220,626	1,220,756
<b>Horse, total.....</b>	10,561,990	1,720,507	640,741	(2)
Illinois.....	4,928,863	756,653	240,123	(2)
All other states.....	5,633,126	963,854	157,618	(2)
<b>Skins, total.....</b>	3267,775,879	79,663,981	66,280,290	(2)
Delaware.....	41,170,434	13,019,389	7,262,766	(2)
Illinois.....	7,317,262	1,170,849	2,185,944	(2)
Massachusetts.....	55,931,646	17,999,231	17,597,553	(2)
New Jersey.....	22,537,327	5,210,554	6,539,632	(2)
New York.....	20,192,652	6,587,243	6,256,521	(2)
Pennsylvania.....	67,530,750	20,000,463	19,225,129	(2)
Wisconsin.....	32,362,215	4,130,580	5,309,662	(2)
All other states.....	14,733,537	2,595,662	1,923,083	(2)
<b>Belting leather, total.....</b>	32,773,994	1,483,070	847,224	521,035
North Carolina.....	8,772,765	424,710	203,812	123,478
Virginia.....	8,623,631	359,965	167,046	179,556
All other states.....	15,380,608	698,365	276,366	221,201
<b>Harness leather, total.....</b>	24,171,047	1,717,154	2,777,312	3,945,235
California.....	3,473,741	253,298	269,728	383,264
Michigan.....	3,285,618	239,538	414,370	214,579
New York.....	1,526,979	100,811	262,133	337,108
Ohio.....	3,157,361	219,455	335,127	399,081
Wisconsin.....	3,854,044	308,103	631,787	1,331,625
All other states.....	8,873,304	596,929	885,191	1,414,953

<sup>1</sup> Included in "All other states" to avoid disclosure.

<sup>2</sup> Figures not available.

<sup>3</sup> Includes upper leather to the value of \$1,223,685, for which the number of



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TABLE 20.—PRINCIPAL PRODUCTS, BY STATES: 1919, 1914, AND 1909—Continued.

PRODUCT AND STATE.	VALUE.		
	1919	1914	1909
<b>Upholstery leather, total.....</b>	<b>\$32,224,644</b>	<b>\$14,328,358</b>	<b>\$14,266,742</b>
New Jersey.....	18,873,843	8,344,416	8,836,740
Ohio.....	7,820,189	3,494,590	3,734,827
All other states.....	5,530,612	2,579,352	1,695,175
<b>Patent leather (other than upholstery), total.....</b>	<b>26,827,083</b>	<b>15,590,812</b>	<b>(1)</b>
Delaware.....	1,625,375	(2)	(1)
Massachusetts.....	11,320,708	6,302,820	(1)
New Jersey.....	4,641,869	2,897,178	(1)
Pennsylvania.....	4,933,817	4,188,915	(1)
Wisconsin.....	3,266,236	1,175,508	(1)
All other states.....	1,039,078	1,026,371	(1)
<b>Glove leather, total.....</b>	<b>21,022,964</b>	<b>4,284,655</b>	<b>4,913,543</b>
Illinois.....	6,275,666	373,404	586,823
Michigan.....	865,623	(2)	(2)
New York.....	9,290,870	1,667,474	2,074,701
Pennsylvania.....	488,359	(2)	(2)
Wisconsin.....	2,947,600	776,707	1,353,618
All other states.....	1,154,786	1,467,070	893,401
<b>Bookbinders' leather, total.....</b>	<b>3,493,841</b>	<b>1,362,673</b>	<b>2,450,155</b>
New Jersey.....	1,717,405	740,661	1,502,657
All other states.....	1,746,376	622,012	947,498
<b>Rough leather sold, total.....</b>	<b>3,712,687</b>	<b>4,494,085</b>	<b>6,335,599</b>
New Jersey.....	603,266	1,423,908	1,234,065
Ohio.....	753,899	141,458	(2)
Pennsylvania.....	617,351	750,656	1,182,142
Wisconsin.....	184,871	75,808	226,950
All other states.....	1,488,300	2,101,155	3,692,442
<b>All other leather, including offal, total.....</b>	<b>85,945,319</b>	<b>38,843,699</b>	<b>124,866,677</b>
California.....	3,369,442	1,406,471	1,427,487
Connecticut.....	827,795	382,272	388,169
Delaware.....	146,204	394,875	10,969,291
Illinois.....	6,499,059	2,911,080	8,705,791
Indiana.....	1,848,786	1,138,061	523,258
Maine.....	652,432	426,901	359,123
Maryland.....	1,678,326	(2)	(2)
Massachusetts.....	11,974,770	4,687,907	24,317,598
Michigan.....	3,361,184	3,095,754	3,562,715
Missouri.....	448,148	262,852	178,348
New Hampshire.....	1,167,460	205,220	(2)
New Jersey.....	10,266,504	6,262,331	12,226,087
New York.....	9,678,892	4,283,800	9,349,484
North Carolina.....	2,180,198	(2)	(2)
Ohio.....	2,447,460	776,460	1,677,432
Pennsylvania.....	19,956,704	6,947,241	27,971,706
Virginia.....	2,383,024	290,517	687,592
Wisconsin.....	4,648,363	2,674,812	19,938,885
All other states.....	2,423,489	2,595,145	2,586,701

<sup>1</sup> Figures not available.

<sup>2</sup> Included in "All other states" to avoid disclosure.

Detailed statistics of materials and products, 1919.—Table 21 is a detailed statement of the special statistics for the leather industry, materials and products, for the census of 1919. It includes the information as reported by the establishments that constitute the classified industry and also by the establishments in other industries that manufactured leather for their own use in further manufacture.

TABLE 21.—DETAILED STATEMENT OF MATERIALS AND PRODUCTS: 1919.

	Unit of measure.	Quantity.	Cost.
<b>MATERIALS.</b>			
Total cost.....			\$846,521,527
Tanning (raw stock used during year).....			521,789,592
Cattle hides (all kinds)—			
Dry (12 pounds and over).....	Number.....	4,041,999	36,539,083
Green or green salted (25 pounds and over).....	Number.....	18,142,518	208,455,800
Horsehides—			
Dry.....	Number.....	370,378	1,248,053
Green or pickled.....	Number.....	376,552	3,947,004
Butts, equivalent hides.....	Number.....	890,295	2,903,793
Fronts, equivalent hides.....	Number.....	657,083	4,849,433
Calf and kip skins—			
Dry (under 12 pounds).....	Number.....	2,914,997	13,666,577
Green or pickled (under 25 pounds).....	Number.....	9,979,277	60,667,778
Goat and kid skins—			
Dry.....	Number.....	51,162,706	75,474,563
Green or pickled.....	Number.....	3,027,923	4,886,705
Tanned, but unfinished (imported).....	Number.....	1,298,201	2,139,577
Sheep and lamb skins—			
Dry.....	Number.....	4,290,257	6,315,200
Green or pickled.....	Number.....	18,555,990	23,100,544
Cabretta skins.....	Number.....	5,404,613	6,268,905
Kangaroo and wallaby skins.....	Number.....	900,445	1,018,280
Deer and elk skins.....	Number.....	853,809	1,131,147
Pig and hog skins.....	Number.....	544,400	689,939
Skivers, pieces.....	Number.....	2,709,864	3,088,100
Fishers, pieces.....	Number.....	1,807,948	873,257
Other raw stock.....			4,522,015
Currying (purchased rough leather used during the year).....			10,166,339
Rough leather.....	Sides.....	487,676	4,030,093
Rough grains (split leather).....	Sides.....	582,191	2,321,140
Rough splits, whole sides.....	Sides.....	1,015,983	1,898,757
Butt splits.....	Butts.....	112,053	454,504
All other rough leather.....			7,461,935
Vegetable materials used for tanning or finishing, total.....			46,564,536
Chemicals, total.....			20,985,006
Acids.....			1,835,955
Alkalies.....			3,460,302
Chromates.....			3,082,915
Dyes and dyestuffs.....			5,249,381
Other chemicals.....			7,356,473
Fats, oils, and greases.....			11,342,269
All other materials, including fuel and rent of power.....			29,673,785
<b>PRODUCTS.</b>			
Total value.....			Value. 928,591,701
Rough leather, for sale in the rough.....	Equivalent sides.	206,379	1,592,146
Rough grains (split leather), for sale in the rough.....	Equivalent sides.	95,528	499,098
Rough splits, for sale in the rough:			
Whole side splits.....	Sides.....	1,050,908	1,370,595
Butt splits.....	Butts.....	172,385	250,849
Sole leather:			
Hemlock.....	Equivalent sides.	1,731,545	10,179,564
Union.....	Equivalent sides.	7,314,834	79,917,866
Oak.....	Equivalent sides.	10,086,228	117,522,078
Chrome.....	Equivalent sides.	583,214	5,210,325
Offal.....	Pounds.....	24,696,770	8,979,905



## MANUFACTURES.

TABLE 21.—DETAILED STATEMENT OF MATERIALS AND PRODUCTS: 1919—Continued.

	Unit of measure.	Quantity.	Value.
PRODUCTS—continued.			
Belting leather:			
Oak.....	Butts.....	1,431,010	\$31,615,932
Chrome.....	Butts.....	62,080	1,151,082
Offal.....	Pounds.....	14,734,854	4,408,674
Saddlery leather.....	Equivalent sides.....	102,594	986,012
Skirting and collar leather.....	Equivalent sides.....	581,410	5,998,656
Harness leather:			
Hemlock.....	Sides.....	423,389	5,448,793
Union <sup>1</sup> .....	Sides.....	378,051	5,160,140
Oak.....	Sides.....	015,714	13,562,174
Latigo leather.....	Sides.....	20,631	210,757
Case, bag, and strap leather.....	Sides.....	1,225,577	11,880,766
Lace leather.....	Sides.....	401,077	2,532,074
Welting leather.....	Sides.....	205,699	1,929,846
Upholstery leather (auto, furniture, and carriage):			
Whole-hide grains.....	Hides.....	933,921	18,262,372
Whole-hide splits.....	Hides.....	1,507,741	13,962,272
Upper leather (other than patent):			
Cattle—			
Chrome.....	Sides.....	14,675,106	106,152,033
Combination (chrome and vegetable tannage).....	Sides.....	1,060,152	8,017,702
Vegetable.....	Sides.....	948,755	6,727,543
Horse.....	Sides.....	1,720,507	10,561,990
Calf and kip.....	Skins.....	11,607,427	92,900,873
Goat and kid.....	Skins.....	51,508,673	143,509,032
Sheep and lamb.....	Skins.....	10,036,005	16,489,703
Cabretta.....	Skins.....	5,107,446	10,584,907
Other upper leather, not elsewhere specified.....			4,580,900
Patent leather (other than upholstery):			
Cattle.....	Sides.....	2,563,603	21,379,305
Horse.....	Sides.....	132,873	2,062,802
Calf and kip.....	Skins.....	44,051	503,019
Goat and kid.....	Skins.....	729,963	2,236,853
All other.....			529,199
Glove leather:			
Cattle (grains).....	Sides.....	43,169	312,298
Cattle (splits).....	Sides.....	4,357,984	3,593,702
Horse.....	Sides.....	968,816	5,014,024
Calf and kip.....	Skins.....	5,530	27,323
Pig and hog.....	Skins.....	217,122	334,137
Goat and kid.....	Skins.....	123,397	297,003
Sheep and lamb.....	Skins.....	4,972,351	9,179,019
Deer and elk.....	Skins.....	324,273	1,027,511
Other glove leather, not elsewhere specified.....			1,264,347
Fancy and bookbinders' leather:			
Whole hide.....	Hides.....	327,390	2,407,480
Calf and kip.....	Skins.....	276,935	1,888,245
Goat and kid.....	Skins.....	336,037	965,949
Sheep and lamb.....	Skins.....	1,751,751	3,141,227
Seal, alligator, pig and hog.....	Skins.....	125,968	668,070
Other fancy leather, not elsewhere specified.....			287,157
Finished splits, not elsewhere specified:			
Cattle—			
Whole sides.....	Sides.....	9,923,160	12,671,088
Butts.....	Butts.....	875,208	1,028,410
Horse—			
Butts.....	Butts.....	485,274	2,509,030
Fronts.....	Fronts.....	599,319	251,131
Skivers.....	Pieces.....	6,547,119	9,374,475
Flashers.....	Pieces.....	5,603,230	2,160,873
Roller and chamolais leather.....	Skins.....	2,092,904	3,012,344
Shearings.....	Skins.....	644,440	1,388,838

<sup>1</sup> Includes "chrome" to avoid disclosure of individual operations.

TABLE 21.—DETAILED STATEMENT OF MATERIALS AND PRODUCTS: 1919—Continued.

	Unit of measure.	Quantity.	Value.
PRODUCTS—continued.			
Textile leather.....	Sides.....	263,060	\$666,762
Pig and hog leather, not elsewhere specified.....	Skins.....	333,763	781,521
Hat sweats.....	Skins.....	1,351,628	2,712,512
All other leather.....			6,438,346
Miscellaneous by-products:			
Wool.....	Pounds.....	7,392,440	3,318,576
Hair (equivalent washed and dried).....	Pounds.....	86,452,155	2,753,181
Glue stock.....	Pounds.....	306,798,412	7,223,103
Fertilizer materials.....	Pounds.....	31,209,841	285,381
All other products and by-products.....			15,024,656
Amount charged for tanning, currying, or finishing for others.....			51,762,235
Establishments assigned to other industries but producing leather for use in further manufacture.....			
MATERIALS.			
Total cost.....			Cost, 817,711
Tanning (raw stock used during year):			
Cattle hides (all kinds)—			
Dry (12 pounds and over).....	Number.....	2,953	31,229
Green or green salted (25 pounds and over).....	Number.....	3,902	61,950
Sheep and lamb skins—			
Dry.....	Number.....	36,000	54,500
Green or pickled.....	Number.....	57,504	71,602
Skivers, pieces.....	Number.....	14,500	20,803
Other raw stock.....			65,870
Currying (purchased rough leather used during the year):			
Rough splits, whole sides.....	Sides.....	756	3,241
All other rough leather.....			460,850
Vegetable materials used for tanning or finishing, total.....			51,666
PRODUCTS.			
Total value.....			Value, 1,193,016
Sole leather, offal.....	Pounds.....	309,720	132,962
Belting leather, oak.....	Butts.....	20,397	571,523
Saddlery leather.....	Equivalent sides.....	900	15,840
Skirting and collar leather.....	Equivalent sides.....	990	12,000
Harness leather, union.....	Sides.....	3,010	40,509
Latigo leather.....	Sides.....	2,560	20,480
Lace leather.....	Sides.....	4,480	35,840
Upholstery leather (auto, furniture, and carriage):			
Whole-hide grains.....	Hides.....	1,022	15,322
Whole-hide splits.....	Hides.....	3,387	33,370
Patent leather (other than upholstery), cattle.....	Sides.....	504	5,040
Glove leather, sheep and lamb.....	Skins.....	3,504	2,708
Finished splits, not elsewhere specified, cattle, whole side.....	Sides.....	756	2,268
Hat sweats.....	Skins.....	101,000	252,000
Miscellaneous by-products:			
Hair.....	Pounds.....	39,050	594
Glue stock.....	Pounds.....	623,274	9,465
Amount charged for tanning, currying, and finishing for others.....			37,402

## GENERAL TABLES.

Comparative summary, by states.—Table 22 gives comparative statistics for the principal items: Number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and

value of products for the census years 1919, 1914, and 1909.

Detailed statement, by states.—Table 23 is a detailed statement, by states, for the census of 1919.

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TABLE 22.—COMPARATIVE SUMMARY, BY STATES: 1919, 1914, AND 1909.

STATE.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earners (aver- age num- ber).	Primary horse power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	STATE.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earners (aver- age num- ber).	Primary horse power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
					Expressed in thousands.								Expressed in thousands.		
United States.....	1919	680	72,470	218,238	\$88,205	\$646,522	\$928,592	New Hampshire.....	1919	7	709	4,750	\$754	\$5,966	\$7,309
	1914	741	55,936	172,712	31,014	284,245	367,202		1914	8	452	3,174	263	2,251	2,864
	1909	919	62,202	148,140	32,103	248,279	327,874		1909	4	264	890	114	1,109	1,581
California.....	1919	21	1,453	5,714	1,897	16,472	21,416	New Jersey.....	1919	73	5,499	13,239	7,297	52,587	78,012
	1914	29	1,361	3,676	1,007	7,858	10,021		1914	84	5,108	12,396	3,260	22,081	31,652
	1909	40	1,398	3,534	988	7,039	9,367		1909	86	5,560	9,243	3,473	20,198	28,431
Connecticut.....	1919	7	168	510	189	1,060	1,569	New York.....	1919	94	7,056	20,134	8,420	70,487	98,095
	1914	7	185	340	100	636	906		1914	98	5,360	20,039	2,955	27,912	36,018
	1909	8	150	356	95	805	1,047		1909	109	5,683	14,205	2,912	20,941	27,642
Delaware.....	1919	18	4,251	7,977	5,812	28,341	50,138	North Carolina.....	1919	11	1,385	6,016	1,099	14,281	17,849
	1914	20	2,332	5,163	1,187	6,474	9,183		1914	17	877	2,806	355	5,545	7,182
	1909	16	3,045	4,417	1,367	8,147	12,079		1909	39	832	2,672	290	4,156	5,415
Illinois.....	1919	29	4,434	14,026	5,247	42,652	60,324	Ohio.....	1919	24	1,565	5,063	2,172	18,818	25,008
	1914	28	2,678	7,020	1,538	13,917	17,509		1914	28	1,005	4,450	1,054	8,506	11,023
	1909	29	3,001	6,769	1,582	12,131	14,912		1909	36	1,884	4,244	1,083	7,720	10,128
Indiana.....	1919	9	396	1,206	343	3,455	4,730	Oregon.....	1919	5	39	203	49	236	315
	1914	10	434	1,127	226	2,326	2,928		1914	5	34	163	20	148	188
	1909	10	398	1,028	205	1,718	2,311		1909	8	49	224	34	181	244
Kentucky.....	1919	10	661	2,478	670	5,791	8,748	Pennsylvania.....	1919	92	13,749	42,961	17,252	146,405	211,389
	1914	11	600	2,276	329	3,242	4,199		1914	120	11,988	39,964	6,492	68,309	85,263
	1909	18	630	2,669	308	3,224	4,241		1909	163	14,008	37,440	6,801	59,113	77,926
Maine.....	1919	9	306	1,746	269	2,675	3,359	Virginia.....	1919	21	1,666	5,341	1,573	16,216	21,591
	1914	10	358	1,995	182	2,061	2,419		1914	21	1,205	3,643	525	8,218	9,834
	1909	17	436	1,467	208	1,452	1,905		1909	39	1,500	4,223	589	6,445	8,267
Maryland.....	1919	7	517	1,630	479	4,357	6,263	West Virginia.....	1919	17	1,520	5,510	1,742	19,079	23,827
	1914	10	440	1,458	229	2,620	3,485		1914	18	1,072	4,887	615	8,695	11,015
	1909	13	466	1,321	211	2,114	2,661		1909	20	1,571	5,305	775	10,393	12,451
Massachusetts.....	1919	131	15,180	34,159	19,211	82,017	129,595	Wisconsin.....	1919	25	6,825	24,808	8,011	69,506	94,762
	1914	126	10,164	26,534	5,918	33,194	45,265		1914	27	5,869	20,142	3,404	33,053	42,204
	1909	132	10,252	19,231	5,444	28,766	40,002		1909	32	7,548	17,112	3,983	34,829	44,668
Michigan.....	1919	28	3,464	12,243	4,163	32,452	45,801	All other states.....	1919	35	1,368	6,076	1,233	10,723	14,722
	1914	23	2,773	6,787	1,739	20,982	25,504		1914	31	764	3,167	390	4,166	5,372
	1909	24	2,201	6,719	1,133	12,121	15,331		1909	67	921	4,492	357	4,033	5,230
Missouri.....	1919	7	265	948	296	2,946	3,770								
	1914	10	227	700	156	2,042	2,573								
	1909	9	220	519	146	1,599	2,035								

## MANUFACTURES.

TABLE 23.—DETAILED STATEMENT, BY STATES: 1919.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.										WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.						EXPENSES.		
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Average number.	Wage earners.		Total.	16 and over.		Under 16.		Capital.	Salaries and wages.				
					Male.	Female.		Maximum month.	Minimum month.		Male.	Female.	Male.	Female.		Officials.	Clerks, etc.			
																		Number, 15th day of—		
United States.	680	79,292	898	2,858	2,267	1,293	72,476	De 79,010	Fe 65,515	79,205	72,257	6,507	330	111	\$671,341,553	\$14,382,409	\$5,796,593			
California.	21	1,630	11	76	55	35	1,453	Au 1,506	My 1,401	1,509	1,460	46	2	1	15,904,030	331,557	201,539			
Connecticut.	7	195	1	19	6	1	168	De 229	Fe 114	224	207	13	4	....	1,106,864	87,390	9,248			
Delaware.	18	4,468	5	73	69	55	4,251	Se 5,566	Fe 2,390	5,521	3,914	1,533	42	32	34,982,894	661,007	198,861			
Georgia.	3	321	2	13	5	....	301	Au 827	De 290	290	268	22	....	....	774,793	70,912	9,793			
Illinois.	29	4,801	25	150	137	55	4,434	No 4,694	Ja 4,144	4,617	4,046	536	13	22	38,069,464	1,082,667	419,945			
Indiana.	9	442	2	28	9	7	396	Jy 414	Ap 358	388	388	2	....	....	4,786,639	120,402	26,587			
Kentucky.	10	727	1	39	18	8	661	Au 701	No 628	654	652	2	....	....	7,011,821	157,195	42,538			
Maine.	9	337	2	21	8	5	306	De 374	My 270	376	363	13	....	....	2,507,111	65,833	6,379			
Maryland.	7	574	5	31	15	6	517	Se 581	Ja 405	566	563	3	....	....	5,547,285	187,700	32,650			
Massachusetts.	131	16,877	92	634	530	441	15,180	De 17,379	Jy 13,241	17,378	15,769	1,440	147	32	92,548,853	2,779,770	1,117,085			
Michigan.	28	3,748	1	158	81	44	3,464	Au 3,622	Ja 3,302	3,528	3,356	172	....	....	32,886,376	626,698	302,105			
Missouri.	7	351	2	17	41	6	265	De 303	Ja 235	303	300	3	....	....	4,498,610	68,440	38,897			
New Hampshire.	7	830	....	46	35	40	709	De 968	Mh 582	968	906	61	1	....	4,188,468	100,755	49,371			
New Jersey.	73	0,012	31	277	132	73	5,499	Se 5,920	Ja 4,856	5,907	5,279	624	4	....	55,771,911	1,681,744	424,921			
New York.	94	7,723	80	253	210	119	7,056	De 8,025	Fe 5,980	8,033	7,687	330	16	....	67,523,416	1,540,610	578,058			
North Carolina.	11	1,474	6	45	25	13	1,385	Ja 1,451	No 1,322	1,340	1,340	....	....	....	12,301,050	206,729	64,852			
Ohio.	24	1,738	17	80	44	32	1,565	Oc 1,791	Ja 1,363	1,733	1,702	31	....	....	26,995,409	342,072	139,647			
Oregon.	5	46	4	3	....	....	39	Ja 40	No 37	38	38	....	....	....	242,998	5,400	....			
Pennsylvania.	92	14,745	57	452	334	163	13,749	De 14,787	Ja 12,287	14,772	13,646	1,040	63	23	146,280,214	2,423,118	766,998			
Tennessee.	10	650	6	18	12	....	608	Au 655	Ja 593	578	564	14	....	....	4,891,775	94,221	41,070			
Texas.	3	27	2	5	1	1	18	De 38	Fe 6	88	31	7	....	....	92,228	8,940	1,425			
Virginia.	21	1,875	6	57	114	32	1,666	Au 1,819	Ja 1,494	1,729	1,718	10	1	....	19,971,296	249,902	276,647			
West Virginia.	17	1,617	8	39	33	17	1,520	Jy 1,579	De 1,426	1,433	1,431	2	....	....	18,947,995	121,284	90,170			
Wisconsin.	25	7,609	14	291	352	127	6,825	Mh 6,946	Je 6,076	6,814	6,212	565	37	....	69,779,705	1,297,005	902,357			
All other states.	19	499	18	23	6	11	441	....	....	468	429	38	1	....	3,730,360	92,058	22,820			

STATE.	EXPENSES—continued.						POWER.									
	Salaries and wages—Continued.	For contract work.	Rent and taxes.		For materials.		Value of products.	Value added by manufacture.	Primary horsepower.						Electric horsepower generated in establishments reporting.	
			Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.						
										Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. <sup>2</sup>	Rent. <sup>3</sup>		
United States.	\$88,205,473	\$2,337,011	\$738,403	\$26,497,983	\$636,698,271	\$9,823,250	\$928,591,701	\$282,070,174	218,238	124,891	25,909	6,438	2,020	58,971	85,441	
California.	1,896,537	....	....	411,555	16,250,563	221,132	21,416,302	4,944,607	5,714	1,828	50	....	....	3,836	364	
Connecticut.	189,386	2,052	9,600	13,859	1,039,740	20,404	1,568,963	508,819	510	300	....	30	30	150	....	
Delaware.	5,811,722	6,425	10,587	4,491,848	28,106,589	235,222	50,138,251	21,797,440	7,977	4,628	150	....	....	3,299	492	
Georgia.	235,805	....	....	42,963	2,396,483	32,927	3,242,494	813,084	1,077	275	....	....	....	802	....	
Illinois.	5,246,980	411,113	30,248	1,233,375	42,130,911	512,322	60,323,659	17,671,426	14,626	8,494	2,890	....	....	3,242	9,390	
Indiana.	343,075	....	8,052	102,367	3,410,089	45,209	4,720,538	1,274,240	1,206	425	....	....	....	781	140	
Kentucky.	669,593	....	78	160,206	5,680,435	104,281	8,747,872	2,957,156	2,478	1,057	30	85	....	1,306	577	
Maine.	299,162	....	1,800	22,392	2,576,482	98,137	3,358,638	654,019	1,746	1,540	....	....	60	146	814	
Maryland.	479,115	....	....	112,116	4,282,995	73,446	6,293,468	1,907,027	1,630	1,024	....	....	....	606	175	
Massachusetts.	19,211,106	1,142,633	816,402	3,692,229	80,083,207	1,034,048	129,594,962	47,577,707	34,159	15,165	5,404	200	362	13,028	11,147	
Michigan.	4,162,546	....	1,270	1,916,156	31,685,075	766,723	45,800,798	13,348,988	12,243	8,278	520	1,110	....	2,335	6,549	
Missouri.	2,605,198	....	2,605	144,883	18,624,793	193,028	25,008,070	6,190,270	948	420	....	....	....	528	....	
New Hampshire.	754,265	308	1,300	89,361	5,849,472	116,953	7,309,472	1,343,047	4,760	835	....	....	200	3,715	1	
New Jersey.	7,296,535	449,744	166,436	1,833,730	51,835,463	761,058	78,012,101	25,425,580	13,239	6,235	283	....	....	6,721	4,493	
New York.	8,419,516	158,434	81,598	3,001,263	60,573,940	913,349	98,094,503	27,607,514	20,134	9,420	3,465	752	404	6,087	11,489	
North Carolina.	1,095,246	....	....	130,010	14,043,567	237,357	17,848,526	3,567,602	6,916	3,920	75	8	425	2,488	1,140	
Ohio.	2,171,838	....	4,005	559,846	18,624,793	193,028	25,008,070	6,190,270	5,063	2,612	667	170	....	1,014	1,972	
Oregon.	49,177	....	....	1,095	231,861	4,451	314,567	78,255	203	16	....	....	....	187	....	
Pennsylvania.	17,252,410	41,191	72,733	4,828,934	144,433,316	1,972,061	211,389,349	64,983,972	42,961	34,681	550	3,578	435	3,717	13,178	
Tennessee.	489,952	....	300	182,202	4,945,912	82,003	6,709,970	1,882,355	2,877	1,860	....	....	100	917	318	
Texas.	18,464	....	....	94	57,698	1,020	90,297	31,669	127	....	....	8	....	119	....	
Virginia.	1,573,237	73,814	3,000	300,371	16,030,969	185,935	21,590,902	5,374,868	5,341	4,104	135	....	10	1,092	1,883	
West Virginia.	1,741,717	....	....	288,430	18,809,116	269,947	23,827,131	4,748,068	5,510	4,970	....	490	....	50	1,830	
Wisconsin.	8,011,138	49,338	9,676	3,794,719	63,589,370	916,658	94,762,230	25,256,202	24,808	11,762	11,650	....	....	1,396	18,149	
All other states.	489,683	1,959	18,478	92,477	3,128,358	79,075	4,680,070	1,472,637	1,995	1,136	40	7	3	809	1,325	

<sup>1</sup> All other states embrace: Alabama, 1 establishment; Colorado, 1; Louisiana, 1; Minnesota, 6; North Dakota, 2; Rhode Island, 2; South Dakota, 1; Vermont, 2; Washington, 2; and Wyoming, 1.

<sup>2</sup> Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

<sup>3</sup> Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

# BOOTS AND SHOES.

## GENERAL STATISTICS.

General character of the industry.—This industry includes the manufacture of boots, shoes, sandals, slippers, moccasins, leggings, overgaiters, and allied footwear, chiefly of leather, though it is inclusive of canvas and other textile fabrics. It includes establishments doing such special work as crimping, stitching, buttonhole making, and also those doing contract work on materials furnished by the boot and shoe trade. Establishments making rubber boots, shoes, and sandals are not included.

In 1919 there were 1,449 establishments in the industry, and the value of products amounted to \$1,155,041,436, and in addition there were 9 establishments engaged primarily in other lines of manufacture which reported products within the scope of the industry to the value of \$894,201.

Comparison with earlier censuses.—Table 24 shows the principal statistics for the industry for 1919 and for each census year since 1879. A comparison of the figures for 1919 with those for 1914, though showing large increases in financial items, due to industrial conditions since the World War, show small gains in quantity production and in number of wage earners employed. The decrease in number of proprietors and firm members, the only item showing a decrease, was probably due to the incorporation of small establishments.

Specialization in the industry.—Table 25 presents the principal statistics for establishments grouped according to class of work. The regular factories formed 92.3 per cent of the total number, employed 99 per cent of the wage earners, and the value of their products constituted 99.2 per cent of the aggregate value. The number of establishments doing contract work or special kinds of work is greatly decreasing. The establishments doing contract work only were in Massachusetts, New York, New Jersey, and Ohio and those doing special kinds of work were in Massachusetts, New Hampshire, New York, and Pennsylvania. Establishments in the class "overgaiters, moccasins, and leggings," also reported sandals, lumbermen's and miners' boots, and other footwear not entirely of leather.

Principal states, ranked by value of products.—Table 26 presents the statistics relating to number of establishments, wage earners, value of products, and value added by manufacture, by states, ranked according to value of products. The 11 states having highest rank held respectively the same rank in 1914. Though the proportion of the total value of products reported by

Massachusetts was less in 1919 than formerly, the actual increase over 1914 amounted to 120.6 per cent. The increase for New York was 183.1 per cent, and for Missouri 170.9 per cent.

The combined products of three New England states—Maine, Massachusetts, and New Hampshire—represented 48.9 per cent of the total for the United States. These states, and New York and Pennsylvania, the important Middle Atlantic boot-and-shoe states, together represented 71 per cent of the total. Ohio, Illinois, Wisconsin, and Missouri, the leading boot-and-shoe states in the Middle West, reported 22.9 per cent of the total value of products.

Summary for leading cities.—Table 27 gives the statistics for 1919, 1914, and 1909 for the 14 ranking cities, according to value of products in 1919. New York advanced from fifth place in 1909 to fourth in 1914 and to second place in 1919. Brockton, Lynn, Haverhill, and Boston represented in 1919, as in 1914, one-fifth of the total value of products for all establishments in the industry.

Persons engaged in the industry.—The age classification of the average number of wage earners, as presented in Table 28, is an estimate obtained by the method described in the "Explanation of terms." Statistics for states will be found in Table 45.

Wage earners, by months.—Table 29 gives the total number of wage earners by months and the number of females so employed for states having an average of 500 wage earners or more. These figures reflect the steadiness of employment, or the reverse, during the year. The fluctuation in employment during 1919 did not differ materially from 1914. For the six leading states in the industry, each employing more than 10,000 wage earners, the variation ranged from 90.2 per cent, minimum of maximum, in Pennsylvania, to 81.6 per cent in New Hampshire. The greatest difference in number employed in any state during the year was in Indiana, the minimum number being 50.9 per cent of the maximum number. The proportion of females employed in the six leading states ranged from 30.9 per cent of the state total in New York to 42.9 per cent in Missouri. Kentucky showed the largest percentage for females, 55.6 per cent.

Prevailing hours of labor.—Table 30 shows that only three-tenths of 1 per cent of the wage earners in 1909 were employed in establishments where the prevailing hours of labor were 48 per week or less. In 1914 this percentage was 2.6 but in 1919 it was 62.8 per cent. On the other hand, 15.6 per cent of all wage earners

## MANUFACTURES.

in 1909 were in establishments where the prevailing hours of labor per week were 60 or more. This dropped to 3 per cent in 1914, and in 1919 only four-tenths of 1 per cent were in this group. For Massachusetts and New York, the leading states in the industry, the wage earners in establishments having working hours of 48 or less per week formed 85.8 per cent and 84.3 per cent of the respective totals in 1919, compared with 1.4 per cent and 1.2 per cent, respectively, in 1914. In Missouri, the next state in importance, 55.9 per cent of the wage earners worked these hours in 1919 compared with eight-tenths of 1 per cent in 1914. In Ohio 87.3 per cent of the wage earners were in establishments reporting working hours per week "Between 48 and 54."

**Size of establishments, by average number of wage earners.**—The industry contains a considerable number of large establishments, and, as a whole, averaged 146 wage earners per establishment in 1919 compared with 141 in 1914 and 138 in 1909. In 1919 there were 87 establishments that employed over 500 wage earners, these establishments constituting 6 per cent of the total number with 39.1 per cent of all wage earners. In 1914 the establishments of this class, those with over 500 wage earners, represented 6.3 per cent of the establishments and 39.7 per cent of the wage earners, and in 1909, 5.8 per cent of the establishments and 36.3 per cent of the wage earners. The statistics therefore, as presented in Table 31, do not show a marked change in size, based upon number of wage earners.

**Size of establishments, by value of products.**—In Table 32 the grouping by value of products reflects general increases in values. The average value of products per establishment increased from \$330,000 in 1909 to \$370,000 in 1914 and to \$797,000 in 1919, the increase from 1914 to 1919 being essentially due to high prices, for on a quantity-production basis and

on an employee basis the growth was relatively small. This condition accounts for the changes from lower to higher groups when classified according to value of products.

**Character of ownership.**—Table 33 shows a classification of the establishments according to ownership. In 1919 and 1914 a majority of the establishments were incorporated, 62 per cent and 50.6 per cent, respectively, in 1909 but 45.4 per cent. The average value of products per establishment in 1919 was \$1,134,000 for the "Corporations" group, \$174,000 for "Individuals" and \$359,000 for "All others," most of the latter being firms. In 1914 the figures were \$575,000, \$73,000, and \$280,000, respectively. The average number of wage earners per establishment in 1919 was 205 for corporations, 35 for individuals, and 69 for the "All others" group.

In Massachusetts, 57.6 per cent of the establishments were corporations; and in New York 50 per cent. Maine, another important Eastern state, reported 33 of the 39 establishments, or 84.6 per cent, as incorporated. In Missouri practically all were corporations. Ohio reported 83.3 per cent corporations, Wisconsin, 79 per cent, and Illinois, 72.5 per cent.

**Power used.**—Table 34 shows that primary power reported by the establishments increased 20.4 per cent in horsepower rating between 1914 and 1919. Owned power decreased 7.5 per cent, but rented power increased 71.8 per cent, mostly electric power. A large proportion of the power is utilized as electric, either current purchased or generated by the establishment. In 1909 electric power in the aggregate was equal to 34 per cent of the total primary power; in 1914, 54 per cent; and in 1919, 69.5 per cent.

**Fuel used.**—Table 35 shows the consumption of fuel, by kinds and states. Figures for gas include both natural and manufactured gas.

TABLE 24.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, 1899, 1889, AND 1879.

	1919	1914	1909	1904	1899	1889	1879	PER CENT OF INCREASE. <sup>1</sup>					
								1914-1919	1909-1914	1904-1909	1899-1904	1889-1899	1879-1889
Number of establishments.....	1,449	1,355	1,343	1,316	1,599	2,082	1,059	6.9	0.9	2.1	-17.7	-23.2	6.3
Persons engaged.....	237,107	210,348	200,847	160,159	(2)	(2)	(2)	12.7	4.7	25.4	5.6	.....	.....
Proprietors and firm members.....	888	1,090	1,218	1,424	(2)	(2)	(2)	-19.0	-10.5	-14.5	.....	.....	.....
Salaried employees.....	25,175	17,703	14,513	8,811	7,779	(2)	(2)	42.2	22.0	64.7	13.3	.....	.....
Wage earners (average number).....	211,049	191,555	185,116	149,924	141,880	133,690	111,152	10.2	3.5	23.5	5.7	(2)	(2)
Primary horsepower.....	120,632	100,232	85,896	56,220	49,444	30,686	11,674	20.4	16.7	52.8	13.7	61.1	165.1
Capital.....	\$580,625,075	\$254,590,832	\$197,090,344	\$122,526,063	\$90,819,233	\$95,282,311	\$42,994,028	128.1	20.2	60.9	22.7	4.8	121.6
Salaries and wages.....	\$268,859,576	\$128,623,475	\$109,646,165	\$77,766,362	\$66,110,832	\$60,375,076	\$43,001,438	109.0	17.3	41.0	17.6	-0.4	54.4
Salaries.....	\$58,124,496	\$22,928,071	\$17,257,013	\$8,706,682	\$7,609,949	(2)	(2)	153.5	32.6	98.5	13.5	.....	.....
Wages.....	\$210,734,610	\$106,695,404	\$92,389,152	\$69,059,680	\$58,440,883	(2)	(2)	99.4	14.4	33.7	18.2	.....	.....
Paid for contract work.....	\$1,930,544	\$1,500,381	\$1,811,706	\$1,471,080	\$1,751,948	(2)	(2)	28.7	-17.2	23.1	-16.0	.....	.....
Rent and taxes.....	\$25,160,589	\$3,571,773	\$2,436,145	\$1,573,585	\$1,380,615	(2)	(2)	604.4	46.6	.....	.....	.....	.....
Cost of materials.....	\$715,269,315	\$310,350,588	\$277,467,743	\$107,363,495	\$168,632,654	\$118,785,831	\$102,442,442	130.5	11.9	40.6	17.0	42.0	16.0
Value of products.....	\$1,165,041,436	\$501,760,458	\$442,630,726	\$320,107,458	\$258,900,580	\$220,649,358	\$166,050,354	130.2	13.4	38.3	23.6	17.4	32.9
Value added by manufacture.....	\$439,772,121	\$191,403,872	\$165,162,983	\$122,743,063	\$90,336,926	\$101,863,527	\$63,607,912	129.8	15.9	34.6	35.9	-11.3	60.1
Number of pairs of boots and shoes, all kinds.....	331,224,628	292,666,468	285,017,181	242,110,035	217,965,419	179,409,388	125,478,511	13.2	2.7	17.7	11.1	21.5	43.0

<sup>1</sup> A minus sign (-) denotes decrease.  
<sup>2</sup> Figures not available.

\* Figures not strictly comparable.  
 \* Exclusive of internal revenue.

\* Value of products less cost of materials.

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TABLE 25.—PRINCIPAL STATISTICS FOR THE INDUSTRY, BY CLASSES OF ESTABLISHMENTS: 1919, 1914, AND 1909.

	Census year.	Number of establishments.	Wage earners (average number).	Capital.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
Total.....	1919	1,449	211,049	\$580,625,075	\$210,734,610	\$715,269,315	\$1,155,041,436	\$439,772,121
	1914	1,355	191,555	254,590,832	105,695,404	310,356,558	501,760,458	191,403,872
	1909	1,343	185,116	197,090,344	82,359,152	277,467,743	442,630,726	165,162,983
Establishments engaged in—								
Regular factory production.....	1919	1,337	208,854	575,994,289	208,787,565	710,607,817	1,146,137,272	435,529,455
	1914	1,248	189,774	253,116,682	104,856,829	309,240,548	499,144,745	189,504,197
	1909	1,228	182,642	195,034,177	91,284,239	275,298,510	438,443,370	163,144,880
Contract work.....	1919	17	266	125,081	266,094	43,985	392,215	348,230
	1914	18	364	52,711	209,123	64,538	354,945	290,407
	1909	23	382	239,337	231,211	391,519	773,922	387,403
Stitching.....	1919	19	351	121,839	273,082	83,100	457,807	374,707
	1914	24	571	92,608	262,826	48,405	382,200	333,804
	1909	30	808	107,682	363,692	59,988	530,164	470,176
Crimping.....	1919	3	3	4,563	3,560	183	10,658	10,470
	1914	4	6	9,218	3,732	203	9,732	9,529
	1909	5	10	8,272	6,495	716	17,384	16,698
Making buttonholes.....	1919	3	7	2,150	6,998	3,681	14,896	11,215
	1914	8	50	16,229	24,460	5,616	50,540	44,924
	1909	4	34	5,547	15,943	4,921	30,450	25,536
Making overgaiters, moccasins, and leggings.....	1919	70	1,568	4,376,253	1,397,311	4,530,544	8,025,588	3,498,044
	1914	53	790	1,303,384	338,420	997,276	1,818,287	821,011
	1909	53	1,182	1,695,320	457,872	1,712,089	2,830,430	1,118,341

TABLE 26.—PRINCIPAL STATES, RANKED BY VALUE OF PRODUCTS: 1919.

STATE.	Number of establishments.	WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
		Average number.	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribution.	Rank.
United States.....	1,449	211,049	100.0	.....	\$1,155,041	100.0	.....	\$439,772	100.0	.....
Massachusetts.....	493	80,106	38.0	1	442,466	38.3	1	173,115	39.4	1
New York.....	340	34,710	16.4	2	190,470	16.5	2	82,312	18.7	2
Missouri.....	54	17,458	8.3	3	109,193	9.5	3	32,268	7.3	3
New Hampshire.....	52	12,336	5.9	6	73,671	6.4	4	22,615	5.2	6
Ohio.....	60	14,092	6.7	4	71,355	6.2	5	30,552	6.0	4
Pennsylvania.....	128	13,317	6.3	5	65,412	5.7	6	24,440	5.6	5
Maine.....	39	9,919	4.7	7	48,050	4.2	7	17,840	4.1	7
Wisconsin.....	62	7,598	3.6	9	44,374	3.8	8	16,672	3.8	8
Illinois.....	51	7,684	3.6	8	39,402	3.4	9	14,184	3.2	9
New Jersey.....	34	2,835	1.3	10	12,864	1.1	10	5,053	1.1	10
Minnesota.....	16	2,153	1.0	11	12,645	1.1	11	4,002	1.1	11
Michigan.....	15	1,120	0.5	13	6,046	0.5	13	1,862	0.4	13
Maryland.....	13	996	0.5	15	4,662	0.4	14	1,555	0.4	15
Connecticut.....	8	995	0.5	14	3,765	0.3	15	1,585	0.4	14
Kentucky.....	7	630	0.3	17	3,574	0.3	16	1,475	0.3	16
California.....	14	616	0.3	19	3,247	0.3	17	1,278	0.3	17
Iowa.....	6	653	0.3	16	3,047	0.3	18	777	0.2	19
Indiana.....	5	620	0.3	18	2,854	0.2	19	948	0.2	18
Louisiana.....	4	300	0.1	20	1,136	0.1	20	403	0.1	20
Washington.....	9	146	0.1	21	846	0.1	21	402	0.1	21
Texas.....	11	88	( <sup>1</sup> )	22	361	( <sup>1</sup> )	22	212	( <sup>1</sup> )	22
All other states.....	28	2,627	1.2	.....	15,386	1.3	.....	5,122	1.2	.....

<sup>1</sup> Less than one-tenth of 1 per cent.

TABLE 27.—STATISTICS FOR PRINCIPAL CITIES: 1919, 1914, AND 1909.

CITY.	1919					1914		1909	
	Number of establishments.	Average number of wage earners.	Cost of materials.	Value of products.	Rank.	Value of products.	Rank.	Value of products.	Rank.
Brockton, Mass.....	39	12,878	\$52,594,784	\$81,543,541	1	\$35,032,665	1	\$32,464,288	2
New York, N. Y.....	248	12,880	30,789,290	60,478,600	2	23,859,062	4	16,695,108	5
Lynn, Mass.....	105	12,123	37,899,415	69,457,349	3	30,066,815	2	34,620,870	1
St. Louis, Mo.....	27	9,779	39,553,048	69,857,853	4	( <sup>1</sup> )	5	( <sup>1</sup> )	3
Haverhill, Mass.....	137	11,529	33,245,787	59,090,812	5	25,319,953	3	20,977,540	4
Rochester, N. Y.....	48	6,934	20,565,641	35,912,227	6	13,519,755	7	11,990,187	8
Manchester, N. H.....	13	4,986	23,070,294	33,313,317	7	( <sup>1</sup> )	9	( <sup>1</sup> )	7
Cincinnati, Ohio.....	22	6,569	16,963,535	31,223,081	8	14,525,078	6	14,080,755	6
Milwaukee, Wis.....	26	4,917	18,433,989	30,007,285	9	11,665,824	10	7,431,884	12
Boston, Mass.....	14	6,146	16,154,468	27,526,886	10	13,253,410	8	8,819,284	10
Philadelphia, Pa.....	41	3,823	12,230,101	20,534,339	11	8,761,494	.....	( <sup>2</sup> )	.....
Auburn, Me.....	8	4,671	11,360,283	20,379,476	12	10,238,020	12	6,282,520	13
Chicago, Ill.....	31	3,344	10,479,803	17,595,506	13	10,247,250	11	8,212,087	11
Columbus, Ohio.....	9	1,872	6,151,564	10,198,135	14	5,224,348	.....	( <sup>3</sup> )	.....

<sup>1</sup> Figures not published for the censuses of 1914 and 1909.

<sup>2</sup> Figures not available.

## MANUFACTURES.

TABLE 28.—PERSONS ENGAGED IN THE INDUSTRY: 1919, 1914, AND 1909.

CLASS.	Cen- sus year.	Total.	Male.	Fe- male.	PER CENT OF TOTAL.		CLASS.	Cen- sus year.	Total.	Male.	Fe- male.	PER CENT OF TOTAL.	
					Male.	Fe- male.						Male.	Fe- male.
All classes.....	1919	237,107	147,065	90,042	62.0	38.0	Clerks and other subordinate sal- aried employees.....	1919	17,558	8,494	9,064	48.4	51.6
	1914	210,348	136,388	73,960	64.8	35.2		1914	13,620	7,780	5,840	57.1	42.9
	1909	200,847	130,398	70,449	64.9	35.1		1909	11,053	6,428	4,625	58.2	41.8
Proprietors and officials.....	1919	8,500	7,961	539	93.7	6.3	Wage earners (average number)...	1919	211,049	130,610	80,439	61.9	38.1
	1914	4,928	4,928	245	95.3	4.7		1914	191,555	123,680	67,875	64.6	35.4
	1909	4,678	4,467	211	95.5	4.5		1909	185,116	110,503	65,613	64.6	35.4
Proprietors and firm members...	1919	883	836	47	94.7	5.3	16 years of age and over.....	1919	204,346	126,561	77,785	61.9	38.1
	1914	1,090	1,051	39	96.4	3.6		1914	187,976	121,738	66,238	64.8	35.2
	1909	1,218	1,165	53	95.6	4.4		1909	177,500	115,119	62,381	64.9	35.1
Salaried officers of corporations..	1919	1,747	1,704	43	97.5	2.5	Under 16 years of age.....	1919	6,703	4,049	2,654	60.4	39.6
	1914	1,020	1,000	20	98.0	2.0		1914	3,579	1,942	1,637	54.3	45.7
	1909	890	875	15	98.3	1.7		1909	7,616	4,384	3,232	57.6	42.4
Superintendents and managers..	1919	5,870	5,421	449	92.4	7.6							
	1914	3,063	2,877	186	93.9	6.1							
	1909	2,570	2,427	143	94.4	5.6							

TABLE 29.—WAGE EARNERS, BY MONTHS, FOR STATES: 1919.

(Month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures.)

STATE.	Average number em- ployed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent min- imum is of max- imum.
		January.	Febru- ary.	March.	April.	May.	June.	July.	August.	Septem- ber.	Octo- ber.	Novem- ber.	Decem- ber.	
United States:														
1919.....	211,049	202,905	204,440	201,295	<b>199,065</b>	201,710	206,562	211,811	215,596	217,031	219,604	224,197	228,412	87.1
Males.....	130,610	124,853	126,228	124,255	<b>123,463</b>	125,348	128,569	131,605	133,174	134,061	135,824	138,549	141,388	87.3
Females.....	80,439	78,052	78,212	77,040	<b>75,602</b>	76,362	77,993	80,206	82,422	82,970	83,780	85,648	87,024	86.8
1914.....	191,555	200,739	203,135	198,772	<b>189,856</b>	188,934	191,110	193,354	191,036	186,740	189,653	<b>183,212</b>	188,119	90.2
California.....	610	<b>590</b>	552	568	595	593	605	608	632	639	677	680	707	75.8
Connecticut.....	995	<b>765</b>	806	874	916	1,004	1,041	1,094	1,105	1,110	1,043	1,056	1,098	71.4
Illinois.....	7,684	<b>7,563</b>	7,761	7,806	<b>5,609</b>	6,163	7,431	7,933	7,976	8,200	8,453	8,576	8,737	64.2
Indiana.....	620	<b>710</b>	743	737	686	540	578	537	561	580	649	662	657	50.9
Iowa.....	653	<b>628</b>	648	653	674	668	701	683	659	633	621	610	658	87.0
Kentucky.....	630	<b>449</b>	473	462	454	460	654	688	724	758	775	821	842	53.3
Louisiana.....	309	<b>287</b>	289	295	293	297	308	308	297	307	310	307	302	92.6
Maine.....	9,919	<b>9,845</b>	9,854	9,459	8,730	<b>8,568</b>	8,728	8,997	9,904	10,693	11,018	11,609	11,865	71.9
Maryland.....	890	<b>859</b>	885	901	911	913	948	959	1,030	1,093	1,121	1,101	1,117	76.1
Massachusetts.....	80,166	<b>77,871</b>	78,498	78,098	<b>77,018</b>	77,523	77,620	79,047	80,737	81,388	82,235	84,653	86,704	88.3
Michigan.....	1,120	<b>1,061</b>	1,090	1,088	1,104	1,090	1,087	1,120	1,155	1,121	1,151	1,181	1,192	89.0
Minnesota.....	2,153	<b>2,029</b>	2,078	2,062	2,069	2,086	2,102	2,057	2,204	2,231	2,248	2,340	2,333	86.6
Missouri.....	17,458	<b>16,315</b>	<b>16,260</b>	16,452	16,064	17,259	17,721	17,859	17,945	17,829	18,055	18,340	<b>18,487</b>	88.2
New Hampshire.....	12,336	<b>12,403</b>	12,190	11,636	11,450	<b>11,300</b>	12,173	12,468	12,166	12,517	12,639	13,226	<b>13,849</b>	81.6
New Jersey.....	2,835	<b>2,676</b>	2,778	2,813	2,825	2,842	2,886	2,849	2,812	2,806	2,765	2,652	<b>2,617</b>	88.7
New York.....	34,710	<b>32,691</b>	33,324	<b>30,758</b>	32,065	33,558	34,657	35,987	36,627	36,747	36,671	36,631	36,804	83.6
Ohio.....	14,092	<b>13,654</b>	13,846	13,568	<b>13,473</b>	13,805	14,061	14,202	14,449	14,279	14,236	14,478	<b>14,963</b>	90.0
Pennsylvania.....	13,317	<b>12,508</b>	12,617	12,787	13,027	13,193	13,344	13,598	13,669	13,613	13,768	13,811	13,871	90.2
Wisconsin.....	7,593	<b>7,169</b>	7,172	<b>7,105</b>	7,163	7,345	<b>7,527</b>	7,697	7,843	7,798	8,048	8,148	8,133	87.2
States showing large proportion of females.														Per ct. av. is of state.
California.....	234	<b>208</b>	207	210	221	217	224	234	250	251	266	258	267	38.0
Connecticut.....	538	<b>595</b>	400	463	483	557	553	611	601	636	582	575	594	54.1
Illinois.....	3,499	<b>3,479</b>	3,505	3,512	<b>3,676</b>	2,775	3,329	3,605	3,686	3,768	3,843	<b>3,905</b>	3,905	45.6
Indiana.....	293	<b>329</b>	343	345	313	260	176	259	272	278	317	316	309	47.3
Iowa.....	321	<b>315</b>	320	325	333	317	331	325	318	311	313	308	336	49.2
Kentucky.....	350	<b>286</b>	288	277	270	279	361	378	394	398	399	437	447	55.6
Maine.....	3,883	<b>3,047</b>	3,887	3,649	3,460	<b>5,305</b>	3,465	3,520	3,825	4,212	4,325	4,461	4,533	39.1
Maryland.....	369	<b>327</b>	336	338	335	358	358	358	406	406	418	410	418	37.4
Massachusetts.....	29,977	<b>20,309</b>	20,429	20,505	28,616	28,740	<b>28,508</b>	29,205	30,247	30,434	30,917	32,044	32,770	37.4
Michigan.....	485	<b>455</b>	481	472	473	470	464	483	505	492	503	510	512	43.3
Minnesota.....	917	<b>901</b>	904	<b>860</b>	870	893	906	871	941	946	957	975	980	42.6
Missouri.....	7,481	<b>7,002</b>	<b>6,052</b>	6,994	7,224	7,375	7,591	7,675	7,755	7,687	7,668	7,904	7,945	42.9
New Hampshire.....	4,786	<b>4,837</b>	4,747	4,535	4,489	<b>4,445</b>	4,622	4,716	4,727	4,871	4,925	5,162	5,356	38.3
New Jersey.....	1,152	<b>1,080</b>	1,119	1,116	1,136	1,148	1,149	1,153	1,162	1,168	1,179	1,213	1,201	40.6
New York.....	10,740	<b>10,173</b>	10,344	<b>9,682</b>	9,874	10,291	10,670	11,078	11,473	11,532	11,375	11,167	11,215	30.9
Ohio.....	5,865	<b>5,843</b>	5,907	<b>5,699</b>	5,708	5,846	6,005	6,077	5,950	5,785	5,927	6,127	6,127	41.6
Pennsylvania.....	5,330	<b>5,102</b>	5,116	5,149	5,193	5,250	5,350	5,436	5,446	5,390	5,501	5,519	5,581	40.1
Wisconsin.....	3,085	<b>2,962</b>	2,906	<b>2,800</b>	2,933	2,988	3,060	3,103	3,143	3,113	3,270	3,315	3,337	40.6

# BOOTS AND SHOES.

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TABLE 30.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED STATES: 1919 AND 1914.

STATE.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48. <sup>1</sup>	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
United States.....	1919	211,049	18,511	25,580	88,406	47,431	20,898	0,466	755	2
	1914	191,555	( <sup>2</sup> )	( <sup>2</sup> )	4,906	23,263	79,099	77,854	5,773	
	1900	185,116	( <sup>2</sup> )	( <sup>2</sup> )	543	6,094	44,109	105,551	28,583	233
California.....	1919	616		62	512		36		6	
	1914	617	( <sup>2</sup> )	( <sup>2</sup> )	7	223	374		8	
Connecticut.....	1919	995	120		668	202	5			
	1914	567					183	377	2	
Illinois.....	1919	7,684	573	148	3,117	2,075	821	950		
	1914	6,071	( <sup>2</sup> )	( <sup>2</sup> )	18	195	1,175	4,503	180	
Indiana <sup>3</sup> .....	1919	620			56	564				
Iowa <sup>3</sup> .....	1919	653			146	265		242		
Kentucky <sup>3</sup> .....	1919	630	29		73	423		105		
Maine.....	1919	9,919			628	2,153	7,138			
	1914	8,815				73	461	8,029	252	
Maryland.....	1919	986	67			736		183		
	1914	595				68		270	257	
Massachusetts.....	1919	80,106	4,326	23,955	40,506	8,086	3,137	156		
	1914	76,944	( <sup>2</sup> )	( <sup>2</sup> )	1,039	12,224	42,064	21,292	275	
Michigan.....	1919	1,120		101	14	304	555	145		
	1914	2,035	( <sup>2</sup> )	( <sup>2</sup> )	115	20	1,402	232	266	
Minnesota.....	1919	2,153	5		400	1,299		449		
	1914	2,012	( <sup>2</sup> )	( <sup>2</sup> )	39		432	779	702	
Missouri.....	1919	17,458	3,274	34	6,443	4,216	3,195	298		
	1914	13,169	( <sup>2</sup> )	( <sup>2</sup> )	110	819	5,783	6,063	394	
New Hampshire.....	1919	12,330	231	31	7,239	4,223	441	171		
	1914	12,937	( <sup>2</sup> )	( <sup>2</sup> )	346	310	318	11,902	61	
New Jersey.....	1919	2,835	800	85	471	1,149		530		
	1914	3,834	( <sup>2</sup> )	( <sup>2</sup> )	245	262	4	3,310	13	
New York.....	1919	34,710	8,924	676	19,659	4,795	480	169		
	1914	26,193	( <sup>2</sup> )	( <sup>2</sup> )	318	7,396	14,361	4,098	20	
Ohio.....	1919	14,092	15		17	12,309	257	1,470	24	
	1914	14,461	( <sup>2</sup> )	( <sup>2</sup> )	810	103	6,089	7,201	258	
Pennsylvania.....	1919	13,317	205	66	2,675	3,515	3,638	2,876	342	
	1914	13,184	( <sup>2</sup> )	( <sup>2</sup> )	1,312	1,413	5,920	4,473	57	
Wisconsin.....	1919	7,593	15	364	4,187	1,282	243	1,261	246	
	1914	5,772	( <sup>2</sup> )	( <sup>2</sup> )	398	16	523	2,412	2,508	

<sup>1</sup> Includes 48 and under for 1914 and 1900.

<sup>2</sup> Corresponding figures not available.

<sup>3</sup> Not shown separately in 1914.

TABLE 31.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED STATES: 1919.

STATE.	TOTAL		ESTABLISHMENTS EMPLOYING—																	
	Establishments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		251 to 500 wage earners, inclusive.		501 to 1,000 wage earners, inclusive.		Over 1,000 wage earners.		
				Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	
United States..1919..	1,449	211,049	24	195	519	228	2,705	244	8,485	233	17,374	285	46,398	153	63,010	66	45,787	21	36,711	
.....1914..	1,355	191,555	32	214	579	231	2,887	198	6,890	203	14,919	252	41,220	140	48,947	67	45,964	18	30,149	
.....1900..	1,343	185,116	26	206	508	236	2,839	208	7,045	199	14,673	239	38,796	151	61,003	62	43,248	16	23,914	
California.....	14	616	1	2	6	4	37	2	73	4	281	1	219	1	283					
Connecticut.....	8	995		2	9	1	18					4	685		335					
Illinois.....	51	7,684	1	8	21	8	96	4	155	7	537	10	1,660	10	3,335	3	1,874			
Indiana.....	5	620				1	10			2	115	1	237		258					
Iowa.....	6	653				1	11	1	43	1	60	2	274	1	265					
Kentucky.....	7	630				1	11	2	75	1	73	3	471							
Maine.....	39	9,919		2	3	4	32	1	22	7	573	10	2,894	4	1,454	2	1,281	3	3,660	
Maryland.....	13	980				3	34	3	87	5	367	1	124		374					
Massachusetts.....	403	80,166	0	48	136	62	783	93	3,205	89	6,715	103	17,074	57	20,097	26	17,292	9	14,864	
Michigan.....	15	1,120	1	1	1	4	54	2	53	2	139	4	483		390					
Minnesota.....	16	2,153		2	6	2	31	1	43	3	225	5	718	2	542	1	588			
Missouri.....	54	17,458		2	4	4	61	5	175	1	97	14	2,532	19	6,946	6	4,044	3	3,599	
New Hampshire.....	62	12,330		2	2	5	64	4	152	8	624	16	2,084	11	4,057	5	3,644	1	1,109	
New Jersey.....	34	2,835	3	1	1	5	48	9	319	7	550	6	981	3	936					
New York.....	340	34,710	10	85	227	76	888	65	2,149	42	2,898	33	5,152	16	5,278	10	7,289	3	10,829	
Ohio.....	60	14,092		4	10	6	72	3	79	8	681	23	3,319	8	2,860	7	5,012	1	1,559	
Pennsylvania.....	128	13,317		12	28	20	271	33	1,269	25	1,809	23	3,485	12	3,958	3	2,497			
Wisconsin.....	62	7,593	2	11	32	6	72	10	400	13	1,046	13	1,811	3	2,266	3	2,266	1	1,091	



## MANUFACTURES.

TABLE 32.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS: 1919, 1914, AND 1909.

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes.....	1,440	1,355	1,343	211,040	191,555	185,116	\$1,155,041,436	\$501,760,458	\$442,630,726	\$439,772,121	\$101,403,872	\$165,162,983
Less than \$5,000.....	57	138	127	58	250	279	150,171	361,978	368,716	83,051	229,086	220,599
\$5,000 to \$20,000.....	159	210	223	612	1,559	1,932	1,821,903	2,220,096	2,036,777	999,857	1,233,593	1,486,348
\$20,000 to \$100,000.....	279	303	303	4,368	8,460	8,416	15,218,314	16,506,114	15,111,482	7,211,031	7,313,294	6,810,447
\$100,000 to \$500,000.....	440	429	583	23,955	85,018	80,277	120,513,378	112,963,739	204,736,816	49,949,540	81,835,420	78,024,182
\$500,000 to \$1,000,000.....	189	138	122	26,208	96,271	85,212	134,020,114	101,181,585	219,776,835	53,707,744	100,795,479	78,615,437
\$1,000,000 and over.....	328	137	122	162,828	96,271	85,212	883,317,490	208,570,946	219,776,835	327,820,792	100,795,479	78,615,437
PER CENT DISTRIBUTION.												
All classes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5,000.....	3.9	10.2	9.5	(1)	0.1	0.2	(1)	0.1	0.1	(1)	0.1	0.1
\$5,000 to \$20,000.....	11.0	15.5	17.0	0.3	0.8	1.0	0.2	0.4	0.6	0.2	0.6	0.9
\$20,000 to \$100,000.....	19.3	22.4	22.6	2.1	4.4	4.5	1.3	3.3	3.4	1.6	3.8	4.1
\$100,000 to \$500,000.....	30.4	31.7	41.9	12.8	44.4	48.2	10.4	22.5	46.3	11.4	42.8	47.2
\$500,000 to \$1,000,000.....	12.8	10.1	9.1	12.4	50.3	46.0	11.0	20.2	49.6	12.2	52.7	47.6
\$1,000,000 and over.....	22.6	10.1	9.1	72.4	50.3	46.0	76.5	53.5	49.6	74.5	52.7	47.6

1 Less than one-tenth of 1 per cent.

TABLE 33.—CHARACTER OF OWNERSHIP, BY STATES: 1919 AND 1914.

STATE.	Cen- sus year.	NUMBER OF ESTABLISH- MENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
		Indi- vid- uals.	Cor-por- ations.	All oth-ers.	Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.						
						Indi- vid- uals.	Cor-por- ations.	All oth-ers.	Indi- vid- uals.	Cor-por- ations.	All oth-ers.		Indi- vid- uals.	Cor-por- ations.	All oth-ers.	Indi- vid- uals.	Cor-por- ations.	All oth-ers.				
United States..	1919	328	898	223	211,049	11,580	184,167	15,302	5.5	87.3	7.2	\$1,155,041,436	\$56,983,920	\$1,017,908,259	\$80,149,257	4.9	88.1	7.0				
	1914	387	686	282	191,555	12,469	148,887	30,199	6.5	77.7	15.8	501,760,458	28,188,732	394,709,381	78,862,345	5.6	78.7	15.7				
	1909	435	610	298	185,116	14,199	135,336	35,581	7.7	73.1	19.2	442,630,726	30,649,970	329,375,572	82,605,184	6.9	74.4	18.7				
California.....	1919	5	8	1	616	136	580	.....	5.8	91.2	.....	3,247,177	108,844	3,138,333	.....	3.4	96.6	.....				
	1914	2	9	5	617	.....	592	25	.....	95.9	4.1	1,801,356	.....	1,824,921	66,435	.....	96.5	3.5				
Illinois.....	1919	9	37	5	7,684	70	7,363	251	0.9	95.8	3.3	39,402,383	369,094	37,111,942	1,921,347	0.9	94.2	4.9				
	1914	16	23	8	6,071	343	5,299	429	5.6	87.3	7.1	16,891,626	1,108,785	14,727,840	1,055,001	6.6	87.2	6.2				
Maine.....	1919	3	33	3	9,919	133	9,354	432	1.3	94.3	4.4	48,059,388	467,295	45,311,436	2,280,657	1.0	94.3	4.7				
	1914	6	38	6	8,815	36	8,257	522	0.4	93.7	5.9	22,836,073	143,356	20,912,085	1,780,632	0.6	91.6	7.8				
Maryland <sup>1</sup> .....	1919	.....	10	3	936	.....	854	132	.....	86.6	13.4	4,662,351	.....	3,968,903	693,448	.....	85.1	14.9				
Massachusetts.....	1919	127	284	82	80,160	7,185	65,294	7,687	9.0	81.4	9.6	442,466,236	35,885,805	365,672,087	40,908,344	8.1	82.6	9.2				
	1914	147	188	129	76,944	6,562	66,682	13,700	8.5	73.7	17.8	200,529,858	15,762,303	149,231,773	35,535,782	7.9	74.4	17.7				
Michigan.....	1919	3	11	1	1,120	124	1,000	.....	2.1	97.9	.....	6,046,310	169,804	5,976,506	.....	1.2	98.8	.....				
	1914	4	18	2	2,035	.....	2,016	19	.....	99.1	0.9	5,357,151	.....	5,328,416	28,735	.....	99.5	0.5				
Minnesota.....	1919	1	14	1	2,153	.....	2,153	.....	100.0	.....	.....	12,644,659	.....	12,644,659	.....	100.0	.....	.....				
	1914	2	12	.....	2,012	.....	2,012	.....	100.0	.....	.....	5,918,031	.....	5,918,031	.....	100.0	.....	.....				
Missouri.....	1919	2	52	.....	17,458	.....	17,458	.....	100.0	.....	.....	109,193,423	.....	109,193,423	.....	100.0	.....	.....				
	1914	3	46	.....	13,169	.....	13,169	.....	100.0	.....	.....	40,311,210	.....	40,311,210	.....	100.0	.....	.....				
New Hampshire.....	1919	4	39	9	12,336	293	11,140	903	2.4	90.3	7.3	73,870,588	1,681,112	68,177,649	4,011,827	2.3	92.3	5.4				
	1914	9	36	10	12,937	573	11,293	1,071	4.4	87.3	8.3	37,664,039	1,289,025	34,046,042	2,328,372	3.4	90.4	6.2				
New Jersey.....	1919	6	22	6	2,835	217	2,400	218	7.7	84.7	7.7	12,864,068	1,376,647	10,600,137	887,284	10.7	82.4	6.9				
	1914	9	21	12	3,834	168	2,769	897	4.4	72.2	23.4	8,238,710	292,513	6,140,774	1,805,423	3.6	74.5	21.9				
New York.....	1919	112	170	58	34,710	2,469	20,920	2,312	7.1	86.2	6.7	190,475,939	12,631,933	165,976,739	11,867,267	6.6	87.1	6.2				
	1914	103	87	45	26,193	2,388	14,517	9,288	9.1	55.4	35.5	67,288,809	4,943,834	35,428,906	26,916,089	7.3	52.7	40.0				
Ohio.....	1919	7	50	3	14,092	400	13,448	244	2.8	95.4	1.7	71,354,850	1,613,538	68,477,612	1,263,700	2.3	96.0	1.8				
	1914	6	52	4	14,461	371	13,910	180	2.6	96.2	1.2	32,773,992	594,945	31,658,520	520,457	1.8	96.6	1.6				
Pennsylvania.....	1919	23	73	32	13,317	490	10,755	2,072	3.7	80.8	15.6	65,411,673	1,837,353	52,317,685	11,256,635	2.8	80.0	17.2				
	1914	37	61	33	13,184	1,464	9,010	2,710	11.1	68.3	20.6	27,844,752	2,785,283	19,299,273	5,760,196	10.0	69.3	20.7				
Wisconsin.....	1919	10	49	3	7,598	114	7,381	103	1.5	97.1	1.4	44,373,938	478,195	43,337,892	557,851	1.1	97.7	1.3				
	1914	11	45	5	5,772	117	5,535	120	2.0	95.9	2.1	17,643,350	277,103	16,952,052	414,195	1.6	96.1	2.3				

<sup>1</sup> Includes the group "All others."  
<sup>2</sup> Includes the group "Individuals."

<sup>3</sup> Not shown separately in 1914.  
<sup>4</sup> Includes the groups "Individuals" and "All others."

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TABLE 34.—NUMBER AND HORSEPOWER OF TYPES OF PRIME MOVERS: 1919, 1914, AND 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
	1919	1914	1909	Amount.			Per cent distribution.		
				1919	1914	1909	1919	1914	1909
Primary power, total.....	12,119	5,960	2,624	120,632	100,232	85,896	100.0	100.0	100.0
Owned.....	421	595	672	60,196	65,057	61,974	49.9	64.9	72.2
Steam.....	371	480	524	57,287	60,085	56,680	47.5	59.0	66.0
Engines.....	354	(1)	(1)	46,655	(1)	(1)	38.7	.....	.....
Turbines.....	17	(1)	(1)	10,612	(1)	(1)	8.8	.....	.....
Internal-combustion engines.....	36	91	122	908	3,421	3,235	0.8	3.4	3.8
Water wheels, turbines, and motors.....	14	24	26	2,021	1,551	2,059	1.7	1.6	2.4
Rented.....	11,698	5,365	1,952	60,436	35,175	23,922	50.1	35.1	27.8
Electric.....	11,698	5,365	1,952	55,690	30,909	14,553	46.2	30.8	16.9
Other.....	.....	.....	.....	4,746	4,266	9,369	3.9	4.3	10.9
Electric.....	16,279	8,514	3,474	83,792	54,159	29,169	100.0	100.0	100.0
Rented.....	11,698	5,365	1,952	55,690	30,909	14,553	66.5	57.1	49.9
Generated by establishments reporting.....	4,581	3,149	1,522	28,102	23,250	14,616	33.5	42.9	50.1

<sup>1</sup> Not reported separately.

TABLE 35.—FUEL CONSUMED, BY STATES: 1919 AND 1914.

STATE.	Census year.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
		Anthracite <sup>1</sup> (tons, 2,240 pounds).	Bituminous (tons, 2,000 pounds).				
United States.....	1919	46,066	394,026	2,602	24,092	2,901	170,430
	1914	78,076	277,921	2,943	3,608	( <sup>2</sup> )	181,667
California.....	1919	36	1	.....	3,488	.....	548
	1914	.....	155	.....	1,785	( <sup>2</sup> )	1,493
Connecticut.....	1919	24	781	.....	.....	.....	6
	1914	17	588	.....	.....	.....	.....
Illinois.....	1919	12	36,072	322	.....	132	4,073
	1914	2,411	13,123	.....	110	( <sup>2</sup> )	1,483
Indiana <sup>3</sup> .....	1919	.....	1,398	.....	.....	.....	.....
Iowa <sup>3</sup> .....	1919	.....	1,952	.....	.....	.....	18
Kentucky <sup>3</sup> .....	1919	.....	936	.....	.....	.....	58
Maine.....	1919	1,350	10,922	380	11	9	175
	1914	976	10,074	.....	214	( <sup>2</sup> )	348
Maryland.....	1919	26	1,643	.....	2	( <sup>2</sup> )	780
	1914	.....	798	.....	.....	.....	843
Massachusetts.....	1919	12,432	76,949	362	20,148	131	9,598
	1914	19,220	81,067	167	200	( <sup>2</sup> )	7,169
Michigan.....	1919	4	2,530	.....	.....	.....	224
	1914	169	6,097	.....	.....	.....	559
Minnesota.....	1919	71	2,105	.....	3	( <sup>2</sup> )	2,891
	1914	915	3,380	.....	.....	.....	535
Missouri.....	1919	343	41,133	1,172	10	138	9,572
	1914	6,550	39,779	.....	18	( <sup>2</sup> )	4,162
New Hampshire.....	1919	3,028	20,407	.....	250	183	138
	1914	1,642	21,949	.....	76	( <sup>2</sup> )	2,215
New Jersey.....	1919	4,578	6,656	.....	.....	3	3,038
	1914	2,985	5,338	7	29	( <sup>2</sup> )	3,322
New York.....	1919	11,761	74,381	285	23	2,021	24,620
	1914	27,513	27,749	.....	21	( <sup>2</sup> )	31,815
Ohio.....	1919	8	77,346	.....	6	22	58,620
	1914	100	31,966	1,063	431	( <sup>2</sup> )	101,855
Pennsylvania.....	1919	12,072	15,902	.....	155	114	46,350
	1914	12,406	12,151	656	465	( <sup>2</sup> )	4,385
Wisconsin.....	1919	314	17,484	81	1	41	2,060
	1914	3,128	10,833	115	151	( <sup>2</sup> )	2,709
All other states.....	1919	7	6,238	.....	.....	107	7,655
	1914	46	11,674	35	103	( <sup>2</sup> )	18,864

<sup>1</sup> Includes some semianthracite.

<sup>2</sup> Included with figures for fuel oils.

<sup>3</sup> Included with "All other states" in 1914.

## SPECIAL STATISTICS.

Comparative statistics, by classes.—Table 36 gives the number and value of the different classes of products for 1919, 1914, and 1904. As value by classes was not reported in 1909, no figures for that year are given in this table, but quantity-production figures will be found in Table 37.

TABLE 36.—BOOTS AND SHOES, BY CLASSES: 1919, 1914, AND 1904.

	1919	1914	1904
Total value <sup>2</sup> .....	\$1,155,041,436	\$501,760,458	\$320,107,458
Boots, shoes, slippers, etc.:—			
Number of pairs.....	331,224,623	222,668,468	242,110,035
Value.....	\$1,128,286,743	\$489,053,124	\$315,987,387
Boots and shoes—			
Number of pairs.....	236,592,960	252,516,603	216,039,401
Value.....	\$1,070,322,232	\$455,398,112	\$298,653,865
Men's—			
Number of pairs.....	95,017,350	98,031,144	83,434,322
Value.....	\$429,740,457	\$219,904,422	\$142,038,632
Boys' and youths'—			
Number of pairs.....	26,503,432	22,695,719	21,717,236
Value.....	\$72,883,299	\$32,852,560	\$24,301,298
Women's—			
Number of pairs.....	104,812,505	80,916,239	69,470,876
Value.....	\$447,289,044	\$148,433,738	\$98,262,016
Misses' and children's—			
Number of pairs.....	48,538,203	48,322,395	41,416,907
Value.....	\$102,091,213	\$51,870,908	\$34,058,919
Fiber—			
Number of pairs.....	79,391	2,351,106	( <sup>3</sup> )
Value.....	\$168,392	\$2,246,481	( <sup>3</sup> )
Athletic and sporting shoes—			
Number of pairs.....	585,710	( <sup>3</sup> )	( <sup>3</sup> )
Value.....	\$2,083,402	( <sup>3</sup> )	( <sup>3</sup> )
Canvas and other textile fabrics—			
Number of pairs.....	11,056,363	( <sup>3</sup> )	( <sup>3</sup> )
Value.....	\$16,068,425	( <sup>3</sup> )	( <sup>3</sup> )
Slippers—			
Number of pairs.....	21,815,046	24,673,102	17,518,291
Value.....	\$33,400,101	\$26,082,238	\$18,996,832
Men's, boys', and youths'—			
Number of pairs.....	3,230,086	3,660,972	4,403,097
Value.....	\$5,308,089	\$3,450,362	\$3,464,561
Women's, misses', and children's—			
Number of pairs.....	5,264,235	14,066,717	13,115,194
Value.....	\$12,800,707	\$18,573,921	\$10,532,271
Felt or other fiber—			
Number of pairs.....	13,320,725	6,939,413	( <sup>3</sup> )
Value.....	\$15,240,245	\$4,057,955	( <sup>3</sup> )
Infants' shoes and slippers—			
Number of pairs.....	16,668,912	15,476,763	( <sup>3</sup> )
Value.....	\$18,249,791	\$7,672,774	( <sup>3</sup> )
Sandals—			
Number of pairs.....	5,125,962	( <sup>3</sup> )	( <sup>3</sup> )
Value.....	\$5,128,462	( <sup>3</sup> )	( <sup>3</sup> )
Moccasins—			
Number of pairs.....	1,021,748	( <sup>3</sup> )	( <sup>3</sup> )
Value.....	\$1,177,157	( <sup>3</sup> )	( <sup>3</sup> )
All other kinds—			
Number of pairs.....			8,552,343
Value.....			\$3,331,690
All other products, including amount received for work done for others, value.....	\$26,754,693	\$12,707,334	\$4,120,071

<sup>1</sup> At the census of 1909 the value was not reported by classes. See Table 37 for quantity of production.

<sup>2</sup> Exclusive of the boot and shoe, etc., products of establishments engaged primarily in other lines of manufacture: 1919, 9 establishments, value \$894,201; 1914, \$855,882; and 1904, \$89,000.

<sup>3</sup> Not reported separately.

Although there was an increase of only 13.2 per cent in the total number of pairs of boots and shoes, slippers, etc., reported in 1919 as compared with 1914, the value increased 130.7 per cent. The increase in values is perhaps best shown by average unit values for the respective years. The average value per pair of men's shoes in 1919 was \$4.52 as compared with \$2.24 in 1914; women's shoes \$4.27 in 1919 and \$1.83 in 1914; and infants' shoes and slippers, \$1.09 in 1919 and 49 cents in 1914.

"Fiber boots and shoes" should be considered in conjunction with shoes of "canvas or other textile fabrics," as the establishments which manufactured a large majority of the shoes reported as "fiber" in 1914 returned their output as "canvas or other textile fabrics" in 1919. The large decrease in women's, misses', and children's slippers is due to the fact that in many cases production reported in 1914 as "slippers" was shown on the schedules for 1919 as low cut shoes.

Under "All other products" for 1919 is included the value of the products of establishments classified in the boot and shoe industry but making footwear which was not strictly boots and shoes. It also includes the value of such products made by establishments in connection with the manufacture of boots and shoes. Such footwear was in part reported by quantity and value without distinction as to class or type but for the most part the value only was reported. The following tabular statement gives the details for this item:

KIND.	Value.
All other products (Table 36).....	\$26,754,693
Overgaiters.....	4,308,160
Canvas leggings.....	4,084,564
Leather leggings.....	246,257
Bathing shoes.....	201,749
Ballet slippers.....	199,589
Woolen-soled boots.....	380,365
Cowboy boots, wooden shoes, clogs, lumberman's pacs, aluminum, rubber and steel soled boots, Alaskas, puttees, legonettes, etc.....	2,556,502
Army equipment.....	1,427,033
Cut stock.....	7,913,397
Boot and shoe findings.....	462,626
Received for crimping, stitching, and buttonhole making, and contract work only.....	875,576
Other income, custom work and repairing, contract work, leather scraps, rags, remnants, waste offal, etc.....	4,098,078

Products, by states.—Table 37 shows quantity production, 1919, 1914, and 1909, by classes, for the United States and the 10 leading states, ranked according to aggregate products in 1919. The unclassified group "All other footwear" for 1919 and 1914 includes boots, shoes and slippers not segregated as to men's, women's, and children's. For 1909 it was largely composed of infants' shoes and slippers, but also included carpet slippers, sandals, athletic and sporting shoes, etc., reported without classification.

Massachusetts shows no material change in aggregate production for the three census years though the state's proportion of the United States total decreased from 41.4 per cent in 1909 to 39.4 per cent in 1914 and to 35.3 per cent in 1919. New York increased from 10 per cent of the total for the United States in 1909 to 13.3 per cent in 1914 and to 19 per cent in 1919. Missouri, which in 1919 ranked third in production, superseded New Hampshire and Pennsylvania. Maine, Wisconsin, and Illinois show substantial increases in quantity of production, 22.1 per cent, 32.9 per cent, and 28.3 per cent, respectively, for the census period 1914-1919.

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TABLE 37.—PRODUCTS, BY STATES: 1919, 1914, AND 1909.

STATE.	Cen- sus year.	Num- ber of estab- lish- ments.	Aggregate number of pairs.	BOOTS AND SHOES (NUMBER OF PAIRS).					SLIPPERS (NUMBER OF PAIRS).			All other footwear (number of pairs).
				Total.	Men's.	Boys' and youths'.	Women's.	Misses' and children's.	Total.	Men's, boys', and youths'.	Women's, misses', and children's.	
United States..	1919	1,449	331,224,628	274,871,496	95,017,356	26,503,432	104,812,505	48,538,203	18,494,321	3,230,086	5,264,235	47,858,811
	1914	1,355	292,666,468	250,165,497	98,031,144	22,895,719	80,916,239	48,322,395	17,733,639	3,666,972	14,036,717	24,767,282
	1909	1,343	285,017,181	247,643,197	93,888,892	23,838,626	86,596,814	43,820,365	17,607,834	4,802,841	12,704,993	19,866,150
Massachusetts.....	1919	493	116,902,912	102,389,856	39,610,259	5,517,399	45,251,883	12,010,815	5,620,573	2,364,668	3,255,905	8,982,483
	1914	404	115,224,383	98,009,176	44,750,716	8,318,252	32,295,781	12,644,427	11,799,532	3,081,706	8,737,736	5,415,675
	1909	409	118,009,926	102,826,648	45,155,939	9,019,124	36,778,432	11,873,153	10,155,324	3,369,808	6,785,516	5,027,954
New York.....	1919	340	62,773,081	42,740,998	14,266,093	6,571,423	14,272,275	7,631,207	957,024	263,408	693,616	19,075,059
	1914	235	38,798,158	29,108,742	9,923,488	2,590,175	12,021,725	4,373,354	1,301,509	108,531	1,192,978	8,387,907
	1909	219	28,538,451	20,105,346	3,853,855	745,527	10,141,133	5,364,831	2,518,469	701,356	1,817,113	5,914,636
Missouri.....	1919	54	26,362,397	25,457,052	8,399,403	2,204,733	10,256,064	4,506,852	(4)	(4)	(4)	(4)
	1914	49	20,868,352	20,444,240	8,840,878	748,018	6,758,611	4,096,733	102,422	(4)	(4)	(4)
	1909	52	25,931,107	24,687,160	9,303,028	2,087,258	8,642,965	4,623,909	616,220	27,551	588,678	(4)
Pennsylvania.....	1919	128	23,617,362	17,909,498	2,117,680	1,192,017	3,869,766	10,730,035	817,240	128,000	689,240	4,890,624
	1914	131	22,184,502	17,717,591	1,607,909	1,230,864	3,773,602	11,116,356	312,334	(4)	(4)	4,154,677
	1909	124	17,588,474	11,631,329	942,959	1,105,348	3,285,815	6,297,207	1,165,117	127,944	1,037,173	4,792,028
New Hampshire.....	1919	52	22,700,694	21,873,826	10,586,597	3,651,685	4,491,754	3,143,790	(4)	(4)	352,498	(4)
	1914	55	24,659,886	22,708,646	11,048,926	4,010,136	3,773,648	3,875,836	1,674,374	169,872	1,514,502	276,966
	1909	52	25,534,114	25,069,572	11,698,985	4,176,470	4,587,874	4,606,234	282,124	(4)	282,124	182,418
Maine.....	1919	39	19,175,387	10,444,825	3,319,890	1,235,043	5,343,009	546,883	(4)	(4)	(4)	8,689,943
	1914	50	15,709,277	12,704,966	4,476,245	572,980	4,250,166	3,399,575	(4)	(4)	667,239	(4)
	1909	47	9,275,102	9,066,454	4,786,134	665,270	2,886,923	728,127	(4)	(4)	(4)	(4)
Ohio.....	1919	60	17,870,148	17,571,593	898,507	1,804,699	12,157,284	2,711,103	(4)	(4)	(4)	208,555
	1914	62	17,973,441	17,161,199	1,419,925	1,734,957	10,960,825	3,036,492	962,456	(4)	(4)	146,786
	1909	63	18,908,915	17,693,316	1,702,194	1,372,330	11,154,083	3,464,709	1,147,239	180,507	966,732	68,360
Wisconsin.....	1919	62	11,142,456	10,490,408	6,340,008	1,894,948	1,578,289	677,163	(4)	(4)	(4)	600,782
	1914	61	8,382,882	8,017,963	5,000,827	855,138	1,836,525	815,473	135,990	21,515	114,484	228,920
	1909	59	7,296,620	6,777,363	4,055,496	652,109	1,442,341	627,417	204,872	39,018	165,854	314,394
Illinois.....	1919	51	10,638,609	9,241,420	3,876,329	(4)	3,013,743	2,651,348	(4)	(4)	(4)	469,156
	1914	47	8,292,659	7,370,553	3,934,629	1,058,239	1,625,866	751,819	246,835	49,140	197,695	675,271
	1909	46	8,295,805	6,893,731	4,018,016	1,270,520	1,034,470	570,725	274,607	112,900	161,797	1,127,377
New Jersey.....	1919	34	4,280,600	2,678,474	580,137	(4)	436,200	1,662,137	(4)	(4)	(4)	(4)
	1914	42	6,112,974	3,738,459	596,830	4,438	611,950	2,626,211	196,842	17,882	178,960	2,177,673
	1909	40	6,154,954	4,943,451	602,075	137,612	755,486	3,448,278	663,476	125,181	538,295	648,027
All other states.....	1919	136	15,670,922	14,078,546	5,322,453	2,341,485	4,142,738	2,266,870	1,099,484	474,010	272,076	4,852,209
	1914	159	14,459,954	13,184,062	6,340,771	1,762,722	3,590,450	1,484,119	1,301,385	248,236	1,463,123	3,300,507
	1909	172	19,483,704	17,978,827	7,770,211	2,607,049	5,885,792	1,715,775	480,287	118,576	361,711	1,890,956

<sup>1</sup> For total number of boots and shoes or slippers, see Table 36. The kinds not reported by class are here included with "All other footwear."

<sup>2</sup> Includes athletic and sporting, canvas or other textile fabric, and fiber shoes; infants' shoes and slippers; felt or other fiber slippers; sandals; and moccasins. See Table 36 for details.

<sup>3</sup> Includes fiber shoes, felt or other fiber slippers, and infants' shoes and slippers. See Table 36 for details.

<sup>4</sup> Included in "All other states" to avoid disclosure of individual operations.

Infants' shoes and slippers.—The statistics for infants' shoes and slippers are shown in Table 38 for the 12 leading states for 1919, 1914, and 1909.

TABLE 38.—INFANTS' SHOES AND SLIPPERS: 1919, 1914, AND 1909.

STATE.	1919		1914		1909	
	Rank.	Number of pairs.	Rank.	Number of pairs.	Rank.	Number of pairs.
United States.....	.....	16,668,912	.....	15,476,763	.....	15,000,721
New York.....	1	5,668,510	1	4,306,631	2	3,797,675
Pennsylvania.....	2	4,224,866	2	4,117,042	1	4,568,505
Massachusetts.....	3	2,559,373	3	3,109,511	3	3,610,676
New Jersey.....	4	1,388,478	4	2,093,534	3	312,398
Missouri.....	5	861,417	6	318,002	5	657,368
Maine.....	6	705,157	.....	(4)	.....	(4)
Illinois.....	7	330,986	5	545,199	4	1,002,277
Ohio.....	8	234,864	10	149,786	.....	(4)
Indiana.....	9	168,000	.....	(4)	.....	(4)
Michigan.....	10	132,037	8	213,960	.....	(4)
Wisconsin.....	11	58,968	9	170,332	8	145,319
New Hampshire.....	12	2,772	7	276,966	7	182,418
All other states.....	.....	233,484	.....	175,830	.....	729,185

<sup>1</sup> Included in "All other states."

Miscellaneous kinds of footwear.—Table 39 shows the production of felt or other fiber slippers, sandals,

moccasins, athletic and sporting shoes for 1919, by states.

TABLE 39.—MISCELLANEOUS CLASSES OF FOOTWEAR, BY STATES: 1919.

CLASS.	United States.	Massachusetts.	New York.	Pennsylvania.	Other states.
Felt or other fiber slippers:					
Number of establishments	51	15	28	.....	18
Quantity produced, number of pairs.....	13,320,725	3,409,318	9,064,315	.....	847,092
Value of product.....	\$15,240,245	\$3,477,752	\$10,804,258	.....	\$958,235
Sandals:					
Number of establishments	27	5	15	4	3
Quantity produced, number of pairs.....	5,125,062	327,820	3,383,733	420,842	984,567
Value of product.....	\$5,128,462	\$533,425	\$3,340,225	\$431,862	\$322,950
Moccasins:					
Number of establishments	20	7	9	.....	4
Quantity produced, number of pairs.....	1,021,748	335,729	629,187	.....	56,832
Value of product.....	\$1,177,157	\$360,576	\$605,495	.....	\$211,085
Athletic and sporting shoes:					
Number of establishments	14	4	.....	.....	10
Quantity produced, number of pairs.....	585,710	83,992	.....	.....	501,718
Value of product.....	\$2,083,402	\$278,129	.....	.....	\$1,805,273

<sup>1</sup> Includes establishments in Illinois, Iowa, Minnesota, New Jersey, and Wisconsin.

<sup>2</sup> Includes establishments in Connecticut, Minnesota, and Wisconsin.

<sup>3</sup> Includes establishments in Maine, Illinois, and Pennsylvania.

<sup>4</sup> Includes establishments in California, Illinois, Michigan, Minnesota, New York, Pennsylvania, and Wisconsin.

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Method of manufacture.—Table 40 groups the various classes of products by method of manufacture—"Welted," "Turned," "McKay," etc.

The "Stitchdown" type was first reported at the census of 1919. This was used for footwear of all classes, but value was not reported for each class. Of the "Stitchdown" class, 76.9 per cent were boots and shoes for misses and children, and sandals largely for children's wear.

The "Welted" class constituted 32.3 per cent of the total production in 1909, 36.5 per cent in 1914, and 38 per cent in 1919. The "Wood or metal fastened" type is the only group showing a decrease. This decrease, compared with 1914, was 48 per cent, and there was a decrease in the percentage of the total from 9.8 per cent in 1909 to 8.6 per cent in 1914 and to 4 per cent in 1919.

TABLE 40.—BOOTS AND SHOES, ETC., BY METHOD OF MANUFACTURE: 1919 AND 1914.

CLASS.	Census year.	NUMBER OF PAIRS.					
		Total.	Welted.	Turned.	McKay.	Wood or metal fastened.	Stitchdown.
Total.....	1919	331,224,028	125,722,127	61,748,202	120,050,877	13,143,915	10,553,507
	1914	292,006,408	106,714,700	55,378,961	105,309,744	25,203,063	( <sup>1</sup> )
Boots and shoes.....	1919	286,592,900	124,022,654	38,583,581	104,314,881	13,143,915	6,528,029
	1914	262,616,603	104,406,823	29,609,882	93,448,378	24,991,520	
Men's.....	1919	95,017,856	70,951,187	43,997	13,997,182	9,336,042	688,948
	1914	98,031,144	63,975,763	582,802	14,951,419	18,521,160	
Boys' and youths'.....	1919	26,503,432	28,354,305	( <sup>2</sup> )	14,574,282	3,209,346	365,490
	1914	22,895,719	4,229,490	41,210	13,451,259	5,173,700	
Women's.....	1919	104,812,505	35,496,943	21,547,923	46,607,780	270,860	888,969
	1914	80,910,239	28,310,295	15,066,037	36,738,405	792,442	
Misses' and children's.....	1919	48,538,203	7,984,950	14,621,897	21,314,657	182,116	4,431,583
	1914	48,322,395	7,803,807	11,837,713	28,178,753	502,122	
Fiber.....	1919	79,391	( <sup>3</sup> )	21,146	4,58,245		
	1914	2,351,106	138,468	2,082,120	128,482	2,036	
Athletic and sporting <sup>4</sup> .....	1919	585,710	194,588	87,879	102,467	140,776	
Canvas and other textile fabrics <sup>5</sup> .....	1919	11,056,363	1,040,581	2,260,739	7,600,268	4,775	150,000
Slippers.....	1919	21,815,046	745,613	8,154,488	12,689,945	( <sup>6</sup> )	225,000
	1914	24,673,102	1,383,862	12,542,955	10,550,342	195,943	
Men's, boys', and youths'.....	1919	3,230,086	230,558	1,434,413	1,442,115	( <sup>6</sup> )	123,000
	1914	3,606,972	296,078	1,563,428	1,753,623	53,843	
Women's, misses', and children's.....	1919	5,264,235	426,255	2,605,118	2,130,862		102,000
	1914	14,066,717	1,068,209	7,528,903	5,468,505	8,100	
Felt or other fiber.....	1919	13,320,725	88,800	4,114,957	9,116,968		
	1914	6,939,413	21,575	3,455,624	3,328,214	134,000	
Infants' shoes and slippers.....	1919	10,608,912	220,380	14,068,685	2,257,120		122,727
	1914	15,478,763	864,015	13,226,124	1,311,024	75,000	
Sandals <sup>6</sup> .....	1919	5,125,962	548,000	388,715	513,496		3,677,751
Moccasins <sup>6</sup> .....	1919	1,021,748	187,580	552,733	281,435		

<sup>1</sup> Not reported in 1914.

<sup>2</sup> Includes "Turned" to avoid disclosure of individual operations.

<sup>3</sup> Included in another classification to avoid disclosure of individual operations.

<sup>4</sup> Includes "Welted" to avoid disclosure of individual operations.

<sup>5</sup> Not shown separately in 1914.

<sup>6</sup> Includes "Wood or metal fastened" to avoid disclosure of individual operations.

Method of manufacture, by states.—The information given in Table 40, by classes, is shown in Table 41 for the most important states for 1919 and 1914. The "McKay" type in New York increased from 18.9 per cent of the state total in 1914 to 44.9 per cent in 1919; and in New Hampshire the proportion decreased

from 55.8 per cent to 40.3 per cent. Maine and Wisconsin were the only states reporting "Wood and metal fastened" shoes which reported more than a negligible increase in number. The increase for Maine amounted to 129 per cent and for Wisconsin to 40 per cent.

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TABLE 41.—PRODUCTION, BY METHOD OF MANUFACTURE, BY STATES: 1919 AND 1914.

CLASS.	Census year.	NUMBER OF PAIRS.					
		Total.	Welted.	Turned.	McKay.	Wood or metal fastened.	Stitchdown.
United States.....	1919	331,224,628	125,722,127	61,748,202	120,056,877	13,143,915	10,553,507
	1914	292,066,468	106,714,700	55,378,061	105,309,744	25,263,063	( <sup>1</sup> )
Massachusetts.....	1919	116,992,912	52,279,293	21,244,356	35,255,696	4,384,333	829,234
	1914	115,224,383	48,246,803	21,084,585	38,000,118	7,884,877	( <sup>1</sup> )
New York.....	1919	62,773,081	14,694,222	14,612,979	28,158,761	36,834	5,270,285
	1914	38,798,153	12,531,062	10,996,094	7,315,345	7,955,659	( <sup>1</sup> )
Missouri.....	1919	26,362,397	10,352,661	1,980,861	10,588,512	2,130,249	1,310,114
	1914	20,868,352	7,779,541	930,719	9,423,161	2,734,931	( <sup>1</sup> )
Pennsylvania.....	1919	23,617,362	7,165,740	10,523,847	4,898,129	259,162	770,484
	1914	22,184,502	4,943,311	11,107,454	5,609,405	528,332	( <sup>1</sup> )
New Hampshire.....	1919	22,700,694	10,494,583	1,015,310	9,153,088	2,022,549	15,164
	1914	24,659,880	8,767,505	( <sup>2</sup> )	13,750,567	( <sup>2</sup> )	( <sup>1</sup> )
Maine.....	1919	19,175,387	5,971,546	2,144,195	10,520,261	539,385	.....
	1914	15,700,277	5,023,381	3,330,332	6,217,774	235,590	.....
Ohio.....	1919	17,870,143	5,295,248	1,710,762	10,845,138	19,000	.....
	1914	17,973,441	6,075,029	( <sup>2</sup> )	10,384,742	( <sup>2</sup> )	.....
Wisconsin.....	1919	11,142,456	5,932,448	681,278	1,688,267	2,591,757	193,706
	1914	8,382,882	2,500,424	727,324	3,304,325	1,850,809	( <sup>1</sup> )
Illinois.....	1919	10,638,609	5,025,338	1,064,411	4,321,509	227,351	.....
	1914	8,202,050	3,988,602	( <sup>2</sup> )	3,780,123	( <sup>2</sup> )	.....
New Jersey.....	1919	4,280,600	986,603	2,389,899	902,068	2,000	.....
	1914	6,112,974	1,074,736	3,495,465	1,542,773	.....	.....
All other states.....	1919	15,670,922	7,474,355	1,380,304	3,725,448	931,295	2,159,520
	1914	14,459,954	4,883,216	859,497	5,976,413	2,740,828	.....

<sup>1</sup> Not reported.

<sup>2</sup> Figures not shown separately in 1914.

Stitchdown footwear.—Table 42 gives in detail the number of pairs of "Stitchdown," by kinds and by states.

TABLE 42.—STITCHDOWN FOOTWEAR: 1919.

CLASS AND STATE.	Number of pairs.	CLASS AND STATE.	Number of pairs.
Total.....	10,553,507	Boots and shoes—Con.	
Connecticut.....	767,500	Misses'—Continued.	
Kentucky.....	52,267	New York.....	113,945
Maryland.....	1,339,763	Pennsylvania.....	112,538
Massachusetts.....	829,234	Wisconsin.....	59,814
Missouri.....	1,310,114	Children's—	
New Hampshire.....	15,164	Kentucky.....	26,137
New York.....	5,270,285	Maryland.....	278,350
Pennsylvania.....	770,484	Massachusetts.....	391,897
Wisconsin.....	193,706	Missouri.....	352,558
Boots and shoes:		New Hampshire.....	11,420
Men's—		New York.....	1,993,958
Maryland.....	265,351	Pennsylvania.....	225,060
Missouri.....	90,641	Wisconsin.....	107,304
New York.....	307,000	Canvas and other textile fabrics—	
Pennsylvania.....	25,950	New York.....	150,000
Boys' and youths'—		Slippers:	
Maryland.....	265,350	Men's—	
Missouri.....	63,547	Massachusetts.....	76,000
New York.....	36,602	New York.....	47,000
Women's—		Women's and children's—	
Kentucky.....	5,226	New York.....	102,000
Maryland.....	265,351	Sandals:	
Missouri.....	443,239	Connecticut.....	767,500
New York.....	161,505	Massachusetts.....	149,544
Wisconsin.....	13,678	New York.....	2,353,775
Misses'—		Pennsylvania.....	406,932
Kentucky.....	20,904	Infants' shoes and slippers:	
Maryland.....	265,351	Massachusetts.....	8,541
Massachusetts.....	203,252	Missouri.....	91,276
Missouri.....	268,853	New York.....	4,500
New Hampshire.....	3,744	Wisconsin.....	18,410

Shoes of canvas and other textile fabrics.—Shoes of canvas and other textile fabrics were first reported separately in 1919, and the number formed 3.3 per cent of the total for all kinds and classes. Table 43 shows this class of products distributed by method of manufacture and by states.

TABLE 43.—SHOES OF CANVAS AND OTHER TEXTILE FABRICS: 1919.

STATE.	Number of establishments.	QUANTITY PRODUCED (NUMBER OF PAIRS).				Value.
		Total.	Welted.	McKay.	Turned.	
United States....	54	11,056,363	1,190,581	7,600,268	2,260,739	\$10,068,425
Maine.....	4	7,945,154	851,213	6,843,433	245,508	10,038,571
Massachusetts.....	23	2,266,251	62,215	425,524	1,778,512	4,384,145
New Hampshire.....	5	311,793	.....	194,090	116,803	650,648
New York.....	9	266,162	228,393	.....	37,769	447,452
Pennsylvania.....	4	80,147	.....	.....	80,147	474,596
All other states <sup>2</sup> .....	9	1,186,850	48,760	131,321	2,000	263,613

<sup>1</sup> The total includes 4,775 pairs "Wood or metal fastened" not shown in the detail.

<sup>2</sup> Includes "Stitchdown."

<sup>3</sup> Includes Alabama, Minnesota, Missouri, New Jersey, Ohio, and Wisconsin.

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## GENERAL TABLES.

Comparative summary, by states.—Table 44 shows for 1919, 1914, and 1909, by states, the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products.

Detailed statement, by states.—Table 45 presents, for 1919, by states, the detailed statistics for the industry.

TABLE 44.—COMPARATIVE SUMMARY, BY STATES, 1919, 1914, AND 1909.

STATE.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earners (aver- age num- ber).	Primary horse- power.	Expressed in thousands.			STATE.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earners (aver- age num- ber).	Primary horse- power.	Expressed in thousands.		
					Wages.	Cost of mate- rials.	Value of prod- ucts.						Wages.	Cost of mate- rials.	Value of prod- ucts.
United States.....	1919	1,449	211,049	120,632	\$210,735	\$715,269	\$1,155,041	Minnesota.....	1919	16	2,153	1,738	\$1,917	\$7,743	\$12,616
	1914	1,355	191,555	100,232	105,695	310,357	501,780		1914	14	2,012	1,159	1,121	3,080	5,918
	1909	1,343	185,116	85,896	92,859	277,468	442,631		1909	18	2,604	1,411	1,290	4,935	7,568
California.....	1919	14	610	381	542	1,969	3,247	Missouri.....	1919	54	17,458	11,221	13,787	76,926	109,193
	1914	16	617	475	396	1,253	1,891		1914	49	13,199	8,911	6,113	25,946	40,311
	1909	18	695	369	402	1,120	1,924		1909	52	16,336	10,421	7,670	28,943	42,734
Connecticut.....	1919	8	995	283	824	2,179	3,765	New Hampshire.....	1919	52	12,336	7,677	11,173	51,056	73,871
	1914	9	567	227	252	1,338	1,957		1914	55	12,337	6,714	6,676	26,335	37,061
	1909	8	567	227	252	1,338	1,957		1909	52	13,042	7,744	6,418	23,937	34,027
Illinois.....	1919	51	7,684	5,161	5,903	25,218	39,402	New Jersey.....	1919	34	2,835	2,057	2,459	7,811	12,861
	1914	47	6,071	3,285	3,185	10,982	16,892		1914	42	3,834	1,814	1,935	4,767	8,339
	1909	46	5,588	2,623	2,980	9,495	15,111		1909	40	4,084	1,344	1,893	4,352	7,524
Indiana.....	1919	5	620	425	401	1,905	2,854	New York.....	1919	340	34,710	22,761	39,643	108,161	190,476
	1914	6	360	423	184	776	1,278		1914	235	28,193	14,458	15,195	40,188	67,289
Iowa.....	1919	6	653	779	449	2,270	3,047		1909	219	20,545	9,374	10,202	20,274	44,425
	1914	9	389	427	244	501	845	Ohio.....	1919	60	14,092	9,137	12,545	40,802	71,355
	1909	10	716	345	318	1,059	1,633		1914	62	14,461	9,815	7,030	19,248	32,771
Kentucky.....	1919	7	630	463	357	2,099	3,574		1909	63	15,693	8,809	6,632	18,148	30,520
	1914	9	440	428	180	1,672	2,564	Pennsylvania.....	1919	128	13,317	6,629	10,961	40,972	65,412
	1909	10	419	232	167	2,439	3,235		1914	131	13,184	6,271	6,119	16,524	27,845
Louisiana.....	1919	4	300	167	197	733	1,136		1909	124	10,576	4,213	4,181	11,455	19,402
	1914	7	261	166	120	307	534	Texas.....	1919	11	88	56	93	149	361
Maine.....	1919	39	9,019	5,365	9,227	30,220	48,059		1914	7	54	32	28	56	121
	1914	50	8,815	4,369	4,948	14,743	22,836	Washington.....	1919	9	146	175	153	445	846
	1909	47	6,508	3,330	3,152	9,778	15,158		1914	11	178	194	112	500	707
Maryland.....	1919	13	986	582	794	3,107	4,662		1909	9	170	148	88	450	590
	1914	7	595	242	278	824	1,447	Wisconsin.....	1919	62	7,598	4,653	6,632	27,703	44,374
	1909	11	589	250	237	901	1,412		1914	61	5,772	3,888	2,695	11,989	17,613
Massachusetts.....	1919	493	80,166	37,945	80,490	269,351	442,466		1909	59	5,081	2,665	2,131	8,494	13,114
	1914	464	76,944	32,870	40,744	120,326	200,530	All other states.....	1919	28	2,627	2,305	2,204	10,264	15,386
	1909	460	74,710	28,742	41,970	114,277	187,016		1914	40	2,667	2,469	1,208	4,830	7,118
Michigan.....	1919	15	1,120	660	921	4,184	6,046		1909	73	5,245	3,090	1,816	8,064	12,131
	1914	24	2,035	1,596	932	3,181	5,357								
	1909	28	2,455	786	936	3,347	6,256								

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TABLE 45.—DETAILED STATEMENT, BY STATES: 1919.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.										WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.						EXPENSES.		
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Average number.	Wage earners.		Total.	16 and over.		Under 16.		Capital.	Salaries and wages.				
					Male.	Female.		Maximum month.	Minimum month.		Male.	Female.	Male.	Female.		Officials.	Clerks, etc.			
																		Number, 15th day of—		
United States.	1, 449	237, 107	883	7, 617	8, 494	9, 064	211, 049	De 228, 412	Ap 109, 025	230, 457	138, 497	84, 641	4, 434	2, 885	Dollars. 580,625,075	Dollars. 26,951,705	Dollars. 31,173,261			
California.....	14	698	7	24	29	22	616	De 707	Ja 536	707	437	267	3	.....	1,776,437	105,253	83,307			
Connecticut.....	8	1,130	5	41	37	52	995	Se 1,110	Ja 793	1,581	573	418	17	.....	1,878,655	120,381	98,007			
Illinois.....	51	8,063	22	237	643	347	7,684	De 8,737	Ap 5,609	8,746	4,686	3,793	143	124	21,466,079	854,821	1,695,003			
Indiana.....	5	802	1	36	97	48	620	Fe 743	Je 378	657	325	268	26	38	2,276,434	95,236	204,922			
Iowa.....	6	740	2	26	38	21	653	Je 701	No 610	658	312	332	10	4	1,752,067	62,249	95,074			
Kentucky.....	7	732	12	44	31	15	630	De 842	Ja 440	836	383	427	6	20	2,693,936	106,163	190,951			
Louisiana.....	4	346	7	12	17	10	300	Oc 310	Ja 287	302	194	84	17	7	774,290	31,974	32,993			
Maine.....	39	10,965	14	344	209	479	9,919	De 11,865	My 8,526	11,954	7,361	4,510	44	30	23,752,577	1,060,784	957,220			
Maryland.....	13	1,104	6	54	33	25	988	Oc 1,121	Ja 853	1,116	662	390	37	18	3,588,430	190,007	74,901			
Massachusetts.....	493	89,459	315	2,023	2,203	3,882	80,166	De 86,704	Ap 77,018	87,368	52,397	31,435	1,971	1,515	202,662,610	10,832,017	9,705,036			
Michigan.....	15	1,314	6	60	78	50	1,120	De 1,192	Ja 1,061	1,193	663	503	18	9	2,871,813	155,988	280,588			
Minnesota.....	16	2,614	4	86	263	108	2,153	No 2,340	Ja 2,026	2,314	1,322	983	8	1	10,617,683	361,479	692,648			
Missouri.....	54	20,611	2	472	1,851	828	17,458	De 18,467	Fe 10,290	18,504	10,427	7,854	110	104	53,836,904	1,353,831	4,694,690			
New Hampshire.....	52	13,384	26	444	197	381	12,336	De 13,849	My 11,300	13,739	8,308	5,173	168	90	26,396,880	1,406,555	770,697			
New Jersey.....	34	3,165	20	132	95	83	2,835	De 3,017	Ja 2,675	3,062	1,792	1,185	43	42	7,120,905	419,265	353,542			
New York.....	340	38,549	253	1,224	1,022	1,340	34,710	De 36,804	Mh 30,758	37,416	25,093	11,279	204	150	105,105,223	4,906,900	4,638,295			
Ohio.....	60	15,763	13	428	620	600	14,092	De 14,963	Ap 13,473	14,923	8,718	6,088	92	25	40,178,881	1,682,426	3,208,137			
Pennsylvania.....	128	14,730	115	571	374	353	13,317	De 13,871	Ja 12,506	14,059	7,912	5,207	505	375	36,631,318	1,812,607	1,230,028			
Texas.....	11	112	12	9	1	2	88	Oc 1 95	Ja 1 82	96	90	5	1	.....	227,309	15,755	2,520			
Washington.....	9	189	4	22	11	6	146	Oc 1 150	Je 140	164	113	46	3	.....	727,670	53,845	24,166			
Wisconsin.....	62	8,827	19	303	530	377	7,598	No 8,146	Mh 7,105	8,194	4,405	3,076	435	278	27,052,612	983,009	1,874,004			
All other states.....	28	2,890	18	95	115	35	2,627	.....	.....	2,808	1,724	1,035	73	36	7,236,493	301,160	265,242			

STATE.	EXPENSES—continued.						POWER.									
	Salaries and wages—Con.	For contract work.	Rent and taxes.		For materials.		Value of products.	Value added by manufacture.	Primary horsepower.					Electric horsepower generated in establishments reporting.		
			Rent of factory.	Taxes, Federal, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.			Rent- ed. <sup>1</sup>			
										Steam engines (not turbines).	Steam turbines.	Internal combustion engines.			Water power <sup>2</sup>	
United States.	Dollars. 210,734,610	Dollars. 1,930,544	Dollars. 3,023,816	Dollars. 22,136,773	Dollars. 709,351,356	Dollars. 5,917,969	Dollars. 1,156,041,436	Dollars. 439,772,121	120,632	46,655	10,612	908	2,021	60,436	28,102	
California.....	542,010	460	15,311	128,571	1,068,366	10,994	3,247,177	1,277,817	381	115	.....	.....	.....	266	.....	
Connecticut.....	824,152	.....	10,804	84,388	2,160,585	9,822	3,764,778	1,585,371	288	40	.....	.....	.....	243	.....	
Illinois.....	5,002,500	63,169	150,095	615,906	24,610,055	608,264	39,402,363	14,184,064	5,164	3,360	.....	.....	.....	1,804	2,107	
Indiana.....	464,352	.....	240	15,814	1,890,589	14,743	2,853,559	948,227	426	35	.....	.....	.....	391	.....	
Iowa.....	449,858	8,126	9,000	6,552	2,254,199	15,673	3,047,187	777,315	770	275	.....	.....	.....	504	.....	
Kentucky.....	350,716	121,901	3,402	206,163	2,089,062	9,699	3,574,371	1,475,010	463	70	.....	.....	.....	393	40	
Louisiana.....	197,820	.....	4,162	8,375	723,851	8,922	1,136,027	403,254	167	.....	.....	.....	.....	1,167	.....	
Maine.....	9,220,804	101,486	36,772	1,079,809	30,004,831	215,070	48,069,388	17,839,487	5,365	801	.....	.....	40	4,524	70	
Maryland.....	793,700	2,698	24,349	103,422	3,085,084	21,949	4,662,351	1,555,318	582	70	.....	12	.....	500	.....	
Massachusetts.....	89,489,715	846,033	1,209,829	8,025,557	267,787,050	1,563,845	442,466,236	173,115,341	37,945	13,989	2,070	20	40	22,426	1,814	
Michigan.....	920,703	.....	19,435	70,978	4,153,194	30,787	6,040,310	1,562,329	660	132	.....	.....	.....	528	70	
Minnesota.....	1,917,246	5,868	35,856	248,488	7,083,058	60,045	12,644,669	4,901,556	1,738	.....	.....	.....	.....	1,738	.....	
Missouri.....	13,786,880	1,040	42,167	2,201,000	75,406,748	1,459,069	109,193,423	32,267,606	11,221	6,765	.....	.....	.....	4,456	3,177	
New Hampshire.....	11,173,077	5,448	71,425	931,584	50,706,069	259,431	73,870,588	22,815,088	7,677	3,425	383	15	490	3,364	1,437	
New Jersey.....	2,459,177	39,457	80,801	175,837	7,733,971	77,020	12,864,068	5,053,077	2,057	1,389	.....	74	.....	594	409	
New York.....	39,642,597	447,722	787,504	107,414,042	749,865	190,475,939	82,312,032	22,764	4,845	8,000	290	1,360	.....	8,263	10,769	
Ohio.....	12,545,100	92,931	180,409	1,772,248	40,521,015	281,469	71,364,850	30,552,366	9,137	4,188	155	343	.....	4,461	2,288	
Pennsylvania.....	10,960,861	197,412	214,400	1,229,327	40,738,156	233,797	65,411,673	24,439,720	6,620	4,156	.....	80	.....	2,393	1,592	
Texas.....	93,084	.....	5,220	51,994	146,006	2,424	360,927	211,897	56	.....	.....	.....	.....	56	.....	
Washington.....	153,008	.....	3,080	20,330	424,847	19,712	846,077	401,518	175	.....	.....	.....	.....	175	.....	
Wisconsin.....	6,632,062	.....	90,448	1,276,678	27,498,934	203,568	44,373,983	16,671,436	4,653	2,350	.....	26	11	2,263	1,607	
All other states.....	2,204,179	1,793	27,108	229,195	10,201,444	61,791	16,385,527	5,122,202	2,305	1,250	4	39	80	932	2,822	

STATE.	EXPENSES—continued.							Value of products.	Value added by manufacture.	POWER.						
	Salaries and wages—Con.		Rent and taxes.		For materials.		Primary horsepower.							Electric horsepower generated in establishments reporting.		
	Wage earners.	For contract work.	Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.	Total.			Owned.					Rent- <sup>d</sup> .	
										Steam engines (not turbines).	Steam turbines.	Internal combustion engines.	Water power <sup>3</sup> .			
United States.	Dollars. 210,734,610	Dollars. 1,930,544	Dollars. 3,023,816	Dollars. 22,136,773	Dollars. 709,351,356	Dollars. 5,917,969	Dollars. 1,155,041,436	Dollars. 439,772,121	120,632	46,655	10,612	908	2,021	60,436	28,102	
California.....	542,010	460	15,311	128,571	1,958,366	10,994	3,247,177	1,277,817	381	115	.....	.....	.....	263	.....	
Connecticut.....	824,152	.....	16,804	84,388	2,169,585	9,822	3,784,778	1,585,871	288	40	.....	.....	.....	243	.....	
Illinois.....	5,002,500	63,169	156,095	615,906	24,610,055	608,264	30,402,353	14,184,064	5,164	3,360	.....	.....	.....	1,804	2,107	
Indiana.....	464,352	.....	240	15,814	1,890,589	14,743	2,853,559	948,227	426	35	.....	.....	.....	301	.....	
Iowa.....	440,358	3,126	0,000	6,552	2,254,199	15,673	3,047,187	777,315	779	275	.....	.....	.....	504	.....	
Kentucky.....	356,716	121,901	3,402	206,163	2,089,062	9,699	3,574,371	1,475,010	463	70	.....	.....	.....	393	40	
Louisiana.....	197,820	.....	4,162	8,375	723,851	8,922	1,136,027	403,254	167	.....	.....	.....	.....	167	.....	
Maine.....	9,220,804	101,480	36,772	1,079,869	30,004,831	215,070	48,059,388	17,839,487	5,365	801	.....	.....	40	4,524	70	
Maryland.....	793,700	2,698	24,349	103,422	3,085,084	21,949	4,662,351	1,555,318	532	70	.....	12	.....	500	.....	
Massachusetts.....	89,489,715	846,033	1,290,829	8,025,857	267,787,050	1,563,845	442,466,236	173,115,341	37,945	13,389	2,070	20	40	22,426	1,814	
Michigan.....	920,703	.....	19,435	70,978	4,153,194	30,787	6,040,310	1,862,329	660	132	.....	.....	.....	528	70	
Minnesota.....	1,917,246	5,868	35,856	248,488	7,083,058	60,045	12,644,669	4,901,556	1,738	.....	.....	.....	.....	1,738	.....	
Missouri.....	13,786,880	1,040	42,187	2,201,000	75,406,748	1,450,069	109,193,423	32,267,606	11,221	6,765	.....	.....	.....	4,456	3,177	
New Hampshire.....	11,173,077	5,448	71,425	931,584	50,790,069	259,431	73,870,588	22,815,088	7,677	3,425	383	15	490	3,364	1,437	
New Jersey.....	2,459,177	39,457	30,801	175,837	7,733,971	77,020	12,864,068	5,053,077	2,057	1,380	.....	74	.....	594	409	
New York.....	39,642,597	447,722	787,504	3,657,197	107,414,042	749,865	190,475,939	82,312,032	22,764	4,845	8,000	296	1,360	8,263	10,759	
Ohio.....	12,645,100	92,931	130,409	1,772,248	40,521,015	281,469	71,864,850	30,552,366	9,137	4,188	.....	155	343	4,461	2,288	
Pennsylvania.....	10,960,861	197,412	214,409	1,229,827	40,738,156	233,797	65,411,673	24,439,720	6,629	4,156	.....	80	.....	2,393	1,592	
Texas.....	93,084	.....	5,220	51,994	146,606	2,424	360,927	211,897	56	.....	.....	.....	.....	56	.....	
Washington.....	153,008	.....	3,080	20,330	424,847	19,712	846,077	401,513	175	.....	.....	.....	.....	175	.....	
Wisconsin.....	6,632,662	.....	90,448	1,276,678	27,495,934	203,568	44,373,983	16,671,436	4,653	2,350	.....	29	11	2,263	1,607	
All other states <sup>2</sup> .....	2,204,179	1,793	27,108	229,195	10,201,444	61,791	15,885,527	5,122,292	2,305	1,250	4	39	80	932	2,822	

<sup>1</sup> Same number reported for one or more other months.

<sup>2</sup> All other states embrace: Alabama, 1 establishment; Georgia, 3; Kansas, 3; Nebraska, 2; North Carolina, 2; Oklahoma, 2; Oregon, 2; Rhode Island, 1; Tennessee, 2; Utah, 1; Vermont, 2; Virginia, 5; and West Virginia, 2.

<sup>3</sup> Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

<sup>4</sup> Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).



# BOOT AND SHOE CUT STOCK.

## GENERAL STATISTICS.

**General character of the industry.**—The industry includes establishments engaged primarily in the manufacture of soles, top lifts, heels, tips, inner soles, etc., used in making boots, shoes, slippers, and similar footwear. In 1919 there were 252 establishments engaged in the industry, which reported products valued at \$161,203,310. In addition, there were 7 establishments engaged primarily in the manufacture of other products which made cut stock and findings to the value of \$2,159,572.

**Comparative summary.**—Table 46 presents the principal statistics for the industry for each census period from 1879 to 1919. The very large increases in the financial items in 1919 as compared with 1914 are largely due to the general rise in prices, on account of war conditions. The increase in number of wage earners, an indication of the growth of the industry, amounted to 24.2 per cent.

**Wage earners, by months.**—Table 47 shows the number of wage earners employed month by month, and indicates the steadiness of employment, or the reverse. The number for the month of minimum employment in 1919 was 88.8 per cent of the number for the maximum month, as compared with 84.5 per cent in 1914. At the previous censuses the month of maximum employment was February, but in 1919 it was November. The numbers for the latter months of the year indicate an improvement of business conditions. In Massachusetts, the leading state in the industry, the fluctuation in employment during 1919 amounted to only 9.3 per cent. In this state 24.6 per cent of the wage earners engaged in this industry were women.

**Prevailing hours of labor.**—Table 48 shows the classification of wage earners according to the prevailing hours of labor per week in the establishment in which

they were employed. In 1909 and 1914 a majority of the wage earners, 67.2 per cent and 52.2 per cent respectively, were employed in establishments where the prevailing hours of labor were more than 54; in 1919 only 6.4 per cent were in this group. On the other hand, at the earlier periods, only 1.5 per cent and 1.4 per cent respectively of the total number of wage earners were in establishments where the hours were 48 or less per week, but in 1919, 65.4 per cent were employed in such establishments.

**Size of establishments by average number of wage earners.**—Table 49 shows a classification of establishments according to the average number of wage earners employed. The industry is one of relatively small units. Considering the industry as a whole, the establishments having no wage earners or fewer than 21 contributed 66.7 per cent of the total number of establishments and employed 11.9 per cent of the wage earners in 1919, compared with 70.8 per cent of the establishments and 15.8 per cent of the wage earners in 1914. Only 7.5 per cent of the establishments employed more than 100 wage earners in 1919 and 5.1 per cent in 1914, the number of wage earners in these groups constituting 56.9 per cent and 49.5 per cent of the total number, respectively. In Massachusetts, the leading state, the changes in the groups are toward larger units.

**Character of ownership.**—Table 50 shows that the industry is one in which a majority of the establishments are unincorporated. The corporations are, however, the larger and more important establishments, the value of products averaging \$1,293,000 per establishment as compared with less than \$500,000 per establishment for either of the other classes, and the wage earners per establishment averaging 79, compared with less than 20 for the other classes.

TABLE 46.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, 1899, 1889, AND 1879.

	1919	1914	1909	1904	1899	1889	1879	PER CENT OF INCREASE. <sup>1</sup>					
								1914-1919	1909-1914	1904-1909	1899-1904	1889-1899	1879-1889
Number of establishments.....	252	236	232	290	342	344	172	6.8	1.7	-20.0	-15.2	-0.6	100.0
Persons engaged.....	11,512	9,309	7,535	6,715	6,921	( <sup>2</sup> )	( <sup>2</sup> )	23.7	23.5	12.2	-3.0	.....	.....
Proprietors and firm members.....	234	231	255	362	424	( <sup>2</sup> )	( <sup>2</sup> )	1.3	-9.4	-29.6	-14.6	.....	.....
Salaries employees.....	1,593	1,259	587	417	342	( <sup>2</sup> )	( <sup>2</sup> )	24.1	114.5	40.8	21.9	.....	.....
Wage earners (average number).....	9,715	7,819	6,698	5,936	6,155	4,992	2,885	24.2	16.8	12.8	-3.6	( <sup>2</sup> )	( <sup>2</sup> )
Primary horsepower.....	9,003	6,829	4,769	4,519	3,202	2,788	( <sup>2</sup> )	31.8	43.2	5.5	41.1	14.8	.....
Capital.....	\$61,747,458	\$30,455,245	\$15,735,034	\$9,850,007	\$7,003,080	\$5,401,834	\$1,210,300	102.7	93.6	59.7	40.7	29.6	346.3
Salaries and wages.....	12,453,004	5,564,083	3,799,752	2,796,596	2,533,580	2,323,271	735,482	123.8	46.4	35.9	10.4	0.1	215.9
Salaries.....	3,328,226	1,511,980	643,292	432,387	302,889	( <sup>2</sup> )	( <sup>2</sup> )	120.1	135.0	48.8	42.8	.....	.....
Wages.....	9,124,778	4,052,123	3,156,460	2,364,209	2,230,691	( <sup>2</sup> )	( <sup>2</sup> )	125.2	28.4	33.5	6.0	18.0	157.1
Paid for contract work.....	24,808	12,522	5,426	5,636	17,589	( <sup>2</sup> )	( <sup>2</sup> )	98.1	130.8	-8.7	-68.0	.....	.....
Rent and taxes.....	1,753,692	388,478	241,709	192,948	173,793	( <sup>2</sup> )	( <sup>2</sup> )	351.4	60.7	25.3	11.0	.....	.....
Cost of materials.....	133,887,276	51,450,498	36,919,919	21,586,872	17,800,282	13,744,655	5,939,249	160.2	39.4	71.0	21.3	29.5	131.4
Value of products.....	181,203,310	59,904,523	44,661,497	27,675,815	23,242,892	17,903,846	7,531,635	168.8	34.3	61.4	19.1	29.8	137.7
Value added by manufacture.....	27,316,034	8,514,025	7,741,578	6,088,943	5,442,610	4,159,191	1,592,386	220.8	10.0	27.1	11.9	30.9	161.2

<sup>1</sup> A minus sign (-) denotes decrease.

<sup>2</sup> Figures not available.

<sup>3</sup> Figures not strictly comparable.

<sup>4</sup> Exclusive of internal revenue.

<sup>5</sup> Value of products less cost of materials.

# BOOT AND SHOE CUT STOCK.

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TABLE 47.—WAGE EARNERS, BY MONTHS: 1919.

[Month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

STATE.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
United States:														
1919.....	9,715	9,293	9,328	9,361	<i>9,190</i>	9,370	9,857	9,943	9,659	9,760	10,193	10,354	10,272	88.8
Males.....	7,098	6,684	6,782	6,778	<i>6,667</i>	6,896	7,304	7,304	7,024	7,243	7,488	7,506	7,500	88.8
Females.....	2,617	2,609	2,546	2,583	<i>2,523</i>	<i>2,474</i>	2,553	2,639	2,635	2,517	2,705	2,848	2,772	88.9
1914.....	7,819	8,392	8,434	8,409	8,095	7,870	7,581	7,505	7,710	7,699	7,651	<i>7,185</i>	7,557	84.5
1909.....	6,693	6,764	6,972	6,934	6,636	6,599	6,562	<i>6,616</i>	6,651	6,623	6,598	6,723	6,814	83.4
Massachusetts.....	4,631	<i>4,420</i>	4,532	4,527	4,439	4,401	4,593	4,783	4,678	4,744	4,871	4,733	4,761	90.7
Missouri.....	1,593	<i>1,508</i>	1,336	1,520	1,573	1,608	1,640	1,565	1,541	1,645	1,808	1,850	1,727	70.4

TABLE 48.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED STATES: 1919.

STATE.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
		44 and under.	Between 44 and 48.	48. <sup>1</sup>	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
United States.....1919..	9,715	161	1,152	5,041	1,719	1,019	520	103	.....
1914..	7,819	( <sup>2</sup> )	( <sup>2</sup> )	106	1,246	2,383	3,847	211	26
1909..	6,693	( <sup>2</sup> )	( <sup>2</sup> )	101	283	1,813	3,840	656	.....
Massachusetts.....	4,631	130	1,152	1,034	1,142	226	47	.....	.....
Missouri.....	1,593	.....	.....	1,465	96	32	.....	.....	.....

<sup>1</sup> Includes 48 and under for 1914 and 1909.

<sup>2</sup> Corresponding figures not available.

TABLE 49.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED STATES: 1919.

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—															
	Estab-lish-ments.	Wage earners (average number).	No wage earners.		1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		251 to 500 wage earners, inclusive.		Over 500 wage earners.	
			Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.
United States.....1919..	252	9,715	11	73	208	84	949	42	1,362	23	1,666	13	1,771	3	1,092	3	2,667	.....
1914..	236	7,819	8	71	211	88	1,027	37	1,211	20	1,496	8	1,243	1	311	3	2,320	.....
Massachusetts.....	182	4,631	4	55	180	67	736	32	1,014	14	1,014	8	1,105	2	002	.....	.....	.....
Missouri.....	7	1,593	.....	1	3	.....	.....	2	68	2	154	.....	.....	.....	.....	2	1,368	.....

TABLE 50.—CHARACTER OF OWNERSHIP: 1919 AND 1914.

CHARACTER OF OWNERSHIP.	Cen-sus year.	Num-ber of estab-lish-ments.	Average number of wage earners.	Value of products.	Value added by manu-facture.	CHARACTER OF OWNERSHIP.	Cen-sus year.	Num-ber of estab-lish-ments.	Average number of wage earners.	Value of products.	Value added by manu-facture.
All classes.....	1919	252	9,715	\$161,203,310	\$27,316,034	Per cent distribution:	1919	38.9	11.5	7.6	11.3
	1914	236	7,819	59,964,523	8,514,025		1914	48.3	16.4	12.0	17.9
Individual.....	1919	98	1,113	12,314,937	3,074,040		Corporation.....	1919	37.7	77.2	76.2
	1914	114	1,283	7,174,374	1,527,638			1914	28.0	68.6	64.5
Corporation.....	1919	95	7,504	122,799,117	19,716,473		All other.....	1919	23.4	11.3	16.2
	1914	66	5,362	38,685,147	5,110,849			1914	23.7	15.0	23.5
All other.....	1919	59	1,098	20,092,256	4,525,521						
	1914	56	1,174	14,105,002	1,876,638						

## MANUFACTURES.

## GENERAL TABLE.

Detailed statement, by states.—Table 51 presents the detailed statistics for the industry, by states, for 1919.

TABLE 51.—DETAILED STATEMENT, BY STATES: 1919.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.						EXPENSES.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		Capital.	Salaries and wages.	
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.	Female.		Officials.	Clerks.
								Maximum month.	Minimum month.								
United States.....	252	11,512	234	536	385	642	9,715	No 10,354	Ap 9,190	10,285	7,337	2,696	183	69	\$61,747,458	\$2,117,633	\$1,210,593
Massachusetts.....	182	5,331	183	229	141	147	4,631	Oct 4,871	Ja 4,420	4,782	3,488	1,095	151	48	31,739,186	1,101,345	489,408
Missouri.....	7	1,898	3	84	48	170	1,593	No 1,850	Ja 1,303	1,727	1,248	463	13	3	12,582,161	195,967	193,196
New York.....	18	445	17	21	19	10	378	De 397	My 360	405	259	144	.....	2	1,721,884	96,875	47,519
Ohio.....	7	310	3	22	11	6	268	No 298	Ja <sup>1</sup> 243	289	196	93	.....	.....	813,292	52,791	15,549
Pennsylvania.....	11	433	10	17	29	10	367	No 410	Jy 332	376	294	64	8	10	3,468,755	90,757	68,881
All other states <sup>2</sup> .....	27	3,095	18	163	137	299	2,478	.....	.....	2,706	1,852	837	11	6	11,422,210	579,898	396,040

STATE.	EXPENSES—continued.						Value of products.	Value added by manufacture.	POWER.					Electric horsepower generated in establishments reporting.	
	Salaries and wages—Continued.	For contract work.	Rent and taxes.		For materials.				Primary horsepower.						
			Wage earners.	Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.			Fuel and rent of power.	Total.	Owned.				Rented. <sup>4</sup>
											Steam engines (not turbines).	Internal-combustion engines.	Water power. <sup>3</sup>		
United States.....	\$9,124,778	\$24,808	\$399,545	\$1,384,147	\$133,270,830	\$616,446	\$161,203,310	\$27,316,034	9,003	1,765	43	2	7,193	521	
Massachusetts.....	4,452,302	24,808	275,696	798,413	69,295,897	188,069	86,214,106	16,732,140	3,836	915	20	.....	2,901	114	
Missouri.....	1,565,344	.....	11,940	109,676	26,181,553	294,230	28,696,415	2,220,632	1,309	310	.....	.....	999	162	
New York.....	317,394	.....	21,204	20,200	2,434,632	11,955	3,288,113	841,526	330	75	.....	.....	255	.....	
Ohio.....	197,455	.....	6,984	21,599	1,092,014	18,896	1,615,003	504,093	328	18	5	.....	303	.....	
Pennsylvania.....	276,611	.....	7,063	202,446	8,519,755	18,808	11,073,602	2,534,939	495	300	.....	2	193	45	
All other states <sup>2</sup> .....	2,316,672	.....	46,068	231,753	25,746,979	86,488	30,316,171	4,482,704	2,707	147	18	.....	2,542	200	

<sup>1</sup> Same number reported for one or more other months.<sup>2</sup> All other states embrace: Connecticut, 1 establishment; Illinois, 7; Kansas, 1; Maine, 2; Maryland, 1; Michigan, 2; Minnesota, 2; New Hampshire, 7; New Jersey, 2; Rhode Island, 1; and Virginia, 1.<sup>3</sup> Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).<sup>4</sup> Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

## BOOT AND SHOE FINDINGS.

### GENERAL STATISTICS.

**General character of the industry.**—Establishments classified in this industry are those engaged primarily in the manufacture of pegs, bows, clasps, tips, toe caps, buckles, rands, staples, backstays, shanks, heels, arch supporters, box toes, shoe tacks, and other findings for the boot and shoe trade. The establishments are exclusive of those which manufacture the same articles in connection with the manufacture of boots and shoes.

In addition to the 427 establishments in this industry in 1919, reporting products to the value of \$62,825,408, there were 16 establishments engaged primarily in the manufacture of other products which reported boot and shoe findings to the value of \$3,197,047.

**Comparative summary.**—Table 52 presents the principal statistics for the industry for each census year from 1879 to 1919. On account of the general increase in prices since 1914 the increases in the financial items can not be used to measure the progress of the industry. The increases in average number of wage earners employed and in power used show considerable growth.

**Wage earners, by months.**—The figures given in Table 53 show the steadiness of employment or the reverse during the year. There was slightly greater fluctuation in employment in 1919 than in 1914. In 1919 the number of wage earners for the month of minimum employment was 76.4 per cent of the number for the maximum month. The industry employs a fairly large number of female wage earners, 35.5 per cent of the wage earners being females.

**Size of establishments, by prevailing hours of labor per week.**—In Table 54 the average number of wage earners per week are classified according to the hours of labor prevailing in the establishments in which they were employed. At the censuses of 1909 and 1914, of the total number of wage earners, 70.1 per cent and 50.9 per cent, respectively, were in establishments where the working hours were over 54 per week, but

at the census of 1919 only 9.5 per cent of the total number worked these hours. In 1919, 59.5 per cent of the wage earners were in establishments where the prevailing hours were 48 or less, whereas the proportions were insignificant at the earlier censuses. In Massachusetts, which state employed 65.9 per cent of the wage earners in the industry, the largest group, or 44.4 per cent, of the wage earners worked 48 hours and 68.2 per cent of the total for the state were in establishments where the prevailing hours were 48 or less.

**Size of establishments, by average number of wage earners.**—Table 55 classifies the establishments according to number of wage earners. Nearly three-fourths of the establishments in this industry either employed no wage earners or not more than 20. The average number of wage earners per establishment in 1914 was 18, and in 1919, 21. The proportion of establishments employing more than 50 wage earners increased slightly, from 8.4 per cent in 1914 to 9.8 per cent in 1919, and the wage earners in these groups formed 47.8 per cent of the total number in 1914 and 50.5 per cent in 1919. In Massachusetts, the leading state, nearly two-thirds of the establishments employed no wage earners or not more than 20.

**Character of ownership.**—Table 56 shows that the corporations represented about one-third of the establishments in this industry, but they reported more than one-half of the total value of products and of the total number of wage earners employed. The average value of products per establishment in 1919 was \$243,000 for the "Corporation" group, \$63,000 for the "Individual," and \$155,000 for the "All other" group, most of the last being firms. In 1914 the corresponding figures were \$154,000, \$36,000, and \$68,000, respectively. The average numbers of wage earners per establishment in 1919 were 35 for corporations, 10 for individuals, and 20 for the "All other" group.

## MANUFACTURES.

TABLE 52.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, 1899, 1889, AND 1879.

	1919	1914	1909	1904	1899	1889	1879	PER CENT OF INCREASE. <sup>1</sup>					
								1914-1919	1909-1914	1904-1909	1899-1904	1889-1899	1879-1889
Number of establishments.....	427	369	343	280	312	455	216	15.7	7.6	18.7	-7.4	-31.4	110.6
Persons engaged.....	10,615	7,948	7,541	5,068	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	33.6	5.4	48.9	.....	.....	.....
Proprietors and firm members.....	424	381	365	342	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	11.3	4.4	6.7	.....	.....	.....
Salariat employees.....	1,250	853	688	290	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	46.5	24.0	137.2	27.8	.....	.....
Wage earners (average number)....	8,941	6,714	6,488	4,434	3,246	3,434	1,935	33.2	3.5	46.3	36.6	( <sup>3</sup> )	( <sup>3</sup> )
Primary horsepower.....	10,682	5,868	5,537	3,229	2,843	1,987	( <sup>2</sup> )	82.0	4.1	74.6	13.6	43.1	.....
Capital.....	\$28,088,416	\$12,562,364	\$9,498,870	\$4,425,610	\$3,540,839	\$3,009,149	\$980,064	130.7	32.3	114.6	25.0	17.7	207.0
Salaries and wages.....	10,805,704	4,258,527	3,646,199	1,920,713	1,438,317	1,070,273	621,500	153.7	16.8	80.8	33.5	-13.9	168.7
Salaries.....	2,618,598	1,032,844	699,116	272,836	185,826	( <sup>2</sup> )	( <sup>2</sup> )	153.5	47.7	156.2	46.8	.....	.....
Wages.....	8,187,106	3,225,683	2,947,083	1,647,877	1,252,491	( <sup>2</sup> )	( <sup>2</sup> )	153.8	9.5	78.8	31.6	.....	.....
Paid for contract work.....	840,302	111,582	144,528	81,830	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	653.1	-22.8	76.6	.....	.....	.....
Rent and taxes.....	1,473,089	322,910	239,141	118,290	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	356.2	35.0	102.2	.....	.....	.....
Cost of materials.....	40,428,347	20,304,183	18,350,551	6,337,810	5,022,591	3,868,090	1,636,921	99.1	10.6	189.5	26.2	29.8	136.3
Value of products.....	62,825,408	28,303,186	25,505,419	9,004,887	7,834,615	6,805,330	2,935,787	122.0	11.0	157.5	26.4	15.1	131.8
Value added by manufacture.....	22,397,061	7,999,003	7,154,868	3,567,077	2,812,024	2,937,231	1,298,866	180.0	11.8	100.6	26.0	-4.3	126.1

<sup>1</sup> A minus sign (-) denotes decrease.<sup>2</sup> Figures not available.<sup>3</sup> Figures not strictly comparable.<sup>4</sup> Exclusive of internal revenue.<sup>5</sup> Value of products less cost of materials.

TABLE 53.—WAGE EARNERS, BY MONTHS: 1919.

[Month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

STATE.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
United States:														
1919.....	8,941	<b>7,816</b>	8,156	8,217	8,447	8,486	8,792	8,900	9,242	9,493	9,588	9,957	10,223	76.4
Males.....	5,763	<b>4,974</b>	5,174	5,208	5,359	5,385	5,627	5,721	5,965	6,153	6,272	6,527	6,791	73.2
Females.....	3,178	<b>2,841</b>	2,982	3,009	3,088	3,101	3,165	3,185	3,277	3,340	3,316	3,430	3,432	82.8
1914.....	6,714	<b>7,617</b>	7,476	7,169	6,825	6,631	6,309	6,272	6,449	<b>6,252</b>	6,336	6,496	6,736	82.1
1909.....	6,488	<b>6,274</b>	6,381	6,487	<b>6,265</b>	6,308	6,441	6,408	6,645	6,672	6,524	6,682	6,878	91.1
Massachusetts.....	5,806	<b>6,291</b>	5,495	5,538	5,639	5,565	5,772	5,848	6,036	6,184	6,326	6,457	6,601	80.2
Missouri.....	484	<b>400</b>	398	421	420	427	426	475	523	529	548	612	620	94.2
New York.....	675	<b>587</b>	649	618	655	651	647	664	706	707	689	747	780	75.3

TABLE 54.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED STATES: 1919.

STATE.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—						
		44 and under.	Between 44 and 48.	48. <sup>1</sup>	Between 48 and 54.	54.	Between 54 and 60.	60.
United States.....	1919.. 8,941	773	1,342	3,209	2,203	565	489	360
	1914.. 6,714	( <sup>2</sup> )	( <sup>2</sup> )	392	646	2,257	3,252	167
	1909.. 6,488	( <sup>2</sup> )	( <sup>2</sup> )	52	169	1,689	4,248	300
Massachusetts.....	5,806	269	1,134	2,619	1,234	226	130	284
Missouri.....	484	278	.....	99	94	13	.....	.....
New York.....	675	195	188	133	100	2	57	.....

<sup>1</sup> Includes 48 and under for 1914 and 1909.<sup>2</sup> Corresponding figures not available.

TABLE 55.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED STATES: 1919.

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—											
	Estab-lish-ments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.	6 to 20 wage earners, inclusive.	21 to 50 wage earners, inclusive.	51 to 100 wage earners, inclusive.	101 to 250 wage earners, inclusive.	Over 250 wage earners.					
			Estab-lish-ments.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	
United States.....	1919.. 427	8,941	30	145	357	137	1,665	73	2,406	25	1,736	14	1,941	3
	1914.. 369	6,714	26	146	395	106	1,212	60	1,895	22	1,474	7	1,054	2
Massachusetts.....	254	5,896	10	67	174	92	1,132	61	1,966	14	958	9	1,382	1
Missouri.....	12	484	.....	5	16	3	35	1	31	2	139	.....	.....	254
New York.....	77	675	14	36	81	20	237	5	196	2	161	.....	.....	263

# BOOT AND SHOE FINDINGS.

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TABLE 56.—CHARACTER OF OWNERSHIP: 1919 AND 1914.

CHARACTER OF OWNERSHIP.	Cen- sus year.	Num- ber of estab- lish- ments.	Average number of wage earners.	Value of products.	Value added by manu- facture.	CHARACTER OF OWNERSHIP.	Cen- sus year.	Num- ber of estab- lish- ments.	Average number of wage earners.	Value of products.	Value added by manu- facture.
All classes.....	1919 1914	427 369	8,941 6,714	\$62,825,408 28,303,186	\$22,397,061 7,990,003	Per cent distribution:					
Individual.....	1919 1914	174 169	1,691 1,601	11,015,577 6,068,976	3,882,232 1,895,641	Individual.....	1919 1914	40.7 45.8	18.9 23.8	17.5 21.4	17.3 23.7
Corporation.....	1919 1914	143 101	5,038 3,311	34,803,174 15,541,480	12,688,448 3,740,246	Corporation.....	1919 1914	33.5 27.4	56.3 49.3	55.4 54.9	56.7 46.8
All other.....	1919 1914	110 99	2,212 1,802	17,006,657 6,692,730	5,826,381 2,363,116	All other.....	1919 1914	25.8 26.8	24.7 20.8	27.1 28.6	26.0 29.5

## GENERAL TABLE.

Detailed statement, by states.—Table 57 gives the detailed statistics for the industry, by states, for 1919.

TABLE 57.—DETAILED STATEMENT, BY STATES: 1919.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.						EXPENSES.		
		Total.	Proprietors and superintendents, and managers.	Clerks, etc.		Average number.	Wage earners.		Total.	16 and over.		Under 16.		Capital.	Salaries and wages.			
				Male.	Female.		Maximum month.	Minimum month.		Male.	Female.	Male.	Female.		Officials.	Clerks, etc.		
United States . . .	427	10,615	424	522	344	384	8,941	Dec 10,223	Jan 7,815	10,188	6,545	3,315	172	156	\$28,988,416	\$1,733,472	\$885,120	
Maine . . . . .	6	317	1	17	7	13	279	Dec 424	Jan 211	366	249	117	.....	.....	955,503	57,877	21,510	
Massachusetts . . .	254	6,868	245	326	158	243	5,896	Dec 6,601	Jan 5,291	6,620	4,258	2,139	115	108	18,485,738	1,191,032	465,351	
Michigan . . . . .	3	15	0	1	.....	.....	8	Oct 13	Apr 3	13	10	8	.....	.....	41,009	1,500	.....	
Missouri . . . . .	12	641	10	30	84	33	484	Dec 620	Feb 398	620	425	162	24	9	3,039,643	60,822	169,279	
New Jersey . . . .	5	74	2	10	3	2	57	Jy 66	Jan 38	59	26	33	.....	.....	230,816	21,831	9,155	
New York . . . . .	77	888	81	62	39	31	675	Dec 780	Jan 587	784	588	188	6	2	1,673,503	191,517	58,017	
Pennsylvania . . .	16	224	27	11	10	18	158	Nov 192	Feb 124	194	129	62	1	2	626,708	18,356	36,003	
Rhode Island . . .	9	121	6	8	10	6	91	Dec 102	Jy 82	100	42	56	2	.....	216,995	23,902	15,884	
Wisconsin . . . . .	9	204	6	10	6	4	238	Dec 257	Jan 211	258	134	74	20	30	947,730	22,986	9,796	
All other states <sup>2</sup> . . .	36	1,203	40	47	27	34	1,055	.....	.....	1,174	684	481	4	5	2,770,771	143,649	100,131	

STATE.	EXPENSES—continued.						Value of products.	Value added by manufacture.	POWER.						
	Salaries and wages—Con.	For contract work.	Rent and taxes.		For materials.				Total.	Primary horsepower.					Electric horse-power generated in establishments reporting.
			Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.				Owned.	Rented. <sup>4</sup>				
												Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. <sup>3</sup>
United States . . . .	\$8,187,196	\$840,302	\$403,588	\$1,069,501	\$40,017,475	\$410,872	\$62,825,408	\$22,397,061	10,682	3,507	115	40	460	6,560	1,053
Maine . . . . .	180,018	.....	1,240	17,726	366,794	8,773	805,495	429,928	709	250	15	.....	150	294	220
Massachusetts . . .	5,046,725	690,853	288,671	655,499	28,128,828	257,390	44,357,147	15,970,929	6,572	2,145	.....	28	135	4,264	408
Michigan . . . . .	8,801	.....	168	268	22,232	1,760	40,455	16,473	22	.....	.....	.....	.....	22	.....
Missouri . . . . .	424,488	.....	7,192	196,776	3,391,344	14,161	4,575,910	1,170,405	416	.....	.....	.....	.....	416	.....
New Jersey . . . .	40,665	12,026	1,897	24,063	159,361	3,891	360,097	199,745	72	62	.....	.....	.....	10	.....
New York . . . . .	698,613	29,302	67,678	35,159	2,513,006	32,368	4,404,140	1,618,766	798	5	.....	.....	50	743	.....
Pennsylvania . . .	139,412	75,784	13,586	934	989,104	13,245	1,489,090	489,741	198	.....	10	.....	.....	188	.....
Rhode Island . . .	70,591	23,556	3,061	14,059	141,943	4,613	381,475	234,010	44	.....	.....	2	.....	42	.....
Wisconsin . . . . .	187,114	.....	3,912	17,525	954,143	14,065	1,324,961	356,753	293	220	.....	.....	.....	73	200
All other states <sup>2</sup> . . .	784,769	8,781	16,183	106,982	3,356,720	60,516	5,026,638	1,600,402	1,558	825	100	.....	125	508	225

<sup>1</sup> Same number reported for one or more other months.

<sup>2</sup> All other states embrace: California, 1 establishment; Colorado, 1; Illinois, 5; Kentucky, 3; Maryland, 2; Minnesota, 2; New Hampshire, 13; Ohio, 6; Texas, 2; and Washington, 1.

<sup>3</sup> Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

<sup>4</sup> Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

# LEATHER GLOVES AND MITTENS.

## GENERAL STATISTICS.

**General character of the industry.**—This industry comprises establishments making gloves, mittens, and gauntlets of leather or of materials of which leather forms the larger part. There were 355 establishments which reported leather gloves, mittens, and gauntlets as the product of chief value in 1919, with products valued at \$46,940,511, including gloves, \$44,831,777 and allied or incidental products, \$2,108,734. In addition to this production, gloves valued at \$3,175,014 were made in 22 establishments, engaged primarily in the manufacture of other products.

**Comparative summary.**—Table 58 presents the principal statistics for the industry for 1919, 1914, 1909, 1904, and 1899. Although the financial statistics for 1919 show large increases over previous censuses, they are largely the result of the general increase in prices. The increase in the average number of wage earners employed was insignificant and the increase in the quantity of output only moderate.

**Principal states, ranked by value of products.**—In Table 59 statistics are presented for value of products, average number of wage earners, and value added by manufacture for each state that can be shown, ranked according to value of products. New York, which has always been the leading state, reported 57.1 per cent of the total value of products, a slight decrease from 59.4 per cent in 1914 and from 60.7 per cent in 1909. The state of Wisconsin has ranked second in the industry since the census of 1904.

**Fulton County, New York.**—Fulton County, New York, has always been the center of the glove industry in the United States, and with a few exceptions the establishments are located in Gloversville and Johnstown. Table 60 shows the principal statistics for Fulton County and these cities. There has been a slight but gradual decrease in the proportion of the total for the United States. This loss shows for the county and for each city in the proportion of the quantity and value of the products for the three census years and also in the wage earners employed. Furthermore, the statistics for Fulton County show for the decade 1909-1919 in regard to quantity of output and wage earners employed, a decrease of 26.1 per cent in pairs of gloves and 12.7 per cent in the average number of wage earners.

**Persons engaged in the industry.**—The age classification of the average number of wage earners in Table 61 was found by the method described in the "Explanation of terms." The industry is one requiring much machine sewing and women are generally em-

ployed in this capacity. More than half of the wage earners reported at each of the censuses shown were females. Statistics for persons engaged in the industry will be found for states in Table 73.

**Wage earners, by months.**—The figures given in Table 62, which shows the number of wage earners employed by months, reflect the steadiness of employment, or the reverse, during the census year. There was less fluctuation throughout the industry in 1919 than in 1914. The number employed in the minimum month in 1919 was 85.9 per cent of the maximum, and in 1914, 72.6 per cent. Of the states shown, Illinois reported the largest proportion of female wage earners, 66.1 per cent, and New York the smallest, 50.2 per cent.

**Prevailing hours of labor.**—Of the total number of wage earners in 1909, only 4.9 per cent were employed in establishments where the prevailing hours of labor per week were 48 or less, and in 1914, 9.7 per cent; but in 1919 the proportion was 33.7 per cent. On the other hand, Table 63 shows that the proportion of the total number of wage earners employed in establishments where the working hours per week were more than 54 decreased from 78.1 per cent in 1909 to 31.4 per cent in 1914 and to 15.2 per cent in 1919.

**Size of establishments, by average number of wage earners.**—Table 64 shows a classification of establishments according to the average number of wage earners employed. The figures show no marked change in size of establishments measured by the number of wage earners. In both 1919 and 1914 approximately one-third of the establishments, those employing no wage earners or not more than 5 per establishment, reported but 2.4 per cent of the wage earners; and about 7 per cent of the establishments in 1919 and 1914 had over 100 wage earners each and reported 41 and 46.3 per cent, respectively, of the total number.

**Size of establishments, by value of products.**—Table 65 shows a classification of establishments based upon value of products. In 1909 the average value of products was approximately \$62,700; in 1914, \$61,400; and in 1919, \$132,200 per establishment, the increase in 1919 being fundamentally due to the general advance in values. This accounts for the shifts to higher groups as compared with 1914.

**Character of ownership (Table 66).**—This industry is one in which the majority of the establishments are not incorporated, but the corporations constitute the more important establishments both in value of products and average number of wage earners per

establishment. The value of products per establishment for the corporations was \$216,121 compared with \$51,386 for establishments owned by individuals and \$156,261 for establishments under other forms of ownership, chiefly firms. The corporations reported an average of 53 wage earners per enterprise, the group "Individual" 10, and the group "All other," 33. In New York, which dominates the industry, 50 of the 219 establishments, or 22.8 per cent, were corporations, but in Wisconsin, the second state, 57.1 per cent of the establishments were incorporated, in Illinois, 38.7 per cent, and in California, 40.7 per cent.

Number and horsepower of types of prime movers.—Table 67 gives the power statistics for the industry. The owned horsepower shows a decrease of 36.6 per cent as compared with 1914, offset in the main by rented power, chiefly electric power, which increased more than 50.5 per cent, the total primary power showing a small decrease. Of the total primary power, 62.8 per cent was utilized in the form of electric power, purchased or generated, in 1919; 45.1 per cent in 1914; and 34.6 per cent in 1909.

Fuel consumed.—Table 68 shows the quantity of fuel used, by kinds. The figures for gas include both manufactured and natural gas.

TABLE 58.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

	1919	1914	1909	1904	1899 <sup>1</sup>	PER CENT OF INCREASE. <sup>2</sup>			
						1914-1919	1909-1914	1904-1909	1899-1904
Number of establishments.....	355	352	377	339	381	0.9	-0.6	11.2	-11.0
Persons engaged.....	12,594	12,345	12,060	11,712	15,325	2.0	-4.7	10.6	-23.6
Proprietors and firm members.....	405	417	458	427	508	-2.0	-9.0	7.3	-15.9
Salaried employees.....	1,504	1,260	1,138	640	637	19.4	10.7	77.8	0.5
Wage earners (average number).....	10,685	10,608	11,364	10,645	14,180	0.2	-6.0	6.7	( <sup>3</sup> )
Primary horsepower.....	3,288	3,357	2,880	2,725	2,114	-2.1	16.2	6.0	28.9
Capital.....	\$29,870,277	\$17,080,398	\$16,908,671	\$10,705,590	\$9,004,427	74.9	1.0	57.0	18.9
Salaries and wages.....	\$11,248,830	\$5,958,695	\$6,010,872	\$4,424,826	\$4,095,296	88.8	-1.0	36.0	-5.8
Salaries.....	\$3,098,046	\$1,400,335	\$1,250,042	\$584,573	\$544,170	121.2	11.5	114.9	7.4
Wages.....	\$8,150,784	\$4,558,360	\$4,760,830	\$3,840,253	\$4,151,123	78.8	-4.3	24.0	( <sup>3</sup> )
Paid for contract work.....	\$1,559,224	\$927,164	\$992,216	\$393,723	\$93,795	68.2	-6.6	152.0	( <sup>3</sup> )
Rent and taxes.....	\$1,004,336	\$193,769	\$167,417	\$106,351	\$100,354	418.3	15.7	57.4	-2.7
Cost of materials.....	\$26,286,129	\$12,170,694	\$13,208,001	\$10,000,889	\$9,382,102	116.0	-7.9	32.1	0.6
Value of products.....	\$46,940,511	\$21,614,109	\$23,030,568	\$17,740,385	\$10,721,234	117.2	-8.5	33.2	6.1
Value added by manufacture <sup>6</sup> .....	\$20,654,382	\$9,443,415	\$10,422,597	\$7,739,496	\$7,330,132	118.7	-9.4	34.7	5.5
Gloves, mittens, and gauntlets, manufactured, dozen pairs.....	3,616,703	3,082,376	3,368,655	3,370,146	2,895,601	17.3	-8.5	( <sup>6</sup> )	16.4

<sup>1</sup> Figures given for 1899 represent leather gloves and mittens only, and do not agree with the general statistics for that year.

<sup>2</sup> A minus sign (—) denotes decrease.

<sup>3</sup> Figures not strictly comparable.

<sup>4</sup> Exclusive of internal revenue.

<sup>5</sup> Value of products less cost of materials.

<sup>6</sup> Less than one-tenth of 1 per cent.

TABLE 59.—PRINCIPAL STATES, RANKED BY VALUE OF PRODUCTS: 1919.

STATE.	Number of establishments.	WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.			STATE.	Number of establishments.	WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
		Average number.	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribution.	Rank.			Average number.	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribution.	Rank.
United States.....	355	10,685	100.0	....	\$40,941	100.0	....	\$20,654	100.0	....	Pennsylvania.....	6	112	1.0	9	\$345	0.7	9	\$95	0.5	13
New York.....	219	5,510	51.6	1	26,763	57.0	1	12,196	59.0	1	Virginia.....	4	62	0.6	14	252	0.5	11	61	0.3	16
Wisconsin.....	28	1,728	16.2	2	6,773	14.4	2	2,506	12.1	2	Washington.....	7	46	0.4	17	244	0.5	12	112	0.5	11
Illinois.....	31	1,239	11.6	3	5,433	11.6	3	2,349	11.4	3	Massachusetts.....	5	50	0.5	16	225	0.5	14	89	0.4	14
California.....	27	665	6.2	4	2,049	4.4	4	1,193	5.8	4	All other states <sup>1</sup> ..	18	770	7.2	....	2,769	5.9	....	1,073	5.2	...
Iowa.....	6	290	2.7	5	1,520	3.2	5	767	3.7	5											
Indiana.....	4	213	2.0	6	588	1.3	6	213	1.0	6											

<sup>1</sup> Includes New Hampshire and Minnesota ranking 6 and 7, respectively, Ohio 10 and Maryland 13, according to value of products.



## MANUFACTURES.

TABLE 60.—COMPARATIVE SUMMARY FOR FULTON COUNTY, NEW YORK: 1919 AND 1914.

	FULTON COUNTY, N. Y.					GLOVERSVILLE.					JOHNSTOWN.				
	1919	1914	Per cent of total for United States.			1919	1914	Per cent of total for United States.			1919	1914	Per cent of total for United States.		
			1919	1914	1909			1919	1914	1909			1919	1914	1909
Number of establishments.....	154	153	43.4	43.5	41.4	102	93	28.7	26.4	23.1	42	50	11.8	14.2	14.3
Persons engaged.....	5,279	5,733	41.9	46.4	47.9	3,590	3,972	28.5	32.2	32.6	1,399	1,466	11.1	11.9	12.3
Proprietors and firm members..	72	207	17.8	49.6	49.3	51	122	12.6	29.3	25.5	16	70	4.0	16.8	18.6
Salaried employees.....	457	553	30.4	43.9	47.2	417	375	27.7	29.8	35.2	183	155	12.2	12.3	10.5
Wage earners (average number).	4,760	4,973	44.5	46.6	47.9	3,122	3,475	29.2	32.6	32.6	1,200	1,241	11.2	11.6	12.3
Primary horsepower.....	795	925	24.2	27.5	28.8	498	640	15.0	19.2	19.2	251	164	7.6	4.9	5.6
Capital.....	\$10,291,210	\$8,452,501	54.5	49.5	57.4	\$11,271,204	\$5,806,533	37.7	34.0	38.1	\$4,058,403	\$2,170,872	13.6	12.7	10.1
Salaries and wages.....	\$5,266,953	\$2,857,538	46.8	48.0	50.7	\$3,777,813	\$1,971,259	33.6	33.1	30.3	\$1,252,468	\$733,852	11.1	12.3	11.7
Salaries.....	\$1,617,903	\$612,396	52.2	43.7	44.6	\$1,155,723	\$414,778	37.3	29.0	30.0	\$416,231	\$171,652	13.4	12.3	7.0
Wages.....	\$3,649,050	\$2,245,142	44.8	49.3	52.3	\$2,622,080	\$1,556,481	32.2	34.1	30.3	\$836,237	\$562,200	10.3	12.8	12.9
Paid for contract work.....	\$1,345,636	\$800,247	86.3	92.8	( <sup>1</sup> )	\$821,372	\$594,857	52.7	64.2	( <sup>1</sup> )	\$238,141	\$210,242	15.3	22.7	( <sup>1</sup> )
Rent and taxes.....	\$183,860	\$45,934	18.3	23.7	( <sup>1</sup> )	\$132,501	\$27,915	13.2	14.4	( <sup>1</sup> )	\$42,750	\$10,523	4.3	8.5	( <sup>1</sup> )
Cost of materials.....	\$12,582,133	\$6,103,592	47.9	50.1	55.3	\$8,451,095	\$4,080,043	32.2	33.5	37.5	\$3,580,118	\$1,535,922	12.9	12.6	14.2
Value of products.....	\$22,829,219	\$11,010,247	48.6	50.9	54.7	\$16,797,811	\$7,309,017	33.7	33.8	37.5	\$5,739,897	\$2,014,250	12.2	13.5	13.8
Value added by manufacture.....	\$10,247,086	\$4,906,655	49.6	52.0	54.0	\$7,346,716	\$3,228,974	35.6	34.2	37.6	\$2,359,749	\$1,378,337	11.4	14.6	13.2
Gloves, mittens, and gauntlets, manufactured, dozen pairs.....	1,203,631	1,282,027	33.3	41.6	48.3	788,318	781,081	21.8	25.3	29.3	308,239	348,851	8.5	11.3	12.2

<sup>1</sup> Figures not available.<sup>2</sup> Value of products less cost of materials.

TABLE 61.—PERSONS ENGAGED IN THE INDUSTRY: 1919, 1914, AND 1909.

CLASS.	Cen- sus year.	Total.	Male.	Fe- male.	PER CENT OF TOTAL.		CLASS.	Cen- sus year.	Total.	Male.	Fe- male.	PER CENT OF TOTAL.	
					Male.	Fe- male.						Male.	Fe- male.
All classes.....	1919	12,594	6,088	6,506	48.3	51.7	Clerks and other subordinate sala- ried employees. -	1919	880	601	288	67.6	32.4
	1914	12,345	6,045	6,300	49.0	51.0		1914	903	570	333	63.1	36.9
	1909	12,950	6,219	6,731	48.0	52.0		1909	836	532	304	63.6	36.4
Proprietors and officials.....	1919	1,020	938	82	92.0	8.0	Wage earners (average number).....	1919	10,685	4,549	6,136	42.6	57.4
	1914	774	740	34	95.6	4.4		1914	10,608	4,735	5,873	44.4	55.6
	1909	760	714	46	93.9	6.1		1909	11,354	4,973	6,381	43.8	56.2
Proprietors and firm members.	1919	405	391	14	96.5	3.5	16 years of age and over .....	1919	10,237	4,394	5,843	42.6	57.4
	1914	417	399	18	95.7	4.3		1914	10,504	4,689	5,815	44.6	55.4
	1909	458	436	22	95.2	4.8		1909	11,085	4,846	6,239	43.7	56.3
Salaried officers of corporations	1919	212	201	11	94.8	5.2	Under 16 years of age.....	1919	448	185	263	41.3	58.7
	1914	169	108	1	99.1	0.9		1914	164	46	118	28.0	72.0
	1909	85	81	4	95.3	4.7		1909	269	127	142	47.2	52.8
Superintendents and managers	1919	403	346	57	85.9	14.1							
	1914	248	233	15	94.0	6.0							
	1909	217	197	20	90.8	9.2							

TABLE 62.—WAGE EARNERS, BY MONTHS, FOR SELECTED STATES: 1919.

[The month of maximum employment for each state is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

STATE.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
United States:														
1919.....	10,685	10,175	10,044	<i>9,984</i>	10,045	10,190	10,515	10,887	11,125	11,042	11,286	11,303	11,623	85.9
Males.....	4,549	<i>4,151</i>	4,199	4,207	4,257	4,374	4,534	4,670	4,780	4,700	4,879	4,842	4,995	83.1
Females.....	6,136	6,024	5,845	<i>5,777</i>	5,789	5,816	5,981	6,217	6,345	6,342	6,407	6,461	6,628	87.2
1914.....	10,668	11,762	11,745	11,791	11,573	11,379	11,348	11,012	11,059	9,788	9,417	<i>8,661</i>	8,581	72.6
1909.....	11,354	<i>10,659</i>	10,085	11,145	11,130	11,188	11,333	11,299	11,372	11,590	11,583	11,961	12,007	88.8
California.....	665	<i>595</i>	598	603	652	656	636	681	702	709	711	714	723	82.3
Illinois.....	1,239	1,278	1,245	1,189	<i>1,188</i>	1,152	1,160	1,244	1,281	1,252	1,265	1,241	1,428	79.3
New York.....	5,510	<i>4,908</i>	5,092	5,167	5,250	5,389	5,574	5,660	5,785	5,695	5,833	5,838	5,929	82.8
Wisconsin.....	1,728	<i>1,972</i>	1,748	1,694	1,626	<i>1,616</i>	1,673	1,692	1,699	1,706	1,767	1,764	1,779	81.9
States showing large proportion of females.														Per cent av. is of state.
California.....	397	<i>370</i>	370	378	401	400	381	406	411	418	407	408	414	59.7
Illinois.....	819	<i>867</i>	839	785	<i>748</i>	753	755	801	843	823	840	819	957	66.1
New York.....	2,764	<i>2,589</i>	2,590	2,623	2,655	2,701	2,794	2,816	2,879	2,857	2,870	2,914	2,943	80.2
Wisconsin.....	1,136	<i>1,313</i>	1,153	1,127	1,082	<i>1,073</i>	1,105	1,116	1,102	1,110	1,160	1,143	1,148	65.7

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TABLE 63.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, BY STATES: 1919 AND 1914.

STATE.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—						
			44 and under.	Between 44 and 48.	48. <sup>1</sup>	Between 48 and 54.	54.	Between 54 and 60.	60 and over.
United States.....	1919	10,885	1,190	1,111	1,295	3,357	2,108	1,461	163
	1914	10,808	( <sup>2</sup> )	( <sup>2</sup> )	1,630	2,229	4,063	3,044	302
	1909	11,354	( <sup>2</sup> )	( <sup>2</sup> )	555	1,017	917	7,743	1,122
California.....	1919	665	161	261	139	102	2		
Illinois.....	1919	1,239	161	450	12	603	13		
	1914	1,371	( <sup>2</sup> )	( <sup>2</sup> )	125	63	309	872	5
New York.....	1919	5,510	642	110	471	1,281	1,857	1,018	131
	1914	6,020	( <sup>2</sup> )	( <sup>2</sup> )	256	1,255	2,895	1,008	12
Wisconsin.....	1919	1,728	101	265	213	699	24	426	
	1914	1,711	( <sup>2</sup> )	( <sup>2</sup> )	224	384	551	381	171

<sup>1</sup> Includes 48 and under for 1914 and 1909.

<sup>2</sup> Corresponding figures not available.

TABLE 64.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, BY STATES: 1919.

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—													
	Estab-lish-ments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		Over 250 wage earners.		
			Estab-lish-ments.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	
United States.....	1919.	355	10,685	23	94	260	108	1,349	73	2,587	31	2,104	22	3,133	4	1,202
	1914.	352	10,668	24	106	257	107	1,233	53	1,706	37	2,537	21	3,293	4	1,642
California.....		27	665	1	9	20	5	62	11	372			1	211		
Illinois.....		31	1,239	1	3	10	15	203	7	257	2	119	2	244	1	406
New York.....		219	5,510	18	64	174	67	822	40	1,417	17	1,089	11	1,466	2	642
Wisconsin.....		28	1,728	1	2	7	9	113	5	191	5	356	5	807	1	254

TABLE 65.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS: 1919, 1914, AND 1909.

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes.....	355	352	377	10,685	10,668	11,354	\$46,940,511	\$21,614,109	\$23,630,598	\$20,654,382	\$9,443,415	\$10,422,597
Less than \$5,000.....	29	67	77	16	72	131	75,280	162,783	201,786	43,523	89,311	111,969
\$5,000 to \$20,000.....	72	108	117	222	613	683	852,245	1,279,224	1,339,783	445,485	605,053	703,097
\$20,000 to \$100,000.....	130	115	123	1,802	2,943	3,089	6,902,001	5,205,684	5,751,826	3,247,085	2,408,240	2,657,434
\$100,000 to \$500,000.....	103	59	60	5,072	17,040	7,451	22,241,162	14,066,418	16,337,203	9,572,471	6,340,811	6,950,097
\$500,000 to \$1,000,000.....	17	2		2,371			11,622,163			4,729,102		
\$1,000,000 and over.....	4	1		1,202			5,247,660			2,615,810		
PER CENT DISTRIBUTION.												
All classes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5,000.....	8.2	19.0	20.4	0.1	0.7	1.2	0.2	0.8	0.9	0.2	0.9	1.1
\$5,000 to \$20,000.....	20.3	30.7	31.0	2.1	5.7	6.0	1.8	5.9	5.7	2.2	6.4	6.7
\$20,000 to \$100,000.....	36.6	32.7	32.6	16.9	27.6	27.2	14.7	24.1	24.3	15.7	25.5	26.5
\$100,000 to \$500,000.....	29.0	16.7		47.5	66.0	65.6	47.4	69.2	69.1	46.3	67.1	66.7
\$500,000 to \$1,000,000.....	4.8	0.6		22.2			24.8			22.9		
\$1,000,000 and over.....	1.1	0.3		11.2			11.2			12.7		

<sup>1</sup> Includes the group "\$1,000,000 and over."

## MANUFACTURES.

TABLE 66.—CHARACTER OF OWNERSHIP: 1919, 1914, AND 1909.

CHARACTER OF OWNERSHIP.	Cen- sus year.	Num- ber of estab- lish- ments.	Average number of wago earners.	Value of products.	Value added by manufac- ture.	CHARACTER OF OWNERSHIP.	Cen- sus year.	Num- ber of estab- lish- ments.	Average number of wage earners.	Value of products.	Value added by manufac- ture.
All classes.....	1919	355	10,685	\$46,940,511	\$20,654,382	Per cent distribution:	1919				
	1914	352	10,668	21,614,109	9,443,415	Individual.....	1914	40.3	13.9	15.7	16.6
	1909	377	11,354	23,030,598	10,422,597		1909	48.3	17.8	16.3	17.7
Individual.....	1919	143	1,485	7,348,256	3,423,776		1909	50.4	18.8	17.9	18.6
	1914	170	1,889	3,518,008	1,672,280	Corporation.....	1919	30.4	53.9	49.7	50.3
	1909	190	2,135	4,222,329	1,936,590		1914	22.7	45.1	44.2	43.8
Corporation.....	1919	108	5,757	23,341,063	10,894,805		1909	19.4	41.6	42.8	41.5
	1914	80	4,815	9,544,230	4,137,744	All other.....	1919	29.3	32.2	34.6	33.1
	1909	73	4,723	10,106,657	4,825,226		1914	29.0	37.2	39.6	38.5
All other.....	1919	104	3,443	16,251,192	6,831,301		1909	30.2	39.6	39.4	39.9
	1914	102	3,964	8,551,871	3,633,391						
	1909	114	4,496	9,301,612	4,100,811						

TABLE 67.—NUMBER AND HORSEPOWER OF TYPES OF PRIME MOVERS: 1919, 1914, AND 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
	1919	1914	1909	Amount.			Per cent distribution.		
				1919	1914	1909	1919	1914	1909
Primary power, total.....	791	518	378	3,288	3,357	2,889	100.0	100.0	100.0
Owned.....	42	40	68	1,293	2,031	2,016	39.3	60.5	69.8
Steam <sup>1</sup> .....	14	24	31	918	1,767	1,625	27.9	52.3	56.2
Engines.....	14	(*)	(*)	918	(*)	(*)	27.9		
Turbines.....		(*)	(*)		(*)	(*)			
Internal-combustion engines.....	17	13	25	73	82	141	2.2	2.4	4.9
Water wheels, turbines, and motors.....	11	3	12	302	192	250	9.2	5.7	8.7
Rental.....	749	478	310	1,995	1,326	873	60.7	39.5	30.2
Electric.....	749	478	310	1,995	1,277	860	60.7	38.0	29.4
Other.....					49	23	1.5		0.8
Electric.....	767	508	330	2,064	1,515	1,000	100.0	100.0	100.0
Rented.....	749	478	310	1,995	1,277	860	96.7	84.3	85.0
Generated by establishments reporting.....	18	30	20	69	238	150	3.3	15.7	15.0

<sup>1</sup> Figures for horsepower include for 1909 the amount reported under the head of "Other" owned power.

\* Not reported separately.

TABLE 68.—FUEL CONSUMED, BY STATES: 1919 AND 1914.

STATE.	Census year.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
		Anthracite - (tons, 2,240 pounds). <sup>1</sup>	Bituminous (tons, 2,000 pounds).				
United States.....	1919	2,652	10,597	128	3	97	8,730
	1914	2,539	12,262	38	207	(*)	11,948
California.....	1919		2	2	3	33	681
	1914		4		60	(*)	1,691
Illinois.....	1919	191	2,413				1,082
	1914	69	5,827		5	(*)	524
Indiana.....	1919		556				
	1914		302		3	(*)	33
Iowa.....	1919	43	199				
	1914	10	485				3,700
Massachusetts <sup>2</sup> .....	1919	38					55
New York.....	1919	2,314	3,708			25	2,783
	1914	2,305	2,821	8	67	(*)	4,619
Pennsylvania <sup>3</sup> .....	1919	8	105				1,080
Virginia <sup>4</sup> .....	1919	10	27				
Washington <sup>4</sup> .....	1919		18				35
Wisconsin.....	1919	15	2,808	114		39	684
	1914	24	2,124	30	61	(*)	72
All other states.....	1919	33	761	12			2,430
	1914	122	699		11	(*)	1,209

<sup>1</sup> Includes some semianthracite.<sup>2</sup> Included in figures for fuel oils.<sup>3</sup> Included with "All other states" in 1919.

## SPECIAL STATISTICS.

Comparative statistics of products.—Table 69 presents statistics for the quantity and value of leather gloves, mittens, and gauntlets for 1919, 1914, and 1909, by kinds, for men and boys and for women and children, subdivided as to unlined, lined, and part leather and part fabric. The totals are inclusive of the output of establishments classified under other industries, because of their chief products, but manufacturing very considerable quantities of leather gloves, mittens, and gauntlets. These are not distributable by kind and hence are not represented in the groups and subgroups.

The average unit value for all men's and boys' gloves, mittens, and gauntlets increased from \$6.15 per dozen pairs in 1914 to \$11.35 in 1919, and for women's and children's from \$9.30 to \$17.95.

Distribution, by classes and kinds of leather.—Table 70 classifies the products (1) men's and boys' and women's and children's gloves, with subdivisions—unlined, lined, and part fabric; and (2) dress and working gloves, with subdivisions as to kind of leather. Of the aggregate quantity, 58.8 per cent were reported as unlined in 1919, and 16.5 per cent were made of part leather and part fabric. At the census of 1914 the unlined gloves formed 63.2 per cent of the total number and the part fabric and part leather gloves 6.5 per cent. Unlined gloves constituted 70.2 per cent of the class designated as dress gloves and 52.9 per cent of the working gloves.

TABLE 69.—PRODUCTS—QUANTITY AND VALUE, BY KINDS, 1919, 1914, AND 1909.

KIND.	1919	1914	1909
Number of establishments.....	377	368	393
Leather gloves and mittens industry.....	355	352	377
Manufacturing leather gloves and mittens as subsidiary products.....	22	16	16
Products, total value.....	\$50,115,525	\$22,259,571	\$23,895,559
Leather gloves and mittens industry, all products.....	\$40,940,511	\$21,014,109	\$23,630,598
Leather gloves and mittens, subsidiary products of other industries.....	\$3,175,014	\$642,462	\$264,961
Gloves, mittens, and gauntlets:			
Dozen pairs.....	1 4,150,412	1 3,288,703	1 3,405,599
Value.....	\$48,006,791	\$20,989,020	\$22,790,822
Average unit value, doz. prs....	\$11.55	\$6.35	\$6.70
Men's and boys':			
Dozen pairs.....	3,040,747	2,656,875	2,888,991
Value.....	\$34,493,050	\$10,333,388	\$18,135,438
Average unit value, doz. prs....	\$11.35	\$6.15	\$6.30
Unlined—			
Dozen pairs.....	1,706,795	1,623,448	1,755,229
Value.....	\$23,053,857	\$11,486,491	\$12,209,929
Lined—			
Dozen pairs.....	767,801	832,695	1,133,762
Value.....	\$9,037,038	\$4,383,271	\$5,925,509
Part leather and part fabric—			
Dozen pairs.....	566,151	200,734	(2)
Value.....	\$2,407,701	\$403,020	(2)
Women's and children's—			
Dozen pairs.....	574,056	425,501	479,661
Value.....	\$10,333,121	\$3,903,170	\$4,390,423
Average unit value, doz. prs....	\$17.95	\$9.30	\$9.15
Unlined—			
Dozen pairs.....	417,595	325,530	320,690
Value.....	\$8,599,567	\$3,190,761	\$3,375,590
Lined—			
Dozen pairs.....	126,294	99,971	152,974
Value.....	\$1,508,735	\$766,409	\$1,014,803
Part leather and part fabric—			
Dozen pairs.....	31,067	(2)	(2)
Value.....	\$167,819	(2)	(2)
All other products, value.....	\$2,108,734	\$1,317,551	\$1,104,737

<sup>1</sup> Includes for 1919, 534,709 dozen pairs, value \$3,175,014; 1914, 206,327 dozen, value \$642,462; and 1909, 36,944 dozen, value \$264,961, not distributed by kinds.  
<sup>2</sup> Not reported separately.

TABLE 70.—LEATHER GLOVES, MITTENS, AND GAUNTLETS, LINED, UNLINED, AND PART LEATHER AND PART FABRIC, ACCORDING TO KIND OF SKIN USED: 1919.<sup>1</sup>

KIND OF LEATHER.	Total.	MEN'S AND BOYS'.			WOMEN'S AND CHILDREN'S.		
		Unlined.	Lined.	Part leather and part fabric.	Unlined.	Lined.	Part leather and part fabric.
Dress gloves, street gloves, mittens, and gauntlets:							
Dozen pairs.....	1,227,284	459,353	225,258	15,823	402,532	121,511	2,807
Value.....	\$24,563,017	\$10,017,571	\$4,501,518	\$119,212	\$3,312,289	\$1,532,301	\$20,126
Domestic lamb or sheep skin, dozen pairs.....	547,740	180,373	170,032	1,533	98,921	96,515	2,366
Imported lamb or sheep skin, dozen pairs.....	427,238	163,753	41,338	310	205,090	16,341	408
Mocha, dozen pairs.....	151,290	71,720	5,670	21	67,878	5,995	.....
Goat or "real" kid, dozen pairs.....	37,261	8,984	325	.....	27,742	210	.....
All other, dozen pairs.....	63,755	34,523	7,887	13,959	4,901	2,450	35
Working gloves, mittens, and gauntlets:							
Dozen pairs.....	2,388,419	1,247,442	542,543	550,328	15,083	4,783	28,230
Value.....	\$20,268,760	\$13,036,286	\$4,475,520	\$2,288,549	\$284,278	\$36,434	\$147,693
Sheep skin, dozen pairs.....	274,998	137,918	97,839	37,151	940	1,135	15
Horsehide, cattle hide, or calfskin, dozen pairs..	1,510,895	710,986	338,286	452,375	1,100	648	7,500
Deer or elk skin, dozen pairs.....	81,408	76,533	4,691	100	84	.....	.....
All other, dozen pairs.....	521,118	322,005	101,727	60,702	12,939	3,000	20,745

<sup>1</sup> Not including 534,709 dozen pairs, value \$3,175,014, the product of establishments in other industries.

Products, in detail, by states.—Table 71 shows that dress and similar gloves formed 33.9 per cent of all gloves in 1919, and working gloves 66.1 per cent, working gloves being chiefly men's and boys'. In 1914 no working gloves were reported for women and children. In

regard to the leather used, domestic lamb and sheep skin was the leather used for 44.6 per cent of the dress gloves, and imported skins for 34.8 per cent. At the census of 1914 these proportions were 26.6 per cent and 48.3 per cent, respectively. The proportion of

"Mocha" gloves among the dress gloves decreased from 19.2 per cent in 1914 to 12.3 in 1919. Horsehide, cattle hide, or calfskin was used for 63.3 per cent of the working gloves.

New York, which produced 40.1 per cent of all gloves, reported 90.6 per cent of the dress gloves, but

only a small proportion, 14.2 per cent, of the working gloves. Illinois and Wisconsin exceeded New York in working gloves, and this class constituted the bulk of the output for these states. Only 12.7 per cent of the production of California and 10 per cent of that of Wisconsin were dress gloves.

TABLE 71.—PRODUCTS—DETAILED STATISTICS, BY STATES: 1919.

CLASS AND KIND.	United States.	California.	Illinois.	New York.	Wisconsin.	All other states.
Products, total value.....	\$46,940,511	\$2,048,503	\$5,422,794	\$26,763,200	\$6,772,808	\$5,933,206
Gloves, mittens, and gauntlets:						
Dozen pairs.....	3,615,703	121,864	706,055	1,450,101	696,807	640,730
Value.....	\$44,831,777	\$2,040,603	\$4,670,095	\$25,889,640	\$6,635,072	\$5,596,381
Dress gloves, street gloves, mittens, and gauntlets:						
Dozen pairs.....	1,227,284	15,525	( <sup>1</sup> )	1,111,372	69,833	30,654
Domestic lamb or sheep skin.....	547,740	120	.....	479,685	52,803	15,132
Imported lamb or sheep skin.....	427,238	4,244	.....	408,559	7,770	6,005
Mocha.....	151,290	563	.....	143,174	5,964	1,899
Goat or "real" kid.....	37,201	723	.....	30,944	436	5,168
All other.....	63,765	9,875	( <sup>1</sup> )	49,010	2,860	2,010
Value.....	\$24,503,017	\$369,705	( <sup>1</sup> )	\$22,109,412	\$1,284,880	\$798,069
Men's and boys', lined and unlined—						
Dozen pairs.....	684,611	8,054	( <sup>1</sup> )	585,327	65,074	26,166
Domestic lamb or sheep skin.....	350,405	120	.....	284,275	52,803	13,207
Imported lamb or sheep skin.....	205,091	2,686	.....	189,492	7,615	5,298
Mocha.....	77,390	115	.....	74,632	1,360	1,299
Goat or "real" kid.....	9,309	.....	.....	4,521	436	4,352
All other.....	42,410	5,133	( <sup>1</sup> )	32,407	2,860	2,010
Value.....	\$14,579,089	\$199,025	( <sup>1</sup> )	\$12,621,905	\$1,148,436	\$709,123
Women's and children's, lined and unlined—						
Dozen pairs.....	524,043	7,471	.....	508,165	4,759	3,648
Domestic lamb or sheep skin.....	193,436	.....	.....	192,281	.....	1,175
Imported lamb or sheep skin.....	221,431	1,558	.....	218,351	165	1,307
Mocha.....	73,573	448	.....	68,521	4,004	300
Goat or "real" kid.....	27,052	723	.....	26,423	.....	806
All other.....	7,351	4,742	.....	2,609	.....	.....
Value.....	\$9,844,590	\$170,140	.....	\$9,458,819	\$130,444	\$79,187
Part leather and part fabric—						
Dozen pairs.....	18,630	.....	.....	17,880	.....	750
Domestic lamb or sheep skin.....	3,890	.....	.....	3,149	.....	750
Imported lamb or sheep skin.....	716	.....	.....	710	.....	.....
Mocha.....	21	.....	.....	21	.....	.....
Goat or "real" kid.....	.....	.....	.....	.....	.....	.....
All other.....	13,994	.....	.....	13,994	.....	.....
Value.....	\$130,338	.....	.....	\$128,688	.....	\$10,650
Working gloves, mittens, and gauntlets:						
Dozen pairs.....	2,388,419	106,339	680,405	338,720	627,064	628,792
Sheepskin.....	274,908	3,364	45,933	171,392	25,090	29,210
Horsehide, cattle hide, or calfskin.....	1,510,895	58,709	387,737	110,880	462,275	461,294
Deer or elk skin.....	81,408	576	100	21,614	4,171	54,947
All other.....	521,118	43,690	255,725	34,843	105,528	81,332
Value.....	\$20,208,700	\$1,070,838	\$4,598,643	\$3,780,234	\$5,350,192	\$4,808,853
Men's and boys', lined and unlined—						
Dozen pairs.....	1,789,985	101,310	364,911	312,440	607,470	403,845
Sheepskin.....	235,757	2,020	36,533	164,628	24,025	7,551
Horsehide, cattle hide, or calfskin.....	1,049,272	58,024	125,370	100,832	478,046	278,000
Deer or elk skin.....	81,224	576	100	21,530	4,171	54,847
All other.....	423,732	40,090	202,908	16,459	101,223	63,047
Value.....	\$17,611,806	\$1,634,724	\$3,354,001	\$3,305,598	\$5,150,121	\$3,977,362
Women's and children's, lined and unlined—						
Dozen pairs.....	19,846	4,429	.....	15,102	315	.....
Sheepskin.....	2,075	744	.....	1,031	300	.....
Horsehide, cattle hide, or calfskin.....	1,748	685	.....	1,048	15	.....
Deer or elk skin.....	84	.....	.....	84	.....	.....
All other.....	15,939	3,000	.....	12,989	.....	.....
Value.....	\$320,712	\$32,714	.....	\$283,228	\$4,770	.....
Part leather and part fabric—						
Dozen pairs.....	578,588	600	324,584	11,178	19,279	222,047
Sheepskin.....	37,166	.....	9,400	5,793	705	21,268
Horsehide, cattle hide, or calfskin.....	459,875	.....	262,367	.....	14,214	182,294
Deer or elk skin.....	100	.....	.....	.....	.....	100
All other.....	81,447	600	52,817	5,445	4,300	18,885
Value.....	\$2,435,242	\$3,400	\$1,244,042	\$101,408	\$195,301	\$391,491
All other products, value.....	\$2,108,734	\$7,900	\$752,699	\$873,554	\$137,736	\$338,845

<sup>1</sup> Included in "All other states" to avoid disclosure of individual operations.

<sup>2</sup> The product of 3 establishments has been included in "All other states" to avoid disclosure of individual operations.

## GENERAL TABLES.

Comparative summary, by states.—Table 72 shows for 1919, 1914, and 1909, by states, the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products reported for the industry.

Detailed statement, by states.—Table 73 presents, for 1919, by states, the more detailed statistics of the industry.

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TABLE 72.—COMPARATIVE SUMMARY, BY STATES: 1919, 1914, AND 1909.

STATE.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earners (aver- age num- ber).	Primary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	STATE.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earners (aver- age num- ber).	Primary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
					Expressed in thousands.								Expressed in thousands.		
United States.....	1919	355	10,685	3,283	\$8,151	\$26,286	\$46,941	New York.....	1919	219	5,510	1,462	\$4,388	\$14,567	\$26,783
	1914	352	10,668	3,357	4,558	12,171	21,614		1914	216	6,028	1,098	2,697	7,080	12,845
	1909	377	11,354	2,889	4,764	13,208	23,631		1909	225	6,287	1,003	2,841	8,023	14,336
California.....	1919	27	665	138	561	856	2,049	Pennsylvania.....	1919	6	112	44	60	249	345
	1914	24	422	58	203	458	951		1914	7	78	30	24	80	123
	1909	23	570	58	267	558	1,231		1909	3	42	7	12	33	54
Illinois.....	1919	31	1,239	376	1,024	3,074	5,423	Washington.....	1919	7	46	12	65	131	244
	1914	28	1,371	797	646	1,687	2,774		1914	6	52	17	29	79	148
	1909	29	1,309	657	519	1,478	2,523		1909	6	69	10	21	59	120
Indiana.....	1919	4	213	89	86	375	588	Wisconsin.....	1919	28	1,728	609	1,205	4,267	6,773
	1914	4	176	95	65	163	272		1914	24	1,711	670	589	1,746	2,922
	1909	3	153	44	48	152	225		1909	23	1,642	301	573	1,637	2,799
Iowa.....	1919	6	290	81	189	753	1,520	All other states.....	1919	22	832	459	524	1,878	3,011
	1914	8	195	94	85	359	626		1914	30	595	492	196	484	860
	1909	10	234	236	94	373	693		1909	47	949	552	337	852	1,515
Massachusetts.....	1919	5	50	18	49	136	225								
	1914	5	42	6	24	35	93								
	1909	8	109	21	52	43	135								

TABLE 73.—DETAILED STATEMENT, BY STATES: 1919.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.										WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				EXPENSES.		
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Average number.	Wage earners.		Total.	16 and over.		Under 16.		Capital.	Salaries and wages.		
					Male.	Female.		Maximum month.	Minimum month.		Male.	Female.	Male.	Female.		Officials.	Clerks, etc.	
United States.....	355	12,594	405	615	601	288	10,685	Dec 11,623	Mar 9,984	11,459	4,753	6,226	201	279	\$29,870,277	\$1,740,432	\$1,357,614	
California.....	27	782	23	49	20	19	665	Dec 723	Jan 595	730	309	410	5	79	1,045,569	112,956	70,987	
Illinois.....	31	1,379	27	49	38	26	1,239	Dec 1,428	Apr 1,132	1,284	358	772	75	79	2,241,681	104,867	80,809	
Indiana.....	4	232	1	12	4	2	213	Oct 250	Mar 106	246	55	150	9	32	303,283	26,023	8,629	
Iowa.....	6	415	5	25	71	24	290	July 311	Jan 263	310	125	170	7	8	1,316,008	89,379	135,909	
Massachusetts.....	5	64	5	4	1	4	50	Nov 68	Apr 37	62	23	39			158,401	8,100	4,755	
New York.....	219	6,640	233	320	357	161	5,510	Dec 5,929	Jan 4,908	5,887	2,933	2,906	38	10	18,404,716	951,626	913,839	
Pennsylvania.....	6	134	4	8	7	3	112	Nov 148	Mar 92	144	47	82	3	12	247,543	6,280	7,243	
Virginia.....	4	81	8	7	3	1	62	Nov 74	Feb 49	69	24	40	1	4	123,274	12,876	3,611	
Washington.....	7	56	7	1	2		46	Oct 50	Jan 43	51	27	24			138,340	1,680	2,300	
Wisconsin.....	28	1,915	22	101	38	26	1,728	Jan 1,972	May 1,616	1,781	576	1,023	58	124	3,765,616	282,303	61,785	
All other states <sup>2</sup> .....	18	896	20	30	54	22	770	.....	.....	805	276	604	5	10	1,525,846	83,382	67,847	

STATE.	EXPENSES—continued.						Value of products.	Value added by manufacture.	POWER.					Electric horse-power generated in establishments reporting.
	Salaries and wages—Continued.	For contract work.	Rent and taxes.		For materials.				Primary horsepower.					
			Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.			Rent- ed. <sup>4</sup>	
										Steam en- gines (not tur- bines).	Inter- nal- com- bus- tion en- gines.	Water pow- er. <sup>3</sup>		
United States.....	\$3,150,784	\$1,559,224	\$191,932	\$312,404	\$26,102,312	\$183,817	\$46,940,511	\$20,654,382	3,288	918	73	302	1,995	69
California.....	561,261	6,850	14,517	26,460	851,131	4,479	2,048,503	1,192,893	138		18		120	
Illinois.....	1,023,855	1,547	18,910	146,765	3,047,167	26,882	5,422,794	2,348,745	376	50			326	15
Indiana.....	86,117		270	33,673	370,734	4,056	588,108	213,318	89	50			39	
Iowa.....	188,826	180	2,970	14,115	748,799	4,052	1,519,893	767,042	81	30			51	14
Massachusetts.....	49,192	1,464	4,020	1,609	134,098	1,969	225,255	89,188	18				18	
New York.....	4,388,213	1,499,007	101,025	143,631	14,472,927	94,247	26,763,200	12,100,026	1,462	363		152	947	
Pennsylvania.....	60,310	1,023	1,050	1,732	247,036	2,364	344,794	95,394	44		27		17	
Virginia.....	31,181	2,618	1,320	667	190,404	543	252,118	61,171	13				13	
Washington.....	64,889		3,990	1,282	130,359	1,009	243,778	112,410	12				12	
Wisconsin.....	1,205,175	41,835	30,065	330,555	4,235,724	31,026	6,772,808	2,506,058	609	275	28		306	40
All other states <sup>2</sup> .....	491,765	4,700	13,195	111,915	1,673,933	13,190	2,759,260	1,072,137	446	150		150	146	

<sup>1</sup> Same number reported for one or more other months.

<sup>2</sup> All other states embrace: Colorado, 1 establishment; Maryland, 2; Michigan, 4; Minnesota, 2; New Hampshire, 2; New Jersey, 2; Ohio, 2; Oregon, 2; and Tennessee, 1.

<sup>3</sup> Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

<sup>4</sup> Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

# SADDLERY AND HARNESS.

## GENERAL STATISTICS.

**General character of the industry.**—This industry includes establishments engaged primarily in the manufacture of the various products pertaining to saddlery and harness, including horse collars, bridles, halters, horse boots, sweat pads, etc. In addition to the establishments constituting the classified industry in 1919, production was reported to the value of \$2,014,262 by 35 establishments engaged primarily in the manufacture of other products.

**Comparative summary.**—Table 74 presents the principal statistics for the census years 1879 to 1919, inclusive. The increase in financial items in 1919 as compared with 1914 was due to the general advance in prices, for there was a marked decrease in number of establishments and of persons engaged in the industry.

**Wage earners, by months.**—Table 75 reflects the steadiness of employment from month to month, or the reverse. There was relatively small variation in employment in 1919, the minimum-month number being 90.7 per cent of the maximum-month number as compared with 85.7 per cent in 1914.

**Prevailing hours of labor.**—Table 76 shows that in 1909 only 2 per cent and in 1914 but 3.6 per cent of the total number of wage earners were in establishments where the prevailing hours of labor per week were 48 or less. In 1919 this percentage increased to 31.7. On the other hand, in 1909, 36.2 per cent of the wage earners

were in establishments where the prevailing hours of labor were 60 or more per week; whereas in 1914 this percentage dropped to 25.8 and in 1919 to 12.9 per cent.

**Size of establishments, by average number of wage earners.**—The establishments averaged practically six wage earners per establishment in 1919 and five in 1914. The industry includes a large number of establishments owned by individuals and by firms in which the work is done by the proprietors, and as a result many establishments reported few or no wage earners. Table 77 shows that in 1919, 24.8 per cent of the establishments had no wage earners and 62.3 per cent from 1 to 5 per establishment and in 1914, 19.3 per cent had no wage earners and 67.3 per cent from 1 to 5.

**Character of ownership.**—The establishments owned by corporations, as presented in Table 78, constituted only 13.9 per cent of the total number in 1919, but they employed 71.4 per cent of the wage earners and reported 73.6 per cent of the products. The individual establishments constituted 69.9 per cent of the total number in 1919 with 16 per cent of the products. The decrease in number of establishments is distributed proportionately among the groups but the percentage of increase in the value of products reported is much the largest for the corporations.

**General table.**—The detailed statistics for the industry, by states, are given for 1919 in Table 79.

TABLE 74.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, 1899, 1889, AND 1879.

	1919	1914	1909	1904	1899	1889	1879	PER CENT OF INCREASE. <sup>1</sup>					
								1914-1919	1909-1914	1904-1909	1899-1904	1889-1899	1879-1889
Number of establishments.....	1,823	2,551	1,347	1,076	873	7,931	7,999	-28.5	89.4	25.2	23.3	-89.0	-0.9
Persons engaged.....	14,803	18,383	19,014	18,354	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	-19.1	-3.3	3.6	.....	.....	.....
Proprietors and firm members....	1,046	2,768	1,452	1,181	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	-20.7	90.6	22.9	.....	.....	.....
Salaried employees.....	2,506	2,646	2,690	2,141	1,737	( <sup>2</sup> )	( <sup>2</sup> )	-5.3	-9.7	36.9	23.3	.....	.....
Wage earners (average number)...	10,411	12,969	14,632	15,032	14,364	22,672	21,446	-19.7	-11.4	-2.7	4.7	( <sup>3</sup> )	( <sup>3</sup> )
Primary horsepower.....	8,212	10,397	17,234	7,370	6,018	2,347	( <sup>2</sup> )	-21.0	-39.7	133.8	22.5	156.4	.....
Capital.....	\$49,368,288	\$45,207,380	\$39,224,195	\$29,264,460	\$20,462,903	\$35,346,620	\$16,508,019	9.2	15.3	34.0	43.0	-42.1	114.1
Salaries and wages.....	15,238,751	11,154,740	11,002,925	9,653,458	7,682,974	16,030,845	7,997,752	36.6	1.4	14.0	25.6	-52.1	100.4
Salaries.....	4,389,086	3,159,128	2,681,441	2,019,147	1,428,512	( <sup>2</sup> )	( <sup>2</sup> )	39.0	7.8	45.2	41.3	.....	.....
Wages.....	10,849,665	7,995,612	8,321,484	7,634,311	6,254,462	( <sup>2</sup> )	( <sup>2</sup> )	35.7	-0.9	5.7	22.1	.....	.....
Paid for contract work.....	63,357	114,945	56,142	82,575	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	-44.9	104.7	-32.0	.....	.....	.....
Rent and taxes.....	3,202,434	1,185,232	826,854	655,759	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	170.2	43.3	20.1	.....	.....	.....
Cost of materials.....	52,442,907	33,086,442	33,177,037	23,774,239	19,770,574	24,674,225	19,968,716	58.5	-0.3	39.6	20.3	-19.9	23.6
Value of products.....	83,715,010	53,558,612	54,224,602	42,054,842	33,702,563	52,970,801	38,081,643	56.3	-1.2	28.9	24.8	-36.4	39.1
Value added by manufacture <sup>3</sup> .....	31,270,103	20,472,170	21,046,665	18,280,603	13,931,989	28,236,576	18,112,927	52.7	-2.7	15.1	31.2	-50.8	56.2

<sup>1</sup> A minus sign (-) denotes decrease.

<sup>2</sup> Figures not available.

<sup>3</sup> Figures not strictly comparable.

<sup>4</sup> Exclusive of internal revenue.

<sup>5</sup> Value of products less cost of materials.

# SADDLERY AND HARNESS.

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TABLE 75.—WAGE EARNERS, BY MONTHS: 1919.

STATE.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
United States:														
1919.....	10,411	10,627	10,431	10,416	10,060	9,956	9,938	10,068	10,396	10,445	10,789	10,851	10,955	90.7
Male.....	9,532	9,686	9,562	9,569	9,248	9,161	9,120	9,255	9,498	9,538	9,846	9,887	10,014	91.1
Female.....	879	941	869	847	812	795	818	813	898	907	943	964	941	82.5
1914.....	12,969	13,765	13,854	13,653	13,399	13,135	12,834	12,436	12,105	11,876	12,401	12,679	13,041	85.7
1900.....	14,632	14,550	14,827	14,880	14,742	14,634	14,546	14,366	14,301	14,410	14,432	14,728	15,170	94.3
Georgia.....	563	558	554	566	525	535	519	580	615	586	553	568	592	84.4
Illinois.....	887	1,042	988	950	833	816	784	738	795	808	889	923	975	75.0
Indiana.....	453	506	504	498	443	436	423	438	438	412	472	457	443	79.8
Iowa.....	395	441	393	410	386	351	335	330	334	335	496	481	448	66.5
Kentucky.....	479	480	472	475	484	472	474	476	487	473	480	485	490	96.3
Minnesota.....	436	427	438	436	428	417	407	410	434	441	457	453	479	85.0
Missouri.....	1,215	1,120	1,113	1,108	1,124	1,155	1,201	1,233	1,271	1,290	1,291	1,334	1,345	82.0
Ohio.....	799	873	856	794	687	675	690	784	776	812	873	891	897	75.3
Tennessee.....	614	614	581	586	580	604	622	624	622	638	631	626	630	91.8
Texas.....	919	873	903	923	894	935	913	899	934	930	940	943	936	92.6
Wisconsin.....	441	401	408	439	441	444	438	436	454	453	465	458	455	86.2

TABLE 76.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED STATES: 1919.

STATE.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							STATE.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—						
		44 and under.	Between 44 and 48.	48.1	Between 48 and 54.	54.	Between 54 and 60.	60.			44 and under.	Between 44 and 48.	48.1	Between 48 and 54.	54.	Between 54 and 60.	60.
United States.....	10,411	110	140	3,050	1,093	1,932	2,138	1,333	Kentucky.....	479	1	.....	106	19	61	151	137
1914.....	12,969	(2)	(2)	464	508	4,040	4,518	3,323	Minnesota.....	436	1	.....	143	6	4	257	25
1909.....	14,632	(2)	(2)	298	897	2,219	5,920	5,224	Missouri.....	1,215	20	2	743	22	308	90	35
Georgia.....	563	11	.....	52	64	11	356	69	Ohio.....	799	3	27	93	369	108	110	33
Illinois.....	887	22	31	154	41	90	485	63	Tennessee.....	614	.....	153	1	98	87	280	.....
Indiana.....	453	2	.....	64	179	24	107	75	Texas.....	919	.....	310	11	459	111	28	.....
Iowa.....	395	2	.....	38	191	63	57	42	Wisconsin.....	441	.....	17	78	257	65	2	.....

<sup>1</sup> Includes 48 and under for 1914 and 1909.

<sup>2</sup> Corresponding figures not available.

TABLE 77.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED STATES: 1919.

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—												
	Estab-lish-ments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		Over 251 wage earners.	
			Estab-lish-ments.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.
United States....1919..	1,823	10,411	453	1,135	1,740	121	1,440	68	2,257	32	2,333	11	1,705	3	927
1914..	2,551	12,969	493	1,718	2,819	214	2,482	78	2,521	32	2,218	14	2,151	2	778
Georgia.....	20	563	.....	10	15	4	47	3	121	1	64	2	316	.....	.....
Illinois.....	183	887	45	121	171	11	149	4	151	.....	.....	1	107	1	309
Indiana.....	114	453	22	79	102	7	92	5	141	.....	.....	1	118	.....	.....
Iowa.....	110	395	23	76	99	5	63	5	173	1	60	.....	.....	.....	.....
Kentucky.....	52	479	6	35	60	4	41	3	88	4	290	.....	.....	.....	.....
Minnesota.....	51	436	7	36	47	1	10	4	127	3	243	.....	.....	.....	.....
Missouri.....	88	1,215	14	56	87	9	141	1	48	6	491	2	448	.....	.....
Ohio.....	106	790	33	62	110	3	26	5	172	2	140	.....	.....	1	351
Tennessee.....	43	614	7	23	46	3	27	7	246	2	140	1	155	.....	.....
Texas.....	68	910	12	44	79	4	41	2	60	3	247	2	225	1	267
Wisconsin.....	43	441	10	24	29	5	73	2	52	1	58	1	220	.....	.....

TABLE 78.—CHARACTER OF OWNERSHIP: 1919 AND 1914.

CHARACTER OF OWNERSHIP.	Cen-sus year.	Num-ber of estab-lish-ments.	Aver-age number of wage earners.	Value of products.	Value added by manu-facture.	CHARACTER OF OWNERSHIP.	Cen-sus year.	Num-ber of estab-lish-ments.	Aver-age number of wage earners.	Value of products.	Value added by manu-facture.
All classes.....	1919	1,823	10,411	\$83,713,010	\$31,270,103	Per cent distribution:	1919	69.9	18.0	16.0	17.3
	1914	2,551	12,969	53,558,612	20,472,170	Individual.....	1914	70.6	23.9	21.8	27.1
Individual.....	1919	1,275	1,878	13,357,900	5,402,839						
	1914	1,802	3,105	11,651,293	5,542,360	Corporation.....	1919	13.9	71.4	73.6	72.6
Corporation.....	1919	253	7,434	61,653,014	22,688,559		1914	12.7	63.7	64.8	59.2
	1914	324	8,265	34,706,544	12,119,743	All other.....	1919	16.2	10.6	10.4	10.2
All other.....	1919	295	1,099	8,702,096	3,178,705		1914	16.7	12.3	13.4	13.7
	1914	426	1,599	7,200,775	2,810,067						



## MANUFACTURES.

TABLE 79.—DETAILED STATEMENT,

		PERSONS ENGAGED IN THE INDUSTRY.										WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					
STATE.		Num- ber of estab- lish- ments.	Total.	Pro- pri- etors and firm mem- bers.	Sala- ried offi- cers, super- in- ten- dents, and man- agers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		Capital.	
						Male.	Fe- male.	Aver- age num- ber.	Number, 15th day of—			Male.	Fe- male.	Male.	Fe- male.		
									Maximum month.	Minimum month.							
1	United States.....	1,823	14,863	1,046	750	1,330	426	10,411	De 10,955	Je 9,938	11,099	10,078	960	52	9	\$49,368,288	
2	Alabama.....	8	105	9	2	1	.....	53	My 101	De 80	102	92	10	.....	.....	189,769	
3	Arizona.....	4	43	2	4	10	3	24	Oc 28	Ja 22	23	22	1	.....	.....	164,407	
4	Arkansas.....	20	161	29	4	24	4	100	Se 107	Ja 94	101	97	4	.....	.....	469,460	
5	California.....	37	232	34	16	41	11	130	Ja 155	Au 122	159	151	8	.....	.....	937,716	
6	Colorado.....	27	268	24	11	21	6	206	De 236	Mh 188	242	226	16	.....	.....	840,090	
7	Delaware.....	3	7	3	.....	.....	.....	4	Ja 5	Jy 3	3	3	.....	.....	.....	22,885	
8	Georgia.....	20	642	22	17	37	3	563	Au 615	Je 519	596	500	85	8	3	1,154,300	
9	Idaho.....	16	46	18	3	.....	.....	22	Au 24	Ja 17	22	20	2	.....	.....	170,928	
10	Illinois.....	183	1,241	206	46	69	33	887	Ja 1,042	Jy 782	996	939	56	1	.....	3,890,973	
11	Indiana.....	114	680	127	51	39	16	453	Ja 506	Jy 404	513	301	119	2	1	1,858,068	
12	Iowa.....	110	618	126	34	51	12	395	Oc 496	Jy 330	379	372	7	.....	.....	3,052,322	
13	Kansas.....	83	304	89	11	16	7	181	Mh 192	Au 172	190	185	5	.....	.....	959,661	
14	Kentucky.....	52	661	53	27	85	17	479	De 490	Fe 472	490	437	50	3	.....	1,044,064	
15	Louisiana.....	8	179	10	6	24	3	136	Au 145	De 130	133	129	4	.....	.....	775,704	
16	Maine.....	9	17	9	.....	.....	.....	8	My 9	No 7	9	9	.....	.....	.....	24,644	
17	Maryland.....	26	220	26	5	30	.....	150	Ap 174	Ja 124	158	143	15	.....	.....	768,605	
18	Massachusetts.....	15	168	12	9	2	5	140	My 148	Fe 132	138	121	16	1	.....	405,487	
19	Michigan.....	51	326	50	11	5	7	253	No 317	My 185	300	217	83	.....	.....	942,557	
20	Minnesota.....	51	638	49	42	81	30	436	De 479	Je 407	489	454	34	1	.....	2,307,047	
21	Mississippi.....	5	34	6	1	.....	.....	27	Ja 53	No 16	16	4	10	1	1	33,002	
22	Missouri.....	88	1,663	86	106	202	55	1,215	De 1,345	Mh 1,103	1,344	1,231	109	4	.....	5,064,798	
23	Montana.....	11	57	10	5	6	.....	36	Jy 40	Ja 25	37	37	.....	.....	.....	290,693	
24	Nebraska.....	53	226	58	15	24	2	127	Ja 139	Jy 117	131	131	.....	.....	.....	1,066,106	
25	New Jersey.....	46	92	53	2	1	.....	36	Oc 39	My 34	41	41	.....	.....	.....	177,765	
26	New Mexico.....	4	24	4	1	.....	.....	18	De 22	Fe 15	21	21	.....	.....	.....	44,266	
27	New York.....	91	350	62	20	14	10	223	Se 235	Ja 212	232	223	9	.....	.....	927,505	
28	North Carolina.....	30	184	32	10	8	1	113	Oc 121	Ja 103	117	116	.....	1	.....	347,338	
29	North Dakota.....	14	96	13	8	7	3	65	Fe 76	Se 58	67	67	.....	.....	.....	634,001	
30	Ohio.....	106	1,052	112	44	77	20	709	De 897	My 675	906	831	74	1	.....	4,100,027	
31	Oklahoma.....	36	153	41	11	6	3	92	Se 115	Fe 67	111	107	3	1	.....	418,153	
32	Oregon.....	33	260	33	18	18	9	182	Ja 281	No 145	156	151	5	.....	.....	994,702	
32	Pennsylvania.....	117	407	129	7	37	9	225	Ap 232	Ja 215	226	222	4	.....	.....	1,205,136	
34	Rhode Island.....	3	5	2	1	.....	.....	2	( <sup>1</sup> ) 2	( <sup>1</sup> ) 2	2	2	.....	.....	.....	2,743	
35	South Carolina.....	5	22	5	1	1	.....	15	( <sup>1</sup> ) 15	( <sup>1</sup> ) 15	15	15	.....	.....	.....	19,135	
36	South Dakota.....	10	39	9	3	3	1	23	Se 26	Ja 22	24	24	.....	.....	.....	154,301	
37	Tennessee.....	43	804	46	42	86	10	614	Se 636	Fe 584	634	550	64	20	.....	2,215,410	
38	Texas.....	68	1,269	84	64	159	43	919	No 943	Ja 873	934	863	71	.....	.....	4,711,974	
39	Utah.....	18	111	21	9	11	3	67	Jy 73	Fe 59	70	70	.....	.....	.....	321,050	
40	Vermont.....	10	26	9	.....	.....	.....	17	No 20	Jy 15	18	18	.....	.....	.....	31,885	
41	Virginia.....	33	380	33	26	56	41	225	De 248	Ja 210	250	232	18	.....	.....	1,705,654	
42	Washington.....	42	152	47	9	16	6	74	Mh 94	Se 56	68	68	.....	.....	.....	580,216	
43	West Virginia.....	51	146	54	5	5	4	78	Je 83	Oc 71	73	66	7	.....	.....	594,275	
44	Wisconsin.....	43	600	45	30	52	32	441	Oc 465	Ja 401	459	387	62	7	3	2,381,635	
45	Wyoming.....	18	43	10	6	.....	.....	21	Jy 23	Fe 19	20	20	.....	.....	.....	117,744	
46	All other states <sup>2</sup> .....	8	117	9	8	4	8	88	.....	.....	84	73	9	1	1	308,291	

<sup>1</sup> Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).<sup>2</sup> Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).<sup>3</sup> Same number reported for one or more other months.

# SADDLERY AND HARNESS.

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BY STATES: 1919.

EXPENSES.										POWER.						
Salaries and wages.			For contract work.	Rents and taxes.		For materials.		Value of products.	Value added by manufacture.	Primary horsepower.					Electric horse-power generated in establishments reporting.	
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Steam engines (not turbines).	Internal-combustion engines.	Water power. <sup>1</sup>	Rent. <sup>2</sup>		
\$2,298,662	\$2,091,023	\$10,849,066	\$63,357	\$726,286	\$2,476,148	\$52,064,231	\$378,676	\$83,713,010	\$31,270,103	8,212	1,270	282	38	6,613	245	1
11,700	865	77,536		2,993	12,530	299,973	2,148	470,819	168,668	105	75			30		2
6,900	1,800	24,953	1,200	4,950	2,422	86,905	808	148,318	60,605	21				21		3
15,515	45,382	84,791		9,950	6,056	566,586	2,653	824,875	265,636	49				49		4
19,958	25,433	164,455	1,055	18,177	13,333	729,938	4,633	1,181,680	447,109	178				178		5
47,407	51,119	272,422		10,190	25,416	944,586	6,164	1,550,723	605,973	234				234		6
		3,600	52		89	8,792	72	18,540	9,676							7
126,724	62,062	506,715		9,325	91,946	2,535,188	7,078	4,154,219	1,611,953	493	60	30	36	370		8
5,400	1,350	22,894	1,579	6,590	1,699	114,484	1,492	188,491	72,515	20				20		9
153,678	137,079	1,058,949	150	61,287	90,331	4,501,909	28,460	7,032,460	2,502,100	600	120	13		473	105	10
115,083	70,737	440,219	472	47,713	38,107	1,409,986	22,965	2,520,166	1,087,215	905	62	33		510		11
102,955	72,409	493,640	470	28,682	232,016	2,568,298	21,155	4,167,588	1,578,135	409	75	34		300		12
40,103	35,766	217,958		20,524	26,850	956,871	8,779	1,490,428	524,778	156		4		152		13
114,302	159,267	460,109	20,234	14,850	28,658	2,842,395	16,382	4,443,962	1,586,185	352		2		350		14
32,050	45,924	130,468	76	6,034	13,422	612,460	2,750	948,675	333,365	70				70		15
		9,992		2,406	386	20,973	448	49,621	28,200	2		2				16
27,760	26,021	153,473	150	5,984	13,507	505,482	5,604	851,380	340,303	149	100	16		33		17
19,580	8,852	158,568		5,326	15,167	457,309	8,196	778,809	313,301	109	25			81		18
35,692	11,914	267,090		17,026	30,398	1,088,026	10,953	2,101,341	1,092,362	188				188		19
93,107	145,923	489,246		38,658	32,662	2,812,366	16,947	4,159,280	1,329,973	329	60			260	40	20
2,460		9,894		1,260	425	15,722	547	41,470	25,210	20			2	18	2	21
316,881	279,681	1,250,103		74,624	183,239	6,260,481	77,633	9,449,706	3,111,692	1,082	292	17		773	55	22
12,385	9,269	45,155		4,388	4,906	203,376	1,633	318,734	113,725	22		6		16		23
23,036	51,761	159,362		13,792	18,270	893,564	7,165	1,434,118	533,889	134		6		128		24
2,000	1,040	37,720		10,242	2,002	78,605	2,173	191,473	110,695	20				20		25
1,250	1,022	22,336		2,520	1,467	48,681	654	90,904	41,569	8				8		26
28,741	23,878	249,899		31,093	4,535	808,239	7,993	1,435,448	619,216	126				126		27
14,744	6,960	94,217	4,561	7,895	4,684	501,666	3,856	733,427	227,905	185	115	25		45		28
16,500	11,280	65,999	503	3,066	7,297	499,478	4,640	676,300	172,182	80				80	2	29
132,548	125,248	606,807	921	20,107	457,444	3,019,710	16,558	5,142,703	2,106,426	567	110	24		433		30
34,142	9,079	133,685		15,478	7,218	647,182	2,747	1,042,107	392,178	50		2		48		31
40,568	35,864	245,094		17,502	52,252	931,547	6,437	1,031,187	693,203	233				233		32
24,596	42,036	204,787	1,080	24,311	7,836	889,013	8,913	1,515,099	617,173	179	60	25		94	12	33
1,500		2,292		720	66	5,773	143	15,750	9,834	1				1		34
800	700	10,376		1,500	25	25,900	677	48,125	21,548	13				13	3	35
5,000	5,220	35,101		2,715	1,912	83,000	1,202	180,219	96,017	14				14		36
98,586	188,588	520,590	29,536	20,012	27,917	3,009,033	15,217	4,789,806	1,765,556	292				292		37
186,918	168,505	989,859	850	77,840	102,348	5,212,040	17,730	7,817,750	2,587,980	359		10		340		38
11,340	9,220	85,070		3,433	11,256	438,596	2,698	662,018	220,724	40				40		39
		18,151		970	737	35,338	924	75,458	39,196	4				4		40
111,001	40,463	224,096		8,470	12,118	880,526	4,183	1,504,120	619,420	129		15		114		41
53,020	31,970	97,668	304	20,700	15,078	480,881	5,060	921,674	435,728	83		2		81		42
30,193	14,370	81,532		9,618	18,396	450,885	4,698	788,600	333,517	178	125	9		44	25	43
167,216	117,292	500,739	104	27,517	677,417	3,278,379	13,362	5,143,239	1,851,498	247		7		240		44
2,830		28,122		2,444	1,580	90,137	1,370	168,262	65,755	8				8		45
22,800	13,814	93,434		3,504	130,828	224,443	2,771	517,996	290,782	63				63		46

<sup>1</sup> Same number reported throughout the year.

<sup>2</sup> All other states embrace: Connecticut, 4 establishments; Nevada, 2; and New Hampshire, 2.

# LEATHER BELTING.

## GENERAL STATISTICS.

**General character of the industry.**—This industry includes the establishments engaged primarily in the making of leather belting. Prior to 1914 it was inclusive of leather hose, but at the censuses of 1914 and 1919 no establishments were reported as engaged primarily in the manufacture of leather hose. In addition to the establishments constituting the classified industry in 1919, leather belting was reported to the value of \$4,947,610 by 9 establishments engaged primarily in the manufacture of other products and assigned to other industries, which included three of the leather industries—leather, tanned, curried, and finished (\$4,319,779); leather goods, not elsewhere specified; and boot and shoe cut stock.

**Comparative summary.**—Table 80 presents the principal statistics for each census year from 1879 to 1919, the figures for the earlier censuses being inclusive of leather hose. The increase in financial items in 1919 as compared with 1914 was to a large degree due to the general advance in prices, for on the basis of persons engaged in the industry and power equipment, the figures show slight decreases.

**Wage earners, by months.**—Table 81 reflects the steadiness of employment from month to month, or the reverse. Female wage earners constituted but 6.3 per cent of the total number in 1919.

**Prevailing hours of labor.**—In 1909 only 4.5 per cent and in 1914 only 8.3 per cent of the total number of wage

earners, as shown in Table 82, were in establishments where the prevailing hours of labor were 48 per week or less. In 1919 the corresponding proportion was 15.9 per cent. On the other hand, in 1909, 64.8 per cent of the wage earners were in establishments where the hours were more than 54 per week, whereas in 1914 the proportion dropped to 57 per cent and in 1919 to 11.1 per cent.

**Size of establishments, by average number of wage earners.**—As shown in Table 83, the industry includes a large number of establishments with no wage earners or fewer than 6. In 1919, 90 such establishments, or 52.3 per cent of the total number, employed only 6.8 per cent of the wage earners while establishments with more than 50 wage earners formed only 7.6 per cent of the total number of establishments, but employed 52.4 per cent of the wage earners.

**Character of ownership.**—The majority of the establishments, as presented in Table 84, were under corporate ownership, 65.1 per cent in 1919 with 86 per cent of the wage earners, and with products representing 89.2 per cent of all products. Considering the industry as a whole, the establishments averaged \$235,000 in value of products per establishment in 1919 as compared with \$153,000 in 1914; the corporations averaged \$323,000 per establishment in 1919, the individuals \$74,000, and the "All other" group \$69,000, the latter being chiefly firms.

TABLE 80.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, 1899, 1889, AND 1879.

	1919	1914	1909	1904	1899	1889	1879	PER CENT OF INCREASE. <sup>1</sup>					
								1914-1919	1909-1914	1904-1909	1899-1904	1889-1899	1879-1889
Number of establishments.....	172	151	139	117	104	93	96	13.9	8.6	18.8	12.5	.....	.....
Persons engaged.....	4,019	4,263	4,370	2,800	(2)	(2)	(2)	-5.7	-2.4	56.1	.....	.....	.....
Proprietors and firm members.....	91	86	100	94	(2)	(2)	(2)	5.8	-14.0	6.4	.....	.....	.....
Salaried employees.....	1,163	1,226	1,264	614	443	(2)	(2)	-5.1	-3.0	105.9	38.6	.....	.....
Wage earners (average number).....	2,765	2,951	3,003	2,092	1,667	1,342	1,227	-6.3	-1.8	43.7	25.5	(2)	(2)
Primary horsepower.....	7,039	7,411	5,638	3,220	2,162	1,040	(2)	-5.0	31.4	75.1	48.9	107.9	.....
Capital.....	\$27,533,899	\$20,138,522	\$17,457,064	\$10,785,245	\$7,408,219	\$4,973,420	\$2,748,799	36.7	15.4	61.9	45.6	49.0	80.9
Salaries and wages.....	5,956,218	3,829,188	3,362,700	1,951,867	1,398,751	1,114,754	606,037	55.5	13.9	72.3	39.5	25.5	83.9
Salaries.....	2,695,779	1,750,043	1,501,820	787,319	484,874	(2)	(2)	63.2	17.2	90.8	62.4	.....	.....
Wages.....	3,260,439	2,089,545	1,860,880	1,164,548	913,877	(2)	(2)	57.5	11.2	59.8	27.4	.....	.....
Paid for contract work.....	114,528	57,722	6,592	16,958	(2)	(2)	(2)	98.4	775.6	-61.1	.....	.....	.....
Rent and taxes.....	954,470	339,233	208,260	174,715	(2)	(2)	(2)	181.4	62.9	19.2	.....	.....	.....
Cost of materials.....	28,156,711	15,480,110	15,022,603	9,317,206	7,490,952	6,132,704	5,019,853	81.9	-0.9	67.7	24.2	22.3	22.2
Value of products.....	40,480,654	23,035,951	23,091,887	14,220,806	10,622,522	8,633,634	6,525,737	75.7	-2.8	60.6	33.9	23.0	32.3
Value added by manufacture <sup>2</sup> .....	12,323,943	7,555,841	8,069,234	4,903,100	3,122,570	2,500,930	1,505,884	63.1	-6.4	64.6	57.0	24.9	66.1

<sup>1</sup> A minus sign (-) denotes decrease: percentages are omitted where base is less than 100.

<sup>2</sup> Figures not available.

<sup>3</sup> Figures not strictly comparable.

<sup>4</sup> Exclusive of internal revenue.

<sup>5</sup> Value of products less cost of materials.

# LEATHER BELTING.

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TABLE 81.—WAGE EARNERS, BY MONTHS: 1919.

[Month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

STATE.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
United States:														
1919.....	2,765	2,830	2,684	2,683	2,586	2,567	<i>2,566</i>	2,651	2,782	2,870	2,914	2,976	3,071	83.6
Males.....	2,590	2,649	2,518	2,512	2,418	<i>2,399</i>	2,402	2,484	2,610	2,685	2,726	2,796	2,881	83.3
Females.....	175	181	166	171	168	168	<i>164</i>	167	172	185	188	180	190	80.3
1914.....	2,951	3,004	3,004	2,988	2,940	2,913	<i>2,879</i>	2,694	2,914	2,954	2,958	2,975	2,989	95.8
1909.....	3,006	2,980	2,952	2,943	2,877	<i>2,863</i>	2,889	2,915	3,052	3,092	3,106	3,184	3,210	89.2
Connecticut.....	247	301	232	234	225	<i>206</i>	226	227	241	239	253	288	292	68.4
Massachusetts.....	269	266	250	257	247	253	254	264	<i>245</i>	293	294	298	309	78.6
New York.....	660	702	668	653	<i>623</i>	629	636	645	666	672	671	679	676	88.7
Pennsylvania.....	414	417	414	413	407	387	<i>352</i>	378	410	438	457	443	452	77.0

TABLE 82.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED STATES: 1919.

STATE.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
		44 and under.	Between 44 and 48.	48. <sup>1</sup>	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
United States.....	1919.. 2,765	24	65	350	1,580	440	280	26	
	1914.. 2,951	( <sup>2</sup> )	( <sup>2</sup> )	245	523	495	1,553	122	3
	1909.. 3,006	( <sup>2</sup> )	( <sup>2</sup> )	134	330	593	1,466	483	
Connecticut.....	247				24	196	27		
Massachusetts.....	269	8		139	119	3			
New York.....	660	6	1	23	618	12			
Pennsylvania.....	414	3		6	386		19		

<sup>1</sup> Includes 48 and under for 1914 and 1909.

<sup>2</sup> Corresponding figures not available.

TABLE 83.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED STATES: 1919.

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—											
	Estab-lish-ments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		Over 100 wage earners.		
			Estab-lish-ments.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	
United States.....	1919..	172	2,765	8	82	189	50	529	19	597	7	473	6	977
	1914..	151	2,951	5	85	215	35	392	14	394	7	510	5	1,440
Connecticut.....		8	247	1	2	5	3	34	1	25			1	183
Massachusetts.....		20	269	.....	9	25	7	98	3	81	1	65	.....	
New York.....		37	660	2	20	44	9	79	2	53	2	119	2	365
Pennsylvania.....		17	414	1	7	16	5	59	2	70			2	269

TABLE 84.—CHARACTER OF OWNERSHIP: 1919, 1914, AND 1909.

CHARACTER OF OWNERSHIP.	Cen-sus year.	Num-ber of estab-lish-ments.	Aver-age num-ber of wage earners.	Value of products.	Value added by manu-facture.	CHARACTER OF OWNERSHIP.	Cen-sus year.	Num-ber of estab-lish-ments.	Aver-age num-ber of wage earners.	Value of products.	Value added by manu-facture.
All classes.....	1919	172	2,765	\$40,480,654	\$12,323,943	Per cent distribution:	1919	21.5	9.2	6.8	7.7
	1914	151	2,951	23,035,951	7,555,841		1914	29.8	8.5	7.4	8.0
Individual.....	1919	37	253	2,754,142	951,648	Corporation.....	1919	65.1	86.0	89.2	88.4
	1914	45	250	1,711,244	602,625		1914	58.3	88.7	89.5	88.8
Corporation.....	1919	112	2,377	36,128,595	10,890,210	All other.....	1919	13.4	4.9	3.0	3.9
	1914	88	2,617	20,628,404	6,708,297		1914	11.9	2.8	3.0	3.2
All other.....	1919	23	135	1,597,917	482,085						
	1914	18	84	696,303	244,919						

## MANUFACTURES.

## GENERAL TABLE.

Detailed statement, by states.—The detailed statistics for the industry for 1919 are given in Table 85, by states.

TABLE 85.—DETAILED STATEMENT, BY STATES: 1919.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.									WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					EXPENSES.		
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Average number.	Wage earners.		Total.	16 and over.		Under 16.		Capital.	Salaries and wages.		
					Male.	Female.		Maximum month.	Minimum month.		Male.	Female.	Male.	Female.		Officials.	Clerks etc.	
United States..	172	4,019	91	342	538	283	2,765	De 3,071	Je 2,566	3,066	2,803	184	76	3	\$27,533,899	\$1,440,466	\$1,255,313	
California.....	7	111	3	15	8	5	80	De 85	Ja 75	85	69	16	.....	.....	671,607	42,795	43,886	
Connecticut.....	8	320	2	18	37	16	247	Ja 301	My 206	292	274	13	3	2	3,241,340	103,075	99,990	
Illinois.....	9	298	4	29	49	24	192	Se 206	Jo 175	213	206	5	1	1	2,008,687	158,244	109,748	
Massachusetts.....	20	364	7	30	37	21	269	De 309	Au 243	309	282	20	7	.....	1,945,268	147,389	74,385	
Michigan.....	3	141	3	9	7	9	113	Au 135	Je 98	133	116	17	.....	.....	1,088,702	40,585	22,321	
Minnesota.....	3	153	.....	20	14	3	116	De 143	Ap 101	143	85	2	56	.....	1,561,540	30,678	29,133	
Missouri.....	8	123	2	16	33	16	56	Oc 1	Fe 45	61	61	.....	.....	.....	762,247	66,160	53,223	
New Jersey.....	10	130	10	7	22	9	82	My 85	Ap 1	81	64	16	1	.....	630,402	67,023	43,504	
New York.....	37	934	27	54	142	51	600	Ja 702	Ap 623	677	642	34	1	.....	6,501,653	246,459	254,889	
Ohio.....	10	184	.....	26	42	14	102	De 118	Je 1	109	107	2	.....	.....	1,072,269	89,623	44,598	
Pennsylvania.....	17	633	16	48	77	78	414	Oc 457	Je 352	448	413	34	1	.....	4,151,003	213,911	182,985	
Rhode Island.....	6	38	1	7	.....	5	25	De 28	Fe 1	28	28	.....	.....	.....	176,653	32,250	5,192	
Tennessee.....	3	34	4	.....	1	.....	29	De 1	My 1	33	33	.....	.....	.....	56,497	.....	2,400	
Washington.....	5	18	6	2	1	1	8	Se 1	Ja 1	8	8	.....	.....	.....	90,739	2,500	882	
All other states <sup>2</sup> .....	26	538	6	61	68	31	372	.....	.....	446	415	25	6	.....	3,571,262	199,779	183,181	

STATE.	EXPENSES—continued.						Value of products.	Value added by manufacture.	POWER.						
	Salaries and wages—Con.	For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.	
			Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					
										Steam engines (not turbines).	Steam turbines.	Internal combustion engines.	Water power. <sup>3</sup>	Rent-ed. <sup>4</sup>	
United States..	\$3,260,439	\$114,526	\$306,764	\$647,706	\$27,899,058	\$257,653	\$40,480,654	\$12,323,943	7,039	3,967	450	87	55	2,480	320
California.....	81,635	.....	4,595	21,755	732,094	6,722	1,083,208	344,392	261	.....	.....	.....	.....	261	.....
Connecticut.....	285,258	.....	14,735	68,907	2,777,684	17,521	3,930,487	1,135,282	377	155	.....	.....	.....	222	3
Illinois.....	257,144	.....	65,122	109,670	2,444,502	15,670	3,315,438	855,266	368	325	.....	.....	.....	43	117
Massachusetts.....	328,639	3,401	27,715	36,950	2,911,870	17,676	3,943,685	1,014,139	383	135	.....	.....	.....	248	.....
Michigan.....	127,198	.....	799	56,775	1,015,535	17,909	1,595,982	502,538	585	330	.....	.....	.....	255	.....
Minnesota.....	136,028	.....	11,240	33,768	1,189,104	6,584	1,808,535	612,787	120	40	.....	.....	.....	80	.....
Missouri.....	56,796	.....	6,497	20,697	763,822	4,669	1,040,506	272,015	133	.....	.....	.....	.....	133	.....
New Jersey.....	90,336	.....	6,030	7,140	706,573	8,904	1,001,526	286,040	104	7	.....	.....	.....	97	.....
New York.....	854,000	.....	78,098	87,266	6,356,328	94,178	9,331,023	2,880,517	3,100	2,380	450	22	.....	254	57
Ohio.....	107,356	.....	13,367	14,263	1,132,842	5,032	1,549,695	411,821	166	.....	.....	.....	55	111	.....
Pennsylvania.....	475,205	111,125	44,712	75,928	3,547,550	30,513	5,574,105	1,996,042	597	400	.....	61	.....	136	143
Rhode Island.....	33,518	.....	3,775	2,060	206,602	2,380	315,131	106,149	96	75	.....	4	.....	17	.....
Tennessee.....	20,407	.....	270	562	37,550	1,357	79,076	40,160	28	15	.....	.....	.....	13	.....
Washington.....	11,685	.....	2,712	933	99,673	354	141,073	41,046	18	.....	.....	.....	.....	18	.....
All other states <sup>2</sup> .....	395,174	.....	27,097	111,106	3,977,269	28,184	5,771,184	1,765,731	697	105	.....	.....	.....	592	.....

<sup>1</sup> Same number reported for one or more other months.<sup>2</sup> All other states embrace: Colorado, 1 establishment; Delaware, 1; Georgia, 3; Indiana, 3; Louisiana, 3; Maine, 1; Maryland, 2; Mississippi, 1; New Hampshire, 1; North Carolina, 2; Oregon, 1; South Carolina, 1; Virginia, 3; and Wisconsin, 3.<sup>3</sup> Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).<sup>4</sup> Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

# TRUNKS AND VALISES.

## GENERAL STATISTICS.

**General character of the industry.**—This industry includes establishments engaged primarily in the manufacture of trunks and valises, including suit cases and similar manufactures, among which are hat boxes, luncheon kits, etc. The products are largely of leather, but imitation leather, canvas, and fiber board enter into their construction to a large degree. In addition to the establishments constituting the classified industry, production was reported in 1919 to the value of \$931,825 by eight establishments primarily engaged in other lines of manufacture.

**Comparative summary.**—Table 86 presents the principal statistics for the several census years from 1879 to 1919, inclusive. The increase in financial items in 1919 as compared with 1914 was to a large degree due to the general advance in prices; still, the industry shows a very material growth as measured by the number of establishments and persons engaged in the industry.

**Wage earners, by months.**—The figures in Table 87 reflect the steadiness of employment from month to month, or the reverse, the latter months of the year being the months of maximum employment, as a rule, with January the minimum month. The industry employs a considerable number of female wage earners, 15.6 per cent in 1919.

**Prevailing hours of labor.**—Table 88 shows that in 1909 only 3.6 per cent, and in 1914, 4.7 per cent of the wage earners were in establishments where the prevailing hours of labor were 48 per week or less, but in 1919 this percentage increased to 39.3 per cent. On the

other hand, 27.2 per cent of the wage earners in 1909 were in establishments where the prevailing hours of labor were 60 or more per week; in 1914 the proportion was 18.1 per cent and in 1919, but 1.3 per cent.

**Size of establishments, by average number of wage earners.**—As shown in Table 89, the establishments in 1919 averaged 19 wage earners per establishment as compared with 18 in 1914.

The majority of the establishments were owned by individuals or firms, with work done by the proprietors, and as a result many establishments reported no wage earners or very few. In 1919, 54.1 per cent of the establishments, and in 1914, 54 per cent reported no wage earners or not exceeding 5 per establishment. The industry includes, however, a number of establishments employing a relatively large number of wage earners. There were 23 establishments in 1919, each with more than 100 wage earners, aggregating 43.1 per cent of the total number and in 1914, 21 establishments with 37.2 per cent of the total number of wage earners.

**Character of ownership.**—Table 90 shows that establishments owned by corporations represented but 32.5 per cent of the total number, but they employed 71.8 per cent of the wage earners, and accounted for 68.2 per cent of the products. The average value of products per establishment for the industry was approximately \$107,000 in 1919 as compared with \$47,000 in 1914. The corporations averaged \$225,000 per establishment in 1919, the individual establishments \$39,000, and the "All other" group, chiefly firms, \$72,000.

TABLE 86.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, 1899, 1889, AND 1879.

	1919	1914	1909	1904	1899	1889	1879	PER CENT INCREASE. <sup>1</sup>					
								1914-1919	1909-1914	1904-1909	1899-1904	1889-1899	1879-1889
Number of establishments.....	597	561	524	373	312	395	265	6.4	7.1	40.5	19.6	-21.0	49.1
Persons engaged.....	14,216	12,154	13,422	10,458	(2)	(2)	(2)	17.0	-9.4	28.3	.....	.....	.....
Proprietors and firm members.....	601	549	552	406	(2)	(2)	(2)	9.5	-0.5	36.0	.....	.....	.....
Salaries and wages.....	2,145	1,694	1,748	961	708	(2)	(2)	26.6	-3.1	81.9	35.7	.....	.....
Wage earners (average number).....	11,470	9,911	11,122	9,091	6,964	6,032	4,534	15.7	-10.9	22.3	30.5	(2)	(2)
Primary horsepower.....	7,703	7,566	6,885	5,016	3,314	2,001	(2)	1.8	9.9	37.3	51.4	65.6	.....
Capital.....	\$34,258,034	\$18,570,817	\$18,308,037	\$11,018,937	\$6,928,044	\$6,900,766	\$2,792,256	84.5	1.4	66.2	59.0	0.4	147.1
Salaries and wages.....	17,735,544	7,706,448	7,652,587	5,150,005	3,460,173	3,513,749	1,786,586	130.1	0.7	48.6	48.5	-1.3	96.7
Salaries.....	5,271,777	2,166,291	2,115,258	1,010,971	692,157	(2)	(2)	143.4	2.4	109.2	46.1	.....	.....
Wages.....	12,463,767	5,540,157	5,537,329	4,139,034	2,777,016	(2)	(2)	125.0	0.1	33.8	49.0	.....	.....
Paid for contract work.....	40,031	8,969	49,690	8,335	(2)	(2)	(2)	345.2	-82.0	496.2	.....	.....	.....
Rent and taxes.....	2,130,249	763,783	636,931	423,263	(2)	(2)	(2)	180.1	20.0	50.5	.....	.....	.....
Cost of materials.....	33,222,432	13,625,457	14,629,065	9,107,785	5,954,718	4,703,982	3,910,133	143.8	-6.9	60.6	53.0	26.6	20.3
Value of products.....	63,932,266	26,471,527	28,027,964	18,643,580	12,428,646	10,821,621	7,252,470	141.5	-5.6	50.3	50.0	14.8	49.2
Value added by manufacture.....	30,709,834	12,846,070	13,398,899	9,535,795	6,473,928	6,117,639	3,342,837	139.1	-4.1	40.5	47.3	5.8	83.0

<sup>1</sup> A minus sign (—) denotes decrease.  
<sup>2</sup> Figures not available.  
<sup>3</sup> Figures not strictly comparable.

<sup>4</sup> Exclusive of internal revenue.  
<sup>5</sup> Value of products less cost of materials.

## MANUFACTURES.

TABLE 87.—WAGE EARNERS, BY MONTHS: 1919.

[Month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

STATE.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
United States:														
1919.....	11,470	<i>10,101</i>	10,471	10,711	10,785	11,065	11,358	11,678	11,942	12,178	<b>12,467</b>	12,463	12,421	81.0
Males.....	9,677	<i>8,669</i>	8,879	9,063	9,121	9,385	9,607	9,884	10,078	10,256	<b>10,463</b>	10,455	10,394	82.0
Females.....	1,793	<i>1,532</i>	1,592	1,648	1,664	1,680	1,751	1,814	1,864	1,922	<b>2,014</b>	2,008	2,027	75.6
1914.....	9,911	<i>9,816</i>	10,324	10,427	10,633	10,318	10,174	10,124	9,885	9,845	<b>9,643</b>	9,096	8,587	89.9
1909.....	11,122	<i>10,283</i>	10,682	11,068	10,815	11,143	11,070	10,957	11,420	11,700	<b>11,638</b>	11,587	11,169	87.9
Illinois.....	1,181	<i>1,089</i>	1,076	1,117	1,116	1,139	1,179	1,229	1,223	1,230	1,260	1,265	1,299	80.0
Massachusetts.....	614	<i>604</i>	584	535	649	593	638	648	674	702	676	675	640	71.8
Missouri.....	877	<i>775</i>	799	823	820	838	863	887	909	938	989	951	932	78.4
New Jersey.....	717	<i>681</i>	664	642	633	692	699	722	738	744	798	805	835	75.5
New York.....	1,950	<i>1,719</i>	1,800	1,845	1,851	1,883	1,911	1,979	2,046	2,118	<b>2,131</b>	2,094	2,023	80.7
Pennsylvania.....	1,115	<i>954</i>	980	1,022	1,024	1,113	1,160	1,197	1,172	1,166	1,195	1,196	1,201	79.4
Virginia.....	1,703	<i>1,649</i>	1,680	1,687	1,598	1,669	1,698	1,729	1,796	1,810	1,805	1,812	1,803	85.5
Wisconsin.....	933	<i>848</i>	846	869	851	882	874	942	927	1,007	1,048	1,041	1,061	79.7

TABLE 88.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED STATES: 1919.

STATE.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							STATE.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—						
		44 and under.	Between 44 and 48.	48.	Between 48 and 54.	54.	Between 54 and 60.	60.			44 and under.	Between 44 and 48.	48.	Between 48 and 54.	54.	Between 54 and 60.	60.
United States.. 1919..	11,470	790	505	3,127	3,591	1,482	1,741	139	New York.....	1,950	345	31	1,213	134	224	.....	3
1914..	9,911	(2)	(2)	466	1,589	2,498	3,500	1,750	Pennsylvania.....	1,115	187	63	155	229	21	460	.....
1909..	11,122	(2)	(2)	399	378	2,564	4,753	2,992	Virginia.....	1,703	.....	4	509	894	296	.....	.....
Illinois.....	1,181	165	238	382	354	15	27	.....	Wisconsin.....	933	.....	15	138	18	694	68	.....
Massachusetts.....	614	11	159	357	61	.....	26	.....									
Missouri.....	877	.....	90	16	686	65	20	.....									
New Jersey.....	717	27	3	149	522	7	.....	9									

1 Includes 48 and under for 1914 and 1909.

2 Corresponding figures not available.

TABLE 89.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED STATES: 1919.

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—														
	Estab-lish-ments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		251 to 500 wage earners, inclusive.		501 to 1,000 wage earners, inclusive.	
			Estab-lish-ments.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.
United States..... 1919..	597	11,470	47	276	566	154	1,829	72	2,358	25	1,778	17	2,572	5	1,671	1	696
1914..	561	9,911	49	254	640	147	1,713	60	1,804	30	2,070	19	2,764	1	1,340	1	580
Illinois.....	61	1,181	5	21	55	20	218	8	243	5	347	2	318	.....	.....	.....	.....
Massachusetts.....	26	614	1	8	14	8	102	7	194	1	65	1	239	.....	.....	.....	.....
Missouri.....	20	877	.....	6	12	6	71	4	114	2	132	1	190	1	308	.....	.....
New Jersey.....	21	717	.....	8	16	3	28	5	159	3	244	2	270	.....	.....	.....	.....
New York.....	158	1,950	16	73	151	45	577	17	578	5	343	2	301	.....	.....	.....	.....
Pennsylvania.....	86	1,115	12	46	87	18	210	6	199	2	111	1	109	1	399	.....	.....
Virginia.....	15	1,703	.....	2	6	2	30	5	216	1	65	3	402	1	289	1	699
Wisconsin.....	18	933	1	4	6	5	67	2	67	3	239	2	265	1	289	.....	.....

TABLE 90.—CHARACTER OF OWNERSHIP: 1919 AND 1914.

CHARACTER OF OWNERSHIP.	Cen-sus year.	Num-ber of estab-lish-ments.	Average number of wage earners.	Value of products.	Value added by manufac-ture.	CHARACTER OF OWNERSHIP.	Cen-sus year.	Num-ber of estab-lish-ments.	Average number of wage earners.	Value of products.	Value added by manufac-ture.
All classes.....	1919	597	11,470	\$63,932,266	\$30,709,834	Per cent distribution:	1919	44.2	14.4	16.2	14.1
	1914	561	9,911	28,471,527	12,846,070		1914	47.2	17.7	18.3	18.1
Individual.....	1919	264	1,049	10,837,202	4,337,951	Corporation.....	1919	32.5	71.8	68.2	70.5
	1914	265	1,750	4,839,045	2,328,047		1914	30.3	66.9	65.5	66.7
Corporation.....	1919	194	8,237	43,572,070	21,673,659	All other.....	1919	23.3	13.8	15.7	15.3
	1914	170	6,628	17,332,027	8,572,774		1914	22.5	15.5	16.2	15.1
All other.....	1919	139	1,584	10,022,994	4,698,224						
	1914	126	1,533	4,300,455	1,945,249						

## GENERAL TABLE.

Detailed statement, by states.—The detailed statistics for the industry by states, 1919, are given in Table 91.

TABLE 91.—DETAILED STATEMENT, BY STATES: 1919.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.										WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.						EXPENSES.		
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.				Total.	16 and over.		Under 16.		Capital.	Salaries and wages.			
					Male.	Female.	Average number.	Number, 15th day of—		Male.		Female.	Male.	Female.	Officials.		Clerks, etc.			
								Maximum month.	Minimum month.											
United States.....	597	14,216	601	741	937	467	11,470	Oc 12,467	Ja 10,101	12,649	10,453	1,977	151	68	\$34,258,034	\$2,723,188	\$2,548,589			
California.....	45	439	53	22	20	8	336	De 410	My 238	410	329	81	.....	.....	899,823	34,580	34,771			
Colorado.....	7	102	7	10	7	5	73	Oc 82	Ja 67	80	62	11	7	.....	189,464	33,195	18,941			
Illinois.....	61	1,495	58	85	130	41	1,181	De 1,299	Ja 1,039	1,312	1,101	201	4	6	3,639,108	358,042	339,661			
Indiana.....	8	466	8	12	8	11	427	No 466	Ja 323	446	364	82	.....	.....	1,262,519	35,151	33,550			
Iowa.....	10	30	12	.....	.....	2	16	Au 18	Ja 15	16	13	3	.....	.....	71,383	.....	1,650			
Maryland.....	7	44	9	.....	.....	.....	35	Au 42	Ja 13	42	24	18	.....	.....	48,814	.....	.....			
Massachusetts.....	26	753	28	35	47	29	614	Se 702	Ja 504	684	480	180	12	12	1,487,314	109,555	133,637			
Michigan.....	10	237	11	12	4	11	199	Jy 201	My 196	199	126	73	.....	.....	519,666	44,327	18,173			
Minnesota.....	14	111	10	12	6	4	79	De 92	Ja 85	93	84	6	1	2	194,795	21,710	8,338			
Missouri.....	20	1,026	15	38	71	25	877	Oc 989	Ja 775	932	792	134	5	1	2,092,393	114,105	156,886			
Nebraska.....	4	20	4	1	1	1	13	Je 19	Ja 11	11	10	1	.....	.....	31,459	2,500	2,063			
New Jersey.....	21	849	15	42	51	24	717	De 836	Ja 631	837	717	120	.....	.....	2,494,174	248,315	192,346			
New York.....	158	2,527	144	171	108	94	1,950	Oc 2,131	Ja 1,719	2,168	1,972	189	6	1	5,807,300	585,194	512,292			
Ohio.....	22	399	26	29	21	17	306	Au 343	Ja 246	324	265	59	.....	.....	1,067,583	110,517	93,745			
Oregon.....	5	77	5	7	4	2	59	No 72	Ja 48	71	39	32	.....	.....	198,076	24,381	20,688			
Pennsylvania.....	80	1,467	120	58	122	52	1,115	De 1,201	Ja 954	1,220	1,064	124	15	17	3,467,647	295,928	294,544			
Tennessee.....	7	178	5	8	33	3	120	Au 144	So 107	134	115	19	.....	.....	400,724	28,200	46,903			
Texas.....	12	176	13	21	15	2	125	De 135	Ja 81	135	126	9	.....	.....	229,387	55,435	20,295			
Utah.....	6	28	9	1	4	1	13	Jy 15	Ja 10	15	15	.....	.....	.....	53,861	1,600	5,015			
Virginia.....	15	1,904	4	84	71	42	1,703	No 1,812	Ja 1,549	1,805	1,598	191	15	1	5,249,497	303,766	184,901			
Washington.....	13	108	15	6	10	4	73	No 82	Fe 67	83	63	17	3	.....	240,982	11,303	21,298			
Wisconsin.....	18	1,135	5	43	90	64	933	De 1,061	Fe 846	1,058	744	218	73	23	2,830,385	199,979	346,710			
All other states <sup>2</sup> .....	22	645	25	44	54	25	497	.....	.....	574	350	209	10	5	1,784,679	101,498	92,144			

STATE.	EXPENSES—continued.						Value of products.	Value added by manufacture.	POWER.					
	Salaries and wages—Continued.	Rent and taxes.		For materials.		Primary horsepower.					Electric horsepower generated in establishments reporting.			
		For contract work.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.	Total.			Owned.			Rent- <sup>3</sup>		
									Wages. earners.	Rent of factory.	Steam engines (not turbines).		Steam turbines.	Internal-combustion engines.
United States....	\$12,463,767	\$40,031	\$723,594	\$1,415,655	\$32,950,431	\$263,001	\$63,932,266	\$30,709,834	7,703	4,335	120	159	3,089	2,041
California.....	360,635	412	32,402	0,348	835,158	4,011	1,552,508	713,339	195	80	.....	.....	115	.....
Colorado.....	61,744	.....	7,272	1,847	120,794	1,118	292,499	170,587	59	.....	.....	.....	59	.....
Illinois.....	1,482,445	1,500	88,160	131,032	3,824,742	28,098	7,292,902	3,439,462	706	255	.....	.....	451	181
Indiana.....	416,582	.....	3,471	22,888	715,643	17,753	1,348,231	614,835	310	105	.....	.....	205	2
Iowa.....	17,772	.....	4,875	880	14,258	380	57,026	42,388	3	.....	.....	.....	3	.....
Maryland.....	23,913	.....	4,027	93	60,424	663	112,316	51,229	8	.....	.....	.....	8	.....
Massachusetts.....	541,587	1,105	29,690	64,532	1,842,242	7,909	3,206,473	1,356,322	88	.....	.....	.....	88	.....
Michigan.....	202,167	200	10,361	21,808	377,003	3,227	820,912	440,682	143	120	.....	.....	23	15
Minnesota.....	95,975	300	12,871	4,203	254,763	3,638	480,834	222,433	75	.....	.....	.....	75	.....
Missouri.....	855,187	.....	53,648	188,963	2,369,500	27,122	4,278,591	1,881,939	530	290	.....	.....	240	225
Nebraska.....	12,525	.....	2,640	326	27,747	464	86,619	53,408	9	.....	.....	.....	9	.....
New Jersey.....	939,054	711	41,277	46,090	2,761,503	15,270	4,898,978	2,132,203	437	275	.....	.....	155	200
New York.....	2,750,245	25,494	259,235	55,079	7,624,774	42,632	13,977,087	6,309,681	826	290	.....	103	433	25
Ohio.....	357,035	.....	26,109	18,735	796,074	7,525	1,636,384	832,785	223	125	.....	.....	98	154
Oregon.....	76,021	.....	7,170	3,710	176,658	1,665	399,350	221,027	32	.....	.....	.....	32	.....
Pennsylvania.....	1,167,643	3,672	71,941	161,014	3,034,248	26,006	6,620,836	3,559,982	539	220	.....	32	287	180
Tennessee.....	80,356	.....	3,785	12,946	220,243	3,654	470,730	246,833	176	150	.....	.....	26	4
Texas.....	90,965	.....	10,790	6,178	232,606	1,840	502,590	268,144	97	.....	.....	.....	97	.....
Utah.....	10,551	.....	5,480	194	21,923	74	62,562	40,565	4	.....	.....	.....	4	.....
Virginia.....	1,683,736	.....	3,948	475,182	4,119,725	17,246	8,618,472	4,481,501	1,557	1,430	.....	.....	127	437
Washington.....	85,712	.....	11,850	1,623	170,080	772	387,163	196,311	23	.....	.....	.....	23	.....
Wisconsin.....	738,385	6,637	5,950	170,946	2,351,415	36,294	4,724,196	2,336,487	1,269	995	.....	.....	274	616
All other states <sup>3</sup> .....	407,532	.....	26,645	22,038	1,017,908	14,440	2,125,039	1,092,691	394	.....	120	20	254	.....

<sup>1</sup> Same number reported for one or more other months.<sup>2</sup> All other states embrace: Alabama, 1 establishment; Arizona, 1; Arkansas, 1; Connecticut, 3; District of Columbia, 1; Georgia, 2; Kansas, 3; Kentucky, 2; Louisiana, 2; Maine, 2; North Dakota, 1; Rhode Island, 1; South Dakota, 1; and Wyoming, 1.<sup>3</sup> Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).



# POCKETBOOKS.

## GENERAL STATISTICS.

**General character of the industry.**—This industry embraces establishments manufacturing pocketbooks, purses, ladies' purse-hand bags, cardcases, wallets, coin purses, bill folds, brief cases, etc., made chiefly of leather. In addition to the establishments constituting the classified industry in 1919, production was reported to the value of \$110,772 by 7 establishments engaged in the manufacture of other products.

**Comparative summary.**—Table 92 presents the principal statistics for each census year from 1879 to 1919 inclusive. The large increase in financial items in 1919 as compared with 1914 was to a considerable extent, due to the general advance in prices, but the increase of 98.2 per cent in wage earners indicates a very material growth in the industry.

**Wage earners, by months.**—The figures in Table 93 reflect the steadiness of employment, or the reverse, from month to month. There was relatively less variation in employment, in 1919 than in 1914, the minimum-month number in 1919 being 81.6 per cent of the maximum month as compared with 73.3 per cent in 1914 and 78.1 per cent in 1909. The industry gave employment to a relatively large number of females, 47 per cent in 1919, and in the state of New York, the leading state, 36.6 per cent of the average number of wage earners were females.

**Prevailing hours of labor.**—In 1909 only 3.3 per cent, and in 1914 but 14.5 per cent of the total

number of wage earners, as shown in Table 94, were in establishments where the prevailing hours of labor were 48 per week or less, but in 1919 there were 76.1 per cent in establishments of this class. On the other hand, 74.9 per cent of the wage earners in 1909 were in establishments where the hours were more than 54 per week, whereas in 1914 the percentage dropped to 18.9 per cent and in 1919 to 8.5 per cent. New York, which reported 63.4 per cent of the wage earners, showed three-fourths of them in establishments where the prevailing hours per week were 44 or under.

**Size of establishments, by average number of wage earners.**—The establishments in 1919 averaged 21 wage earners per establishment as compared with 23 in 1914. Table 95 indicates that the industry included a relatively large number of establishments owned by individuals and by firms in which the work was done by the proprietors since many of the establishments reported few or no wage earners. In 1919, 43.2 per cent of the establishments, reporting no wage earners or fewer than 6 per establishment, employed only 4.6 per cent of the total average number.

**Character of ownership.**—Table 96 shows that less than one-fourth of the establishments in this industry were incorporated, but these reported 41 per cent of the value of products. The group "All other," chiefly firms, forming 38.8 per cent of the number of establishments, reported 42.3 per cent of the products.

TABLE 92.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, 1899, 1889, AND 1879.

	1919	1914	1909	1904	1899	1889	1879	PER CENT OF INCREASE. <sup>1</sup>					
								1914-1919	1909-1914	1904-1909	1899-1904	1889-1899	1879-1889
Number of establishments.....	139	64	79	46	68	62	53	.....	.....	.....	.....	.....	.....
Persons engaged.....	3,497	1,738	1,771	2,500	1,562	(2)	(2)	101.2	-1.9	-20.2	34.3	.....	.....
Proprietors and firm members..	168	81	100	62	85	(2)	(2)	.....	-19.0	.....	.....	.....	.....
Salaried employees.....	424	191	199	157	124	(2)	(2)	122.0	-4.0	26.8	26.6	.....	.....
Wage earners (average number)	2,905	1,466	1,472	2,281	1,653	1,208	1,413	98.2	-0.4	-35.5	38.0	(3)	(3)
Primary horsepower.....	431	243	178	317	181	156	(2)	77.4	36.5	-43.8	75.1	16.0	.....
Capital.....	\$5,427,990	\$1,609,601	\$1,892,862	\$2,127,824	\$991,876	\$1,121,834	\$598,350	237.2	-15.0	-11.0	114.5	-11.6	87.5
Salaries and wages.....	4,187,167	941,206	931,067	1,031,431	734,814	661,992	484,947	344.9	1.1	-9.7	40.4	11.0	36.5
Salaries.....	1,125,264	238,892	242,452	234,446	146,219	(2)	(2)	371.0	-1.5	3.4	60.3	.....	.....
Wages.....	3,061,903	702,314	688,615	796,985	588,595	(2)	(2)	336.0	2.0	-13.6	35.4	.....	.....
Paid for contract work.....	167,873	20,831	4,115	22,000	2,162	(2)	(2)	705.9	406.2	-81.3	917.6	.....	.....
Rent and taxes.....	281,898	53,232	61,473	428,938	130,285	(2)	(2)	429.6	-13.4	112.6	-4.5	.....	.....
Cost of materials.....	7,557,155	1,783,840	1,920,327	1,925,723	1,270,226	968,948	930,033	323.6	-7.5	0.1	50.7	31.6	4.2
Value of products.....	14,549,659	3,350,552	3,628,161	3,767,446	2,495,188	2,165,462	1,769,036	334.2	-7.7	-3.7	51.0	15.2	22.4
Value added by manufacture <sup>2</sup> .....	6,992,504	1,566,712	1,698,834	1,840,723	1,216,562	1,196,514	839,003	346.3	-7.8	-7.7	51.3	1.7	42.6

<sup>1</sup> A minus sign (-) denotes decrease; percentages are omitted where base is less than 100.

<sup>2</sup> Figures not available.

<sup>3</sup> Figures not strictly comparable.

<sup>4</sup> Exclusive of internal revenue.

<sup>5</sup> Value of products less cost of materials.

TABLE 93.—WAGE EARNERS, BY MONTHS: 1919.

[Month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

STATE.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
United States:														
1919.....	2,905	<i>2,005</i>	2,718	2,778	2,760	2,754	2,791	2,892	3,013	3,060	3,126	3,194	3,169	81.6
Males.....	1,541	<i>1,431</i>	1,477	1,490	1,465	1,458	1,464	1,542	1,608	1,656	1,636	1,638	1,627	80.4
Females.....	1,364	<i>1,174</i>	1,241	1,288	1,295	1,296	1,327	1,350	1,405	1,404	1,490	1,556	1,542	75.4
1914.....	1,466	1,300	1,399	1,545	1,506	1,432	1,398	1,438	1,517	1,627	1,695	1,492	<i>1,243</i>	73.3
1909.....	1,472	1,380	1,467	1,431	1,358	<i>1,324</i>	1,403	1,347	1,460	1,539	1,653	1,695	1,614	78.1
New York.....	1,842	<i>1,068</i>	1,745	1,779	1,751	1,736	1,751	1,843	1,934	1,968	1,986	1,989	1,954	83.9
Males.....	1,167	<i>1,086</i>	1,119	1,119	1,106	1,097	1,103	1,177	1,236	1,268	1,240	1,236	1,217	85.6
Females.....	675	<i>582</i>	626	660	645	639	648	666	698	700	746	753	737	77.3

TABLE 94.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK: 1919.

STATE.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—						
		44 and under.	Between 44 and 48.	48. <sup>1</sup>	Between 48 and 54.	54.	Between 54 and 60.	60.
United States.....	1919.. 2,905	1,555	101	554	419	29	247	..... 3
	1914.. 1,466	( <sup>2</sup> )	( <sup>2</sup> )	212	275	702	274	.....
	1909.. 1,472	( <sup>2</sup> )	( <sup>2</sup> )	40	156	164	755	348
New York.....	1,842	1,398	101	67	243	20	13	.....

<sup>1</sup> Includes 48 and under for 1914 and 1909.<sup>2</sup> Corresponding figures not available.

TABLE 95.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS: 1919 AND 1914.

WAGE EARNERS PER ESTABLISHMENT.	ESTABLISHMENTS.		WAGE EARNERS (AVERAGE NUMBER).				WAGE EARNERS PER ESTABLISHMENT.	ESTABLISHMENTS.		WAGE EARNERS (AVERAGE NUMBER).			
	1919	1914	1919	1914	Per cent of total.			1919	1914	1919	1914	Per cent of total.	
					1919	1914						1919	1914
All establishments.....	139	64	2,905	1,466	100.0	100.0	21 to 50 wage earners.....	21	11	763	335	26.3	22.9
No wage earners.....	14	7	.....	.....	.....	.....	51 to 100 wage earners.....	9	2	570	190	19.6	13.0
1 to 5 wage earners.....	46	19	135	48	4.6	3.3	101 to 250 wage earners.....	7	3	901	380	31.0	25.9
6 to 20 wage earners.....	42	21	536	261	18.5	17.8	251 to 500 wage earners.....	.....	1	.....	252	.....	17.2

TABLE 96.—CHARACTER OF OWNERSHIP: 1919 AND 1914.

CHARACTER OF OWNERSHIP.	Census year.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.	CHARACTER OF OWNERSHIP.	Census year.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
All classes.....	1919 1914	139 64	2,905 1,466	\$14,549,659 3,350,552	\$6,992,504 1,566,712	Per cent distribution:					
Individual.....	1919 1914	49 30	561 214	2,425,813 588,335	1,175,720 261,131	Individual.....	1919 1914	35.3 40.9	19.3 14.6	16.7 17.0	10.8 10.7
Corporation.....	1919 1914	36 14	1,378 635	5,963,039 1,276,523	2,943,191 650,609	Corporation.....	1919 1914	25.9 21.9	47.4 43.3	41.0 38.1	42.1 41.9
All other.....	1919 1914	54 20	966 617	6,160,807 1,485,694	2,873,593 645,972	All other.....	1919 1914	38.8 31.2	33.3 42.1	42.3 44.3	41.1 41.4

## MANUFACTURES.

## GENERAL TABLE.

Detailed statement, by states.—The detailed statistics for the industry, for 1919, are given in Table 97, by states.

TABLE 97.—DETAILED STATEMENT, BY STATES: 1919.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Average number.	Wage earners.		Total.	16 and over.		Under 16.		
					Male.	Female.		Number, 15th day of—			Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.						
United States.....	139	3,497	168	123	180	121	2,905	No 3,194	Ja 2,605	3,190	1,002	1,497	33	58	\$5,427,990
California.....	3	6	3	.....	.....	.....	3	(1) 3	(1) 3	3	3	.....	.....	.....	14,400
Illinois.....	10	122	9	9	11	10	83	No 111	Ja 67	99	59	40	.....	.....	252,604
Massachusetts.....	10	442	12	17	18	14	381	De 434	Ja 303	434	116	301	3	14	704,537
New York.....	93	2,223	134	67	110	70	1,842	No 1,989	Ja 1,668	1,969	1,224	745	.....	.....	3,306,469
Pennsylvania.....	7	185	5	6	9	4	161	Fe 169	Je 155	163	45	111	.....	7	241,581
Wisconsin.....	6	206	1	12	16	9	258	De 317	Jy 232	317	110	153	25	29	536,000
All other states <sup>2</sup> .....	10	223	4	12	16	14	177	.....	.....	205	45	147	5	8	311,799

STATE.	EXPENSES.								Value of products.	Value added by manufacture.	Primary horsepower rented (electric).
	Salaries and wages.				Rent and taxes.		For materials.				
	Officials.	Clerks, etc.	Wage earners.	For contract work.	Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			
United States.....	\$566,025	\$559,339	\$3,061,903	\$167,873	\$177,636	\$104,262	\$7,524,883	\$32,272	\$14,549,659	\$6,992,504	431
California.....	.....	.....	4,296	.....	924	26	3,928	131	10,709	6,050	1
Illinois.....	63,260	27,031	82,130	.....	8,680	1,759	161,179	847	376,511	214,435	22
Massachusetts.....	118,625	81,310	269,023	4,299	9,887	17,385	612,010	5,138	1,324,791	707,043	80
New York.....	291,111	343,402	2,337,223	157,166	141,957	50,937	5,913,503	18,208	11,106,315	5,174,004	229
Pennsylvania.....	13,830	23,243	102,850	5,047	6,775	604	197,050	1,531	453,297	254,716	28
Wisconsin.....	39,449	37,817	169,094	703	2,957	30,671	352,737	4,082	725,448	368,629	29
All other states <sup>2</sup> .....	39,750	46,536	116,687	658	6,456	2,880	284,476	2,335	552,538	265,777	42

<sup>1</sup> Same number reported throughout the year.

<sup>2</sup> All other states embrace: Colorado, 1 establishment; Maine, 1; Missouri, 1; New Jersey, 4; Ohio, 2; and Texas, 1.

# LEATHER GOODS, NOT ELSEWHERE SPECIFIED.

## GENERAL STATISTICS.

**General character of the industry.**—Establishments comprising this industry are those manufacturing leather goods that are not the products of one of the other leather industries, namely, (1) boots and shoes, (2) leather gloves and mittens, (3) boot and shoe cut stock, (4) boot and shoe findings, (5) leather belting, (6) pocketbooks, (7) saddlery and harness, (8) trunks and valises.

In 1919 there were 503 establishments in which leather articles not otherwise provided for were the products of chief value, amounting to \$52,952,772. In addition, 53 establishments engaged primarily in the manufacture of other products, reported miscellaneous leather articles to the value of \$3,507,901.

**Comparative summary.**—Table 98 gives the principal statistics for each census year from 1879 to 1919. On account of the advance in prices since 1914, the increases in the financial items are only in part an indication of growth. The increase in average number of wage earners employed, 26.5 per cent, shows fair growth.

**Wage earners, by months.**—The figures in Table 99, which shows, by months, the number of wage earners employed, reflect the steadiness of employment or the reverse. There was somewhat greater fluctuation in employment in 1919 than in 1914. In New York, the leading state, the number for the minimum month was 74.6 per cent of that for the maximum month. In this industry 37.8 per cent of the wage earners reported were females, and for the states shown this proportion varied from 25.3 per cent in Illinois to 62.5 per cent in Minnesota.

**Prevailing hours of labor.**—Table 100 shows a classification of the wage earners according to the prevail-

ing hours of labor in the establishments in which they were employed. In 1909 only 3.8 per cent of the total number of wage earners were employed in establishments where the prevailing hours per week were 48 or less, and in 1914, 7.2 per cent, but in 1919 the percentage was 77.3. On the other hand, the proportion of the number of wage earners in establishments where the working hours were more than 54 per week decreased from 65.3 per cent in 1909 to 31.7 in 1914 and to 3.8 per cent in 1919. In New York, the leading state in the industry, 64.6 per cent of the wage earners were employed where the prevailing hours did not exceed 44.

**Size of establishments, by average number of wage earners.**—Though there was an increase of 125—33.1 per cent—in the number of establishments in 1919 as compared with 1914, the average number of wage earners per establishment was approximately the same. Table 101 shows that in 1914, 41.3 per cent of the establishments employed no wage earners or not more than 5, and in 1919, 46.1 per cent.

**Character of ownership.**—In this industry only 32.8 per cent of the establishments, as shown in Table 102, were corporations, but these reported practically two-thirds of the total value of products and of the wage earnersemployed. The average value of products per establishment in 1919 was \$201,000 for the corporations, \$40,000 for the establishments under individual ownership, and \$94,000 for those of the "All other" class, most of them being firms; in 1914 comparable figures were \$81,000, \$18,000, and \$72,000, respectively. The average wage earners per establishment in 1919 were 32 for the corporation group, 7 for individuals, and 17 for other forms of ownership.

TABLE 98.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, 1899, 1889, AND 1879.

	1919	1914	1909	1904	1899	1889	1879	PER CENT OF INCREASE. <sup>1</sup>					
								1914-1919	1909-1914	1904-1909	1899-1904	1889-1899	1879-1889
Number of establishments.....	503	378	425	423	315	164	84	33.1	-11.1	0.5	34.3	92.1	.....
Persons engaged.....	11,141	8,623	9,318	9,196	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	29.2	-7.5	1.3	.....	.....	.....
Proprietors and firm members.....	488	396	448	499	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	23.2	-11.6	-10.2	.....	.....	.....
Salaried employees.....	1,708	1,156	1,189	912	638	( <sup>2</sup> )	( <sup>2</sup> )	47.8	-2.8	30.4	42.9	( <sup>2</sup> )	( <sup>2</sup> )
Wage earners (average number).....	8,945	7,071	7,681	7,785	6,293	2,997	1,430	26.5	-7.9	-1.3	23.7	( <sup>2</sup> )	( <sup>2</sup> )
Primary horsepower.....	3,902	3,272	3,851	3,554	1,644	2,264	( <sup>2</sup> )	19.3	-15.0	8.4	116.2	-27.4	.....
Capital.....	\$33,341,408	\$10,951,427	\$10,389,283	\$3,508,111	\$5,511,294	\$3,571,847	\$1,426,850	204.4	5.4	22.1	54.4	54.3	150.3
Salaries and wages.....	13,437,845	5,042,101	5,034,746	4,020,551	2,833,895	1,618,770	587,208	166.5	0.1	25.2	41.9	75.1	175.7
Salaries.....	4,022,442	1,438,236	1,411,546	883,426	562,140	( <sup>2</sup> )	( <sup>2</sup> )	179.7	1.9	59.8	57.2	.....	.....
Wages.....	9,415,403	3,603,865	3,623,200	3,137,125	2,271,755	( <sup>2</sup> )	( <sup>2</sup> )	161.3	-0.5	15.5	38.1	.....	.....
Paid for contract work.....	469,120	96,493	100,248	90,745	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	886.2	-3.7	10.5	.....	.....	.....
Rent and taxes.....	1,166,571	391,101	319,905	309,410	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	193.3	22.3	3.4	.....	.....	.....
Cost of materials.....	30,035,537	10,632,124	10,290,439	9,626,614	6,191,058	3,324,828	1,511,848	182.5	3.3	6.9	55.5	86.2	119.9
Value of products.....	52,952,772	19,333,934	18,838,281	17,655,345	11,787,611	6,291,507	2,736,543	173.9	2.6	6.7	49.8	87.4	129.9
Value added by manufacture.....	22,917,235	8,701,810	8,547,842	8,028,731	5,596,553	2,966,679	1,224,695	163.4	1.8	6.5	43.5	88.6	142.2

<sup>1</sup> A minus sign (—) denotes decrease; percentages are omitted where base is less than 100.  
<sup>2</sup> Figures not available.

<sup>3</sup> Figures not strictly comparable. <sup>4</sup> Value of products less cost of materials.  
<sup>5</sup> Exclusive of internal revenue.

## MANUFACTURES.

TABLE 99.—WAGE EARNERS, BY MONTHS: 1919.

[Month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

STATE.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimums of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
United States:														
1919.....	8,945	<i>8,010</i>	8,082	8,007	8,314	8,458	8,575	9,012	9,240	9,328	9,973	10,153	10,089	79.0
Males.....	5,568	<i>4,937</i>	5,030	5,033	5,205	5,276	5,344	5,588	5,770	5,801	6,227	6,338	6,253	77.9
Females.....	3,377	<i>3,082</i>	3,052	3,050	3,109	3,182	3,231	3,424	3,470	3,527	3,746	3,815	3,836	79.3
1914.....	7,071	<i>6,677</i>	6,820	6,881	6,800	6,807	6,939	6,988	7,115	7,553	7,854	7,417	6,941	85.0
1909.....	7,681	<i>7,120</i>	7,242	7,293	7,250	7,248	7,252	7,418	7,789	8,130	8,489	8,623	8,204	82.7
Illinois.....	687	644	645	638	650	663	684	691	686	721	732	758	732	84.2
Massachusetts.....	545	501	513	508	493	513	515	521	548	562	592	625	644	77.3
Minnesota.....	683	632	597	588	605	625	649	687	703	717	756	813	834	70.5
New Jersey.....	930	913	947	920	878	873	891	906	910	950	998	997	1,007	85.5
New York.....	4,410	3,890	<i>3,822</i>	3,875	4,090	4,183	4,230	4,473	4,632	4,560	5,067	5,120	5,029	74.6
Pennsylvania.....	753	670	689	716	715	721	723	787	806	810	815	801	783	82.2
States showing large proportion of females.														Per ct. av. of state.
Illinois.....	174	165	162	169	166	164	168	174	171	184	183	197	195	25.3
Massachusetts.....	256	241	246	236	233	233	245	241	250	262	275	302	308	47.0
Minnesota.....	427	399	364	361	362	392	403	425	436	452	479	516	535	62.5
New Jersey.....	416	425	433	423	403	401	376	414	403	405	443	430	430	44.7
New York.....	1,277	1,140	<i>1,075</i>	1,113	1,156	1,209	1,232	1,316	1,346	1,321	1,468	1,479	1,469	29.0
Pennsylvania.....	395	349	362	372	376	379	379	421	422	426	428	419	407	62.5

TABLE 100.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED STATES: 1919.

STATE.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							STATE.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—						
		44 and under.	Between 44 and 48.	48.1	Between 48 and 54.	54.	Between 54 and 60.	60.			44 and under.	Between 44 and 48.	48.1	Between 48 and 54.	54.	Between 54 and 60.	60.
United States: 1919..	8,945	3,853	661	2,403	1,468	218	222	120	Massachusetts.....	545	103	43	336	36	8	13	0
1914..	7,071	(2)	(2)	511	2,032	2,287	2,040	197	Minnesota.....	683	446	237	237	237	237	237	237
1909..	7,681	(2)	(2)	295	940	1,433	4,020	943	New Jersey.....	930	218	10	490	138	22	43	43
Illinois.....	687	65	118	100	336	10	3	5	New York.....	4,410	2,849	422	613	361	123	33	9
									Pennsylvania.....	753	99	394	208	48	3	1	1

1 Includes 48 and under for 1914 and 1909.

2 Corresponding figures not available.

TABLE 101.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED STATES: 1919.

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—													
	Estab-lish-ments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		Over 250 wage earners.		
			Estab-lish-ments.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	
United States..1919..	503	8,945	39	193	511	152	1,751	85	2,686	18	1,335	14	2,132	2	530	
1914..	378	7,071	20	127	365	139	1,707	56	1,764	17	1,167	7	985	3	1,033	
Illinois.....	41	687	2	15	50	18	217	5	163	1	70	2	336	1	257	
Massachusetts.....	51	545	4	19	54	20	235	7	188	3	113	2	293	1	273	
Minnesota.....	11	683	5	2	6	6	80	2	113	1	228	2	336	1	273	
New Jersey.....	28	930	5	10	28	6	80	2	80	2	167	2	293	1	273	
New York.....	244	4,410	20	88	230	76	875	44	1,450	10	750	8	1,105	398	398	
Pennsylvania.....	33	753	1	16	37	6	56	7	207	1	55	2	398	398	398	

TABLE 102.—CHARACTER OF OWNERSHIP: 1919 AND 1914.

CHARACTER OF OWNERSHIP.	Cen-sus year.	Num-ber of estab-lish-ments.	Average number of wage earners.	Value of products.	Value added by manu-facture.	CHARACTER OF OWNERSHIP.	Cen-sus year.	Num-ber of estab-lish-ments.	Average number of wage earners.	Value of products.	Value added by manu-facture.
All classes.....	1919	503	8,945	\$52,952,772	\$22,917,235	Per cent distribution:	1919	43.7	18.3	15.5	16.6
	1914	378	7,071	19,333,934	8,701,810	Individual.....	1914	43.1	15.9	14.9	15.0
Individual.....	1919	220	1,641	8,725,032	3,807,737	Corporation.....	1919	32.8	50.3	62.7	61.7
	1914	163	1,127	2,878,301	1,304,623		1914	28.6	45.9	45.2	45.3
Corporation.....	1919	165	5,301	33,184,311	14,138,513	All other.....	1919	23.5	22.4	20.9	21.7
	1914	108	3,246	8,747,319	3,941,322		1914	28.3	38.2	39.9	39.7
All other.....	1919	118	2,003	11,043,429	4,970,985						
	1914	107	2,698	7,708,314	3,455,860						

## LEATHER GOODS, NOT ELSEWHERE SPECIFIED.

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## GENERAL TABLE.

Detailed statement, by states.—Table 103 presents the detailed statistics for the industry, by states, for 1919.

TABLE 103.—DETAILED STATEMENT, BY STATES: 1919.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.										WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					EXPENSES.		
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		Capital.	Salaries and wages.			
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.	Female.		Officials.	Clerks, etc.		
								Maximum month.	Minimum month.										
United States.....	503	11,141	488	563	718	427	8,945	No 10,153	Ja 8,019	10,076	6,130	3,679	123	144	\$33,341,408	\$2,204,193	\$1,818,249		
California.....	17	213	15	14	16	10	158	De 206	Mh 127	198	80	114	1	3	439,111	28,196	21,438		
Connecticut.....	4	37	5	1	.....	.....	31	De 39	Mh 25	39	17	20	1	1	25,396	2,000	.....		
Illinois.....	41	836	27	43	46	33	687	No 768	Mh 638	735	519	181	18	17	1,630,633	182,389	104,978		
Indiana.....	6	183	1	16	21	16	129	De 157	My 107	157	94	63	.....	.....	653,029	85,307	52,400		
Maryland.....	4	114	6	7	5	4	92	My 99	Mh 84	97	73	22	2	.....	154,270	11,820	17,562		
Massachusetts.....	51	677	37	36	32	27	545	De 644	Ap 498	647	319	293	19	16	1,266,265	99,796	84,414		
Michigan.....	14	225	11	24	8	9	173	Ap 192	Ja 145	187	117	70	.....	.....	728,781	89,895	22,428		
Minnesota.....	11	839	4	37	75	40	683	De 834	Mh 588	753	279	474	.....	.....	2,290,721	192,685	172,436		
Missouri.....	8	126	4	13	11	5	93	No 104	My 80	101	51	47	2	1	299,906	89,085	14,720		
New Jersey.....	28	1,055	25	43	42	15	930	De 1,007	Je 861	1,009	539	392	34	44	1,853,145	171,623	132,954		
New York.....	244	5,519	272	262	368	207	4,410	No 5,120	Fe 3,822	5,084	3,544	1,509	21	10	20,992,529	1,084,022	1,014,407		
Ohio.....	13	187	11	15	14	11	136	De 159	Je 113	151	80	70	.....	1	470,039	40,578	18,246		
Oregon.....	6	22	4	1	2	1	14	De 17	My 11	17	10	7	.....	.....	44,378	1,000	3,875		
Pennsylvania.....	33	947	43	31	75	42	753	Oc 815	Ja 670	792	358	303	25	46	2,256,440	149,171	150,032		
Rhode Island.....	4	29	3	2	1	1	22	Se 29	Ap 15	29	12	15	.....	2	13,945	1,876	700		
Washington.....	3	11	3	2	.....	.....	6	De 7	Ja 4	7	1	6	.....	.....	23,400	4,800	.....		
Wisconsin.....	6	20	8	.....	.....	.....	12	De 13	Ap 11	13	11	2	.....	.....	26,373	.....	.....		
All other states <sup>2</sup> .....	10	101	9	13	2	6	71	Je 84	Fe 57	60	26	31	.....	3	170,068	19,950	6,759		

STATE.	EXPENSES—continued.						Value of products.	Value added by manufacture.	POWER.					Electric horsepower generated in establishments reporting.
	Salaries and wages—Continued.	For contract work.	Rent and taxes.		For materials.				Primary horsepower.					
			Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.	Total.			Owned.			Rented. <sup>1</sup>		
									Rent of factory.	Water power. <sup>3</sup>	Steam engines (not turbines).		Internal-combustion engines.	
Wages. earners.														
United States....	\$9,415,403	\$400,120	\$618,185	\$548,386	\$29,856,000	\$178,937	\$52,952,772	\$22,917,235	3,002	696	217	20	2,963	180
California.....	137,102	50	15,036	2,164	330,950	1,916	679,927	347,061	58	.....	.....	.....	58	.....
Connecticut.....	25,016	.....	540	234	54,406	611	105,993	51,070	6	.....	.....	.....	5	.....
Illinois.....	652,853	312	47,361	44,977	2,252,890	25,318	3,921,630	1,643,422	523	175	.....	.....	348	1
Indiana.....	124,012	8,908	9,682	54,004	823,822	6,393	1,300,832	466,617	134	.....	.....	.....	134	.....
Maryland.....	63,848	1,145	2,870	664	153,228	1,381	339,837	185,228	28	20	.....	.....	8	.....
Massachusetts.....	417,345	12,448	32,351	13,384	1,113,942	16,149	2,062,710	932,610	396	94	.....	14	288	.....
Michigan.....	133,679	.....	11,380	14,694	824,188	5,479	1,258,893	429,226	132	.....	42	.....	90	.....
Minnesota.....	623,561	.....	22,614	91,441	2,544,679	12,667	4,052,079	1,494,633	194	.....	12	.....	182	.....
Missouri.....	81,634	.....	6,152	8,374	337,603	5,288	674,096	232,105	419	.....	.....	.....	419	.....
New Jersey.....	913,172	5,673	14,199	48,631	1,641,648	16,764	3,572,545	1,914,133	416	250	65	.....	101	150
New York.....	5,424,854	430,732	417,384	214,935	17,173,346	60,819	30,322,284	13,088,119	1,025	.....	34	10	981	.....
Ohio.....	104,387	1,000	8,469	8,111	607,950	4,369	992,124	380,706	156	.....	8	.....	148	.....
Oregon.....	15,120	.....	2,280	478	36,327	1,602	68,977	31,048	12	.....	.....	.....	12	.....
Pennsylvania.....	631,137	43	19,986	48,013	1,684,446	17,503	3,257,715	1,555,766	359	157	50	.....	152	29
Rhode Island.....	14,741	.....	1,419	134	19,233	737	47,855	27,885	12	.....	6	.....	6	.....
Washington.....	5,454	.....	1,526	190	26,135	122	41,996	15,739	4	.....	.....	.....	4	.....
Wisconsin.....	9,393	95	726	176	68,531	578	84,479	15,370	4	.....	.....	.....	4	.....
All other states <sup>2</sup> .....	37,796	8,714	4,230	2,782	159,167	2,451	267,900	106,282	25	.....	.....	2	23	.....

<sup>1</sup> Same number reported for one or more other months.<sup>2</sup> All other states embrace: Colorado, 2 establishments; Georgia, 4; Louisiana, 1; New Hampshire, 2; Texas, 1.<sup>3</sup> Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).<sup>4</sup> Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).