DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

WASHINGTON

FOURTEENTH CENSUS OF THE UNITED STATES

MANUFACTURES: 1919

NEEDLES, PINS, AND HOOKS AND EYES

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EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census did not cover establishments which were idle during the entire year or for which products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1919, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city, county, or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city, county, or state in which it was located. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products different from those covered by the class designation, and, on the other hand, may not represent the total product covered by this designation, because some products of this class may be made in establishments in which it is not the product of chief value.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1919 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the manufacturing industries were distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners.

The number of persons engaged in each industry, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where this date did not portray such conditions, an earlier date was requested.

In the case of employees other than wage earners the number thus reported for the representative date has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, by sex, without distinction of age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given in certain tables for each separate industry, is not totaled for all industries combined, because, in view of the variations of date, such a total is not believed to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation.

In order to determine as nearly as possible the age distribution of the average number of wage earners for an industry, the per cent distribution by age of the wage earners for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. The percentages thus obtained have been applied to the average number of wage earners for the year to determine the average numbers 16 years and over, and under 16, employed.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number of wage earners fluctuates from month to month in every industry, and in some cases to a very great extent. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month, and while representing the number according to the pay rolls to whom wages were paid on that date, no doubt represent a larger number than would be required to perform the work in any industry if all were continuously employed during the year.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a few wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital (amount actually invested).—The instructions on the schedule for securing data relating to capital were as follows:

"The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises."

These instructions were identical with those employed at the censusus of 1914 and 1909. The data compiled in respect to capital, however, at both censuses, as well as at all preceding censuses of manufactures, have been so defective as to be of little value except as indicating general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include certain Federal taxes and state, county, and local taxes. Under "Federal taxes" there are included the internal revenue tax on manufactures (tobacco, beverages, etc.), excise taxes when included in values reported for products, corporation capital stock tax, and corporation income tax, but not the income tax for individuals and partners.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of depreciation or interest, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power equipment of the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, fuel oils, gasoline and other volatile oils, and gas, and represent the quantity used during the year. As only the principal kinds of fuel are shown, comparison as to the total cost of all fuel is impracticable.

NEEDLES, PINS, AND HOOKS AND EYES.

GENERAL STATISTICS.

General character of the industry.—This report presents statistics for the manufacture of (1) needles, which include knitting-machine needles, sewing-machine needles, and darning, canvas, and bag needles; (2) pins, including common or toilet pins, safety pins, and metal hairpins; (3) hooks and eyes, and snap fasteners.

Comparison with earlier censuses.—Table 1 summarizes the statistics of each census since 1889, with percentages of increase for each period. Increases are noticeable, at each succeeding census, in all items presented in the table. The large increases, however, from 1914 to 1919, in salaries and wages, cost of materials, and value of products are due largely to a general rise of prices and wages following the World War, and do not, therefore, fairly measure the growth of the industry for that period. A truer index of the conditions is found in the increases in the average number of wage earners and primary horsepower. The addition of the Federal income tax since 1914 will account for the increase in "Rent and taxes."

In addition to the total value of products for 1919, as reported in this table, needles, pins, and hooks and eyes, to the value of $1,613,849, were produced as subsidiary products by establishments engaged primarily in the manufacture of other products. The value of such manufactures, however, is not included in the total value of products shown for this industry.

States, ranked by value of products.—Connecticut, as shown by Table 2, was preeminently the leading state in 1919, as it has been for a number of preceding censuses. In 1919 this state, with 25 per cent of the number of establishments, reported 43.4 per cent of the total number of wage earners and 47.4 per cent of the total value of products. Massachusetts, second in importance, contributed 14.8 per cent and 14.3 per cent, respectively, of these two items. The industry is strongly centralized in New England, with a total value of products of $20,883,458, or 71.3 per cent of the total for the industry.

Persons engaged in the industry.—The classification, by sex, for 1919 was reported separately, but for 1914 and 1909 was obtained in the same manner as the distribution by age. The age classification of the average number of wage earners in Table 3 is an estimate obtained by the method described in the "Explanation of terms," page 2. Figures in detail will be found in Table 13.

Wage earners, by months.—As shown by Table 4 the number of wage earners employed in the industry month by month ranged from a maximum of 10,052 in December to a minimum of 8,823 in May, the minimum number being equivalent to 87.8 per cent of the maximum. This table also shows the predominance of female wage earners who represented 51.6 per cent of the total wage earners employed in the industry in 1919. Figures are given separately for all states reporting over 350 wage earners, and for a number of the states showing a large proportion of females. The number of males and females for the United States is also shown.

Average number of wage earners, by prevailing hours of labor per week, for states.—Table 5 shows a marked shortening of the working-day for the industry since 1914. In that year only 3.6 per cent were reported as employed less than 54 hours per week as against 53 per cent in 1919. In 1914 the "60" group constituted 14.3 per cent of the total wage earners, as compared with six-tenths of 1 per cent in 1919.

Size of establishments, by average number of wage earners, by states.—Analysis of Table 6 discloses the fact that 27 establishments, or 29.3 per cent of the total number in the industry, employed more than 100 wage earners each, a total of 7,664, or 82.5 per cent of the total wage earners in 1919.

Size of establishments, by value of products.—At the censuses of 1909 and 1914, establishments with products valued at "$100,000 to $1,000,000" constituted one group, but at the census of 1919 this group was subdivided into "$100,000 to $500,000" and "$500,000 to $1,000,000." The statistics in Table 7 show the degree of concentration of production in large establishments. In 1919 the groups "$500,000 to $1,000,000" and "$1,000,000 and over" included 15 establishments, or 16.3 per cent of the total number for the industry, employed 5,998 wage earners, or 64.6 per cent of the total average number, and reported products to the value of $20,064,491, or 68.4 per cent of the total value of products.

Character of ownership.—Table 8 emphasizes the predominance of the corporate form of ownership. Corporations owned 71.7 per cent of the total number of establishments for the industry in 1919, employed 94.1 per cent of the total average number of wage earners, and reported 95.1 per cent of the value of products. During the five-year period 1914 to 1919,

the average number of wage earners in corporations increased 3,514, or 67.1 per cent, and the value of products $20,110,470, or 259.1 per cent.

Number and horsepower of types of prime movers.—From 1914 to 1919, as shown by Table 9, there was an increase in the total horsepower for the industry of 3,654 horsepower, or 75.9 per cent, due largely to an increase of 2,687 horsepower, or 324.1 per cent, in rented power, since owned power increased only 967 horsepower, or 24.3 per cent, during the five-year period.

Fuel consumed.—Table 10 shows the principal kinds of fuel used for the industry in 1919 and 1914. In 1914 gasoline and other volatile oils were included in the total for fuel oils.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, 1899, AND 1889.

	1919	1914	1909	1904	1899	1889	PER CENT OF INCREASE.				
							1914–1919	1909–1914	1904–1909	1899–1904	1889–1899
Number of establishments	92	49	49	46	52	55	.....	.....	.....	.....	.....
Persons engaged	10,389	5,750	4,978	4,196	2,834	(1)	80.7	15.5	18.6	.....	.....
Proprietors and firm members	39	20	27	31	46	(1)	.....	.....	.....	.....	.....
Salaried employees	1,056	391	313	200	135	96	170.1	24.9	56.5	48.1	40.6
Wage earners (average number)	9,294	5,339	4,638	3,965	2,653	1,827	74.1	15.1	17.0	49.5	45.2
Primary horsepower	8,467	4,813	4,542	2,440	2,103	1,183	75.9	6.0	86.1	16.0	77.8
Capital	$26,324,627	$9,424,203	$6,705,118	$5,331,939	$4,617,552	$2,269,707	179.3	40.6	25.8	15.5	103.4
Salaries and wages	11,316,031	3,104,749	2,457,728	1,848,741	1,214,571	876,446	264.5	26.3	32.9	52.2	38.6
Salaries	2,506,250	598,138	393,350	252,818	147,207	120,891	319.0	52.1	55.6	71.7	21.8
Wages	8,809,781	2,506,611	2,064,378	1,595,923	1,067,364	755,555	251.5	21.4	29.4	49.5	41.3
Paid for contract work	206,216	40,571	35,779	.....	1,594	(1)	408.3	13.4	.....	.....	.....
Rent and taxes	1,781,687	222,374	166,712	[2] 142,788	104,734	(1)	701.2	33.4	16.8	.....	.....
Cost of materials	10,227,199	3,241,657	2,328,674	1,583,644	1,227,997	776,057	215.5	39.2	47.0	29.0	58.2
Value of products	29,304,995	7,890,879	6,694,095	4,750,589	3,237,982	2,109,469	271.4	17.9	40.9	46.7	53.5
Value added by manufacture [3]	19,077,796	4,649,222	4,365,421	3,166,945	2,009,985	1,333,412	310.3	6.5	37.8	57.6	50.7

[1] Figures not available. [2] Exclusive of internal revenue. [3] Value of products less cost of materials.

TABLE 2.—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	92	9,294	100.0	...	$29,305	100.0	...	$19,078	100.0	..
Connecticut	23	4,037	43.4	1	13,904	47.4	1	8,287	43.4	1
Massachusetts	7	1,375	14.8	2	4,194	14.3	2	2,995	15.7	2
Illinois	3	351	3.8	7	1,941	6.6	3	1,185	6.2	4
Pennsylvania	8	739	8.0	4	1,724	5.9	4	1,123	5.9	5
New Hampshire	9	983	10.6	3	$1,705	5.8	5	$1,550	8.1	3
New York	19	497	5.3	5	1,664	5.7	6	1,016	5.3	6
New Jersey	10	418	4.5	6	1,204	4.1	7	724	3.8	7
Michigan	3	142	1.5	11	668	2.3	8	547	2.9	8
All other states	10	752	8.1	...	2,301	7.9	...	1,651	8.7	..

TABLE 3.—PERSONS ENGAGED IN THE INDUSTRY: 1919, 1914, AND 1909.

CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL.	
					Male.	Female.
All classes	1919	10,389	5,220	5,169	50.2	49.8
	1914	5,750	2,928	2,822	50.9	49.1
	1909	4,978	2,553	2,425	51.3	48.7
Proprietors and officials	1919	432	422	10	97.7	2.3
	1914	135	133	2	98.5	1.5
	1909	136	131	5	96.3	3.7
Proprietors and firm members	1919	39	38	1	97.4	2.6
	1914	20	19	1	95.0	5.0
	1909	27	26	1	96.3	3.7
Salaried officers of corporations	1919	119	118	1	99.2	0.8
	1914	55	54	1	98.2	1.8
	1909	46	44	2	95.7	4.3
Superintendents and managers	1919	274	266	8	97.1	2.9
	1914	60	60	.....	100.0	.....
	1909	63	61	2	96.8	3.2
Clerks and other subordinate salaried employees.	1919	663	299	364	45.1	54.9
	1914	276	154	122	55.8	44.2
	1909	204	123	81	60.3	39.7
Wage earners (average number)	1919	9,294	4,499	4,795	48.4	51.6
	1914	5,339	2,641	2,698	49.5	50.5
	1909	4,638	2,299	2,339	49.6	50.4
16 years of age and over	1919	8,893	4,387	4,506	49.3	50.7
	1914	5,086	2,562	2,524	50.4	49.6
	1909	4,282	2,117	2,165	49.4	50.6
Under 16 years of age	1919	401	112	289	27.9	72.1
	1914	253	79	174	31.2	68.8
	1909	356	182	174	51.1	48.9

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR STATES: 1919.

[The 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	9,294	9,008	8,994	8,949	8,824	*8,823*	8,925	9,314	9,587	9,525	9,692	9,835	**10,052**	87.8
Males	4,499	4,301	*4,230*	4,241	4,244	4,256	4,381	4,429	4,581	4,702	4,769	4,875	**4,979**	85.0
Females	4,795	4,707	4,764	4,708	4,580	4,567	*4,544*	4,885	5,006	4,823	4,923	4,960	**5,073**	89.6
1914	5,339	5,497	5,474	5,445	5,421	5,405	5,268	5,318	*5,199*	5,288	5,279	5,258	**5,216**	94.6
1909	4,638	*4,370*	4,424	4,567	4,668	4,704	4,604	4,496	4,652	4,702	4,759	4,789	**4,921**	88.8
Connecticut	4,037	3,941	3,959	4,054	3,971	*3,929*	3,981	4,009	4,086	4,093	4,094	4,144	**4,183**	93.9
Illinois	351	340	356	345	354	349	340	344	339	*338*	348	381	**378**	88.7
Massachusetts	1,375	1,360	1,268	*1,217*	1,223	1,288	1,299	1,305	1,396	1,455	1,489	1,542	**1,858**	73.4
New Hampshire	983	983	931	924	*915*	940	933	962	1,010	994	1,043	1,077	**1,086**	84.1
New Jersey	418	504	484	429	390	*361*	367	386	420	418	418	412	**427**	71.6
New York	497	467	482	492	*443*	445	475	535	521	512	509	532	**551**	80.4
Pennsylvania	739	*612*	729	695	715	646	650	875	893	751	820	752	**730**	68.5
States showing large proportion of females.														Per ct. av. is of state.
Connecticut	1,797	*1,723*	1,762	1,835	1,793	1,765	1,781	1,834	1,866	1,842	1,806	1,785	1,772	44.5
Illinois	250	243	264	249	259	250	239	242	239	*238*	239	271	267	71.2
Massachusetts	751	813	732	680	*677*	736	718	695	736	751	774	819	881	54.6
New Hampshire	575	584	538	523	*508*	547	547	565	601	581	618	639	649	58.5
New Jersey	242	300	295	255	231	*207*	215	233	257	236	229	218	228	57.9
New York	244	246	254	276	219	219	*218*	260	256	241	225	243	273	49.1
Pennsylvania	556	463	581	552	556	473	*452*	672	672	535	619	550	547	75.2

TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR 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.[1]	Between 48 and 54.	54.	Between 54 and 60.	60.
United States	1919	9,294	837	104	1,372	2,612	324	3,992	53
	1914	5,339	(2)	(2)	20	171	1,178	3,206	764
	1909	4,638	(2)	(2)	24	35	423	1,815	2,341
Connecticut	1919	4,037	.....	.....	.....	115	124	3,765	33
	1914	3,068	.....	.....	.....	127	.....	2,189	752
Illinois [3]	1919	351	.....	104	.....	247	.....	.....	.....
Massachusetts	1919	1,375	812	.....	129	434	.....	.....	.....
	1914	535	.....	.....	.....	.....	535	.....	.....
New Hampshire	1919	983	.....	.....	840	.....	97	46	.....
	1914	366	.....	.....	.....	.....	.....	366	.....
New Jersey	1919	418	.....	.....	25	243	.....	150	.....
	1914	515	(2)	(2)	1	.....	.....	514	.....
New York	1919	497	19	.....	57	406	1	14	.....
	1914	230	.....	.....	.....	28	202	.....	.....
Pennsylvania [3]	1919	739	2	.....	78	592	53	14	.....

[1] Includes 48 and under for 1914 and 1909. [2] Corresponding figures not available. [3] Figures not available for 1914.

TABLE 6.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR 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	92	9,294	4	14	34	20	268	17	636	10	692	20	3,014	3	1,245	3	2,107	1	1,298
1914	49	5,339	.....	8	22	12	158	9	297	7	500	7	1,054	3	977	3	2,331	.....	.....
Connecticut	23	4,037	.....	3	6	4	56	4	130	5	352	4	670	.....	.....	2	1,525	1	1,298
Illinois	3	351	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	351	.....	.....	.....	.....	.....	.....
Massachusetts	7	1,375	.....	1	1	2	24	.....	.....	.....	.....	1	105	3	1,245	.....	.....	.....	.....
New Hampshire	9	983	.....	1	2	.....	.....	2	85	1	97	5	799	.....	.....	.....	.....	.....	.....
New Jersey	10	418	1	1	2	5	69	1	38	.....	.....	2	309	.....	.....	.....	.....	.....	.....
New York	19	497	1	5	15	6	75	5	182	.....	.....	2	225	.....	.....	.....	.....	.....	.....
Pennsylvania	8	739	1	1	2	2	24	2	78	1	53	.....	.....	.....	.....	1	582	.....	.....

TABLE 7.—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	92	49	49	9,294	5,339	4,638	$29,304,995	$7,890,879	$6,694,095	$19,077,796	$4,649,222	$4,365,421
Less than $5,000	8	6	10	12	19	31	15,473	17,082	28,675	8,832	12,608	23,096
$5,000 to $20,000	14	10	13	72	107	123	151,922	125,690	145,800	94,910	94,250	106,188
$20,000 to $100,000	23	17	14	541	706	729	1,221,526	790,821	641,960	763,251	557,099	529,217
$100,000 to $500,000	32	15	12	2,671	[1] 4,507	3,755	7,851,583	[1] 6,957,286	5,877,660	5,555,766	[1] 3,985,265	3,706,930
$500,000 to $1,000,000	8	1	.....	1,596	.....	.....	5,491,630	.....	.....	3,771,006	.....	.....
$1,000,000 and over	7	.....	.....	4,402	.....	.....	14,572,861	.....	.....	8,884,031	.....	.....
	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	8.7	12.2	20.4	0.1	0.4	0.7	0.1	0.2	0.4	0.1	0.3	0.5
$5,000 to $20,000	15.2	20.4	26.5	0.8	2.0	2.7	0.5	1.6	2.2	0.5	2.0	2.4
$20,000 to $100,000	25.0	34.7	28.6	5.8	13.2	15.7	4.2	10.0	9.6	4.0	12.0	12.1
$100,000 to $500,000	34.8	30.7	24.5	28.7	84.4	81.0	26.8	88.2	87.8	29.1	85.7	84.9
$500,000 to $1,000,000	8.7	2.0	.....	17.2	.....	.....	18.7	.....	.....	19.8	.....	.....
$1,000,000 and over	7.6	.....	.....	47.4	.....	.....	49.7	.....	.....	46.6	.....	.....

[1] Includes the group "$500,000 to $1,000,000."

TABLE 8.—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.
All classes	1919	92	9,294	$29,304,995	$19,077,796
	1914	49	5,339	7,890,879	4,649,222
Individual	1919	16	436	1,203,319	757,001
	1914	4	23	24,019	19,279
Corporation	1919	66	8,749	27,871,058	18,167,552
	1914	39	5,235	7,760,588	4,550,623
All other	1919	10	109	230,618	153,243
	1914	6	81	106,272	79,320
Per cent distribution:					
Individual	1919	17.4	4.7	4.1	4.0
	1914	8.2	0.4	0.3	0.4
Corporation	1919	71.7	94.1	95.1	95.2
	1914	79.6	98.1	98.3	97.9
All other	1919	10.9	1.2	0.8	0.8
	1914	12.2	1.5	1.3	1.7

TABLE 9.—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	758	298	179	8,467	4,813	4,542	100.0	100.0	100.0
Owned	43	37	40	4,951	3,984	3,644	58.5	82.8	80.2
Steam	28	26	27	4,125	3,359	3,102	48.7	69.8	68.3
Engines	25	(1)	(1)	3,492	(1)	(1)	41.2	(1)	(1)
Turbines	3			633			7.5		
Internal-combustion engines	1	1	4	4	5	112	(2)	0.1	2.5
Water wheels and turbines	14	10	9	822	620	430	9.7	12.9	9.5
Rented	715	261	139	3,516	829	898	41.5	17.2	19.8
Electric	715	261	139	3,472	799	860	41.0	16.6	18.9
Other	.....	.....	.....	44	30	38	0.5	0.6	0.8
Electric	931	393	197	5,903	2,447	1,667	100.0	100.0	100.0
Rented	715	261	139	3,472	799	860	58.8	32.7	51.6
Generated by establishments reporting	216	132	58	2,431	1,648	807	41.2	67.3	48.4

[1] Not reported separately.

[2] Less than one-tenth of 1 per cent.

TABLE 10.—FUEL CONSUMED: 1919 AND 1914.

FUEL.	QUANTITY.		FUEL.	QUANTITY.	
	1919	1914		1919	1914
Coal	25,813	19,608	Fuel oils ... barrels	1,693	1,139
Anthracite ... tons 2,240 lbs	4,420	4,630	Gasoline and other volatile oils ... barrels	652	(1)
Bituminous ... tons 2,000 lbs	21,393	14,978	Gas ... 1,000 cubic feet	26,790	7,627
Coke ... tons 2,000 lbs	16	46			

[1] Included in figures for fuel oils.

SPECIAL STATISTICS.

Detailed statistics of quantity and value.—Table 11 gives detailed statistics for the quantities and values of the different varieties of products for the industry as reported at the censuses of 1919, 1914, 1904, and 1899. Statistics of this character were not called for at the census of 1909.

The production of needles in the United States, consisting almost entirely of knitting-machine and sewing-machine needles, amounted to 264,060 thousands in 1919, valued at $6,015,839. Of this amount, 163,906 thousands, or 62.1 per cent, were knitting-machine needles, valued at $4,186,327.

Common or toilet pins were reported in pounds and packs at the censuses of 1919 and 1914, but by the gross at previous censuses; therefore no comparison can be made to show the increased quantity, but the value increased 499.2 per cent during the period from 1899 to 1919.

Of the 92 establishments reported in 1919, 25 manufactured knitting-machine needles; 2, sewing-machine needles; 11, common or toilet pins; 10, metal hairpins; 10, safety pins; 12, hooks and eyes; and 38, snap fasteners and clasps.

Connecticut reported $13,904,286, or 47.4 per cent, of the total value of all products manufactured in 1919; $2,260,239, or 81 per cent, of the common or toilet pins; $486,849, or 32.9 per cent, of the metal hairpins; and $347,239, or 41.7 per cent, of the hooks and eyes. The 9 establishments in New Hampshire practically confine their operations to the production of knitting-machine needles, in which it is the leading state, reporting a product in 1919 to the value of $1,639,088, or 39.2 per cent of the United States total. Connecticut ranks second in this variety of product, and was also the leading state in the production of safety pins.

In 1919 "All other products" included eyelets, paper boxes, hook and eye tape, paper clips, laundry pins, brass goods, piano and player hardware, metal hose supporter trimmings, and machinery of various kinds for use in the industry.

TABLE 11.—DETAILED STATISTICS OF QUANTITY AND VALUE: 1919, 1914, 1904, AND 1899.

	1919	1914	1904	1899
Products, total value [1]	$29,304,995	$7,890,879	$4,750,589	$3,237,982
Needles:				
Total thousands	264,060	168,734	204,505	161,356
Total value	$6,015,839	$1,278,444	$1,140,924	$1,027,949
Knitting-machine—				
Latch—				
Thousands	121,184	46,165	44,762	39,764
Value	$3,845,431	$492,387	$422,655	$414,504
Spring—				
Thousands	42,722	47,934	47,921	44,246
Value	$340,896	$129,397	$118,223	$114,660
All other needles, including sewing-machine—				
Thousands	100,154	74,635	111,822	77,346
Value	$1,829,512	$656,660	$600,046	$498,785
Pins:				
Common or toilet—				
Total quantity	(2)	(2)	[3] 132,632,232	[3] 47,338,429
Total value	$2,789,735	$1,248,757		
Made of steel wire—				
Pounds	2,798,633	641,121		
Value	$1,120,823	$163,907		
Packs of 3,360	1,342,119	1,825,673		
Value	$400,379	$182,585	$1,129,006	$465,605
Made of brass wire—				
Pounds	740,797	1,186,397		
Value	$617,017	$375,780		
Packs of 3,600	1,089,307	1,638,035		
Value	$651,516	$526,485		
Hairpins, made of metal—				
Gross	24,310,433	9,242,012	1,704,900	1,189,104
Value	$1,480,992	$528,362	$109,245	$78,155
Safety pins—				
Gross	8,427,719	4,744,303	2,550,650	1,640,284
Value	$2,977,498	$936,663	$829,386	$354,294
Hooks and eyes:				
Great gross	745,819	1,076,177		
Value	$833,321	$1,394,745		
Made of steel wire—				
Great gross	582,647	654,714	(4)	(4)
Value	$654,321	$761,476		
Made of brass wire—				
Great gross	163,172	421,463		
Value	$179,000	$633,269		
Snap fasteners and clasps: [5]				
Great gross	2,122,541			
Value	$7,438,551			
Made of iron and steel—				
Great gross	1,080,276	(6)	(6)	(6)
Value	$4,700,846			
Made of other metals—				
Great gross	1,042,265			
Value	$2,737,705			
All other products, value	$7,769,059	$2,503,908	$1,542,028	$1,311,979

[1] In addition, needles, pins, and hooks and eyes, to the value of $1,613,849 in 1919; $1,155,144 in 1914; $942,506 in 1904; and $536,742 in 1899; were produced as subsidiary products by establishments engaged primarily in the manufacture of other products.
[2] Reported in pounds and packs of 3,360 and 3,600 in 1919 and 1914.
[3] Reported in gross in 1904 and 1899.
[4] Included in "All other products" in 1904 and 1899.
[5] In addition, 428,775 great gross of snap fasteners and clasps, valued at $556,654, were manufactured in the button and other industries in 1919.
[6] Included in "All other products" in 1914, 1904, and 1899.

GENERAL TABLES.

Comparative summary, by states.—Table 12 gives, 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 for the industry.

Detailed statement, by states.—Table 13 presents, for 1919, statistics in detail for the industry as a whole, and for each state that can be shown separately without the possibility of disclosing the operations of individual establishments.

TABLE 12.—COMPARATIVE SUMMARY, BY STATES: 1919, 1914, AND 1909.

STATE.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
United States	1919	92	9,294	8,467	$8,810	$10,227	$29,305
	1914	49	5,339	4,813	2,507	3,242	7,891
	1909	49	4,638	4,542	2,004	2,329	6,694
Connecticut	1919	23	4,037	4,355	4,209	5,617	13,904
	1914	12	3,068	3,235	1,548	2,339	5,109
	1909	8	2,648	3,190	1,311	1,697	4,236
Massachusetts	1919	7	1,375	980	1,337	1,199	4,194
	1914	4	535	390	268	190	577
New Hampshire	1919	9	983	459	824	155	1,705
	1914	6	366	247	159	47	260
	1909	7	438	217	171	38	275
New Jersey	1919	10	418	571	$351	$480	$1,204
	1914	7	515	329	215	201	597
	1909	7	557	524	230	184	620
New York	1919	19	497	620	420	648	1,664
	1914	6	230	187	92	102	307
	1909	9	133	157	50	93	290
All other states	1919	24	1,984	1,482	1,669	2,128	6,634
	1914	14	625	425	225	363	1,041
	1909	18	862	454	302	317	1,273

TABLE 13.—DETAILED STATEMENT FOR THE INDUSTRY, BY STATES: 1919.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS, DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.	EXPENSES.		
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.			Salaries and wages.		
					Male	Female	Average number.	Number, 15th day of— Maximum month.	Number, 15th day of— Minimum month.		Male.	Female.	Male	Female		Officials.	Clerks, etc.	Wage earners.
United States	92	10,389	30	393	299	364	9,294	De 10,052	My 8,823	9,839	4,670	4,746	119	304	$26,324,627	$1,626,083	$880,167	$8,809,781
Connecticut	23	4,542	11	196	109	189	4,037	De 4,183	My 3,929	4,250	2,428	1,616	66	140	11,604,691	580,014	382,075	4,208,987
Illinois	3	465	....	20	57	37	351	No 381	Se 338	382	108	195	7	72	1,263,708	223,075	159,092	284,358
Massachusetts	7	1,492	1	42	34	40	1,375	De 1,658	Mh 1,217	1,370	482	856	13	19	4,337,347	257,568	61,191	1,337,310
Michigan	3	162	....	11	2	7	142	De 158	Ap 130	148	90	58	.....	.....	440,871	74,797	12,347	135,863
New Hampshire	9	1,021	4	17	7	10	983	De 1,086	Ap 913	1,092	435	649	4	4	1,189,174	53,304	20,595	823,628
New Jersey	10	463	5	14	11	15	418	Ja 504	My 361	428	194	210	5	19	1,044,413	48,288	26,921	350,530
New York	19	574	9	42	13	13	497	De 551	Ap 443	558	279	274	3	2	1,694,810	127,883	36,207	420,488
Pennsylvania	8	824	3	20	37	25	739	Au 893	Ja 612	730	176	534	7	13	2,625,047	95,812	79,105	533,644
All other states [1]	10	846	6	31	29	28	752	.....	.....	881	478	354	14	35	2,124,566	165,342	102,634	714,973

STATE.	EXPENSES—continued.					Value of products.	Value added by manufacture.	POWER.						
	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.[2]	Rented.[3]	
United States	$206,216	$96,224	$1,685,463	$9,826,308	$400,891	$29,304,995	$19,077,796	8,467	3,492	633	4	822	3,516	2,431
Connecticut	57,699	9,870	709,221	5,395,552	221,891	13,904,286	8,286,843	4,355	2,416	350	.....	655	934	1,615
Illinois	.....	10,969	49,937	738,352	18,067	1,941,030	1,184,611	193	.....	.....	.....	.....	193	.....
Massachusetts	1,521	10,744	281,573	1,143,054	55,764	4,194,263	2,995,445	980	50	.....	.....	.....	930	.....
Michigan	.....	650	47,621	112,089	8,744	667,935	547,102	204	35	.....	.....	.....	169	.....
New Hampshire	6,620	12,781	327,879	139,053	16,210	1,704,998	1,549,735	459	25	15	.....	160	259	.....
New Jersey	47,069	6,981	16,604	460,435	19,847	1,203,961	723,679	571	216	268	.....	.....	87	480
New York	62,271	21,557	109,539	625,354	22,784	1,663,745	1,015,607	620	325	.....	.....	.....	295	180
Pennsylvania	.....	4,755	31,310	588,940	12,657	1,724,194	1,122,597	250	150	.....	4	.....	96	156
All other states [1]	31,036	17,917	111,779	623,479	24,927	2,300,583	1,652,177	835	275	.....	.....	7	553	.....

[1] All other states embrace: Maryland, 1 establishment; Missouri, 1; Ohio, 2; Oregon, 1; Rhode Island, 4; Vermont, 1.
[2] Chiefly water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).
[3] Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

WASHINGTON

FOURTEENTH CENSUS OF THE UNITED STATES

MANUFACTURES: 1919

OILCLOTH AND LINOLEUM

Prepared under the supervision of EUGENE F. HARTLEY, Chief Statistician for Manufactures

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WASHINGTON

GOVERNMENT PRINTING OFFICE

1922

EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census did not cover establishments which were idle during the entire year or for which products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1919, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city, county, or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city, county, or state in which it was located. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products different from those covered by the class designation, and, on the other hand, may not represent the total product covered by this designation, because some products of this class may be made in establishments in which it is not the product of chief value.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1919 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the manufacturing industries were distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners.

The number of persons engaged in each industry, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where this date did not portray such conditions, an earlier date was requested.

In the case of employees other than wage earners the number thus reported for the representative date has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, by sex, without distinction of age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given in certain tables for each separate industry, is not totaled for all industries combined, because, in view of the variations of date, such a total is not believed to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation.

In order to determine as nearly as possible the age distribution of the average number of wage earners for an industry, the per cent distribution by age of the wage earners for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. The percentages thus obtained have been applied to the average number of wage earners for the year to determine the average numbers 16 years and over, and under 16, employed.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number of wage earners fluctuates from month to month in every industry, and in some cases to a very great extent. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month, and while representing the number according to the pay rolls to whom wages were paid on that date, no doubt represent a larger number than would be required to perform the work in any industry if all were continuously employed during the year.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a few wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital (amount actually invested).—The instructions on the schedule for securing data relating to capital were as follows:

"The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises."

These instructions were identical with those employed at the censusus of 1914 and 1909. The data compiled in respect to capital, however, at both censuses, as well as at all preceding censuses of manufactures, have been so defective as to be of little value except as indicating general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include certain Federal taxes and state, county, and local taxes. Under "Federal taxes" there are included the internal revenue tax on manufactures (tobacco, beverages, etc.), excise taxes when included in values reported for products, corporation capital stock tax, and corporation income tax, but not the income tax for individuals and partners.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of depreciation or interest, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power equipment of the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, fuel oils, gasoline and other volatile oils, and gas, and represent the quantity used during the year. As only the principal kinds of fuel are shown, comparison as to the total cost of all fuel is impracticable.

OILCLOTH AND LINOLEUM.

By Arthur J. Leck.

GENERAL STATISTICS.

General character of the industry.—Most oilcloth and linoleum are built on a textile foundation or backing, such as unbleached cotton sheeting, drill, duck, burlap, or felt. These foundation materials are not made within this industry but are purchased, so that the process of manufacture becomes one of mixing and applying the ingredients, much of which is done by the use of special machinery.

Summary for the industry.—The general developments in the oilcloth and linoleum industry, during the 20 years since 1899, are summarized in Table 1. The two main divisions of the industry—"oilcloth and linoleum, floor," and "oilcloth, enameled"—are here presented both separately and combined.

Persons engaged in the industry.—Table 2 shows for 1919, 1914, and 1909 the number of persons engaged in the industry distributed by class and sex, the wage earners being grouped according to age—"16 years of age and over," and "under 16 years of age."

Wage earners, by months.—Table 3 shows the fluctuation by months in the number of wage earners employed in the industry on the 15th of each month during the years 1919 and 1914 for the United States, and for 1919 by states.

Prevailing hours of labor.—The tendency of this industry toward fewer working hours per week is evidenced by the statistics presented in Table 4. The different schedules of time prevailing in the various states are also brought out by this table.

Size of establishments, by average number of wage earners.—The size of establishments for the combined industries as measured by the average number of wage earners is shown in Table 5 for the United States in 1919 and 1914, and by states in 1919.

Size of establishments, by value of products.—The decrease in the number of establishments having a small value of output and the increase in number having a large value is evidenced by the figures presented in Table 6. At the census of 1909 establishments ranging from $100,000 to $1,000,000 in value of product formed one group, while in 1914 and 1919 a division of this group was made in order to permit a more detailed analysis of the subject.

Character of ownership.—It is clearly shown in Table 7 that in 1919, 1914, and 1909 the corporate form of ownership predominated in the oilcloth and linoleum industry.

Number and horsepower of types of prime movers.—The various types of power used in 1919, 1914, and 1909 is shown in Table 8 for the industry as a whole and separately for the two branches, "oilcloth and linoleum, floor," and "oilcloth, enameled."

Fuel consumed.—Table 9 shows an increase from 1914 to 1919 in all kinds of fuel consumed with the exception of anthracite coal and manufactured gas.

Table 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

	Number or amount.					Per cent of increase.[1]			
	1919	1914	1909	1904	1899	1914–1919	1909–1914	1904–1909	1899–1904
Oilcloth and Linoleum.									
Number of establishments	32	31	31	27	27	.....	.....	.....	.....
Persons engaged	7,573	6,234	5,557	4,112	3,409	21.5	12.2	35.1	20.6
Proprietors and firm members	7	7	11	12	26	.....	.....	.....	.....
Salaried employees	1,022	576	345	217	153	77.4	67.0	59.0	41.8
Wage earners (average number)	6,544	5,651	5,201	3,883	3,230	15.8	8.7	33.9	20.2
Primary horsepower	28,010	22,272	16,125	10,112	7,561	25.8	38.1	59.5	33.7
Capital	$60,586,645	$28,041,178	$19,634,138	$13,803,232	$8,879,102	116.1	42.8	42.2	55.5
Salaries and wages	9,902,300	4,149,632	3,474,628	2,304,987	1,922,636	138.6	19.4	50.7	19.9
Salaries	2,183,334	936,317	649,083	361,230	294,523	133.2	44.3	79.7	22.6
Wages	7,718,966	3,213,315	2,825,545	1,943,757	1,628,113	140.2	13.7	45.4	19.4
Paid for contract work	15,798	.....	27,645	4,023	.....	.....	.....	.....	.....
Rent and taxes	2,361,313	114,805	74,449	[2] 49,369	[2] 38,004	1,956.8	54.2	50.8	29.9
Cost of materials	41,509,426	17,775,863	15,550,101	10,050,009	7,549,672	133.5	14.3	54.7	33.1
Value of products	68,110,081	25,598,361	23,339,022	14,792,246	11,402,620	166.1	9.7	57.8	29.7
Value added by manufacture [3]	26,600,655	7,822,498	7,788,921	4,742,237	3,852,948	240.1	0.4	64.2	23.1

[1] A minus sign (–) denotes decrease; percentages are omitted where base is less than 100. [2] Exclusive of internal revenue. [3] Value of products less cost of materials.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899—Continued.

	NUMBER OR AMOUNT.					PER CENT OF INCREASE.[1]			
	1919	1914	1909	1904	1899	1914-1919	1909-1914	1904-1909	1899-1904
OILCLOTH AND LINOLEUM, FLOOR.									
Number of establishments	21	18	19	16	18	.....	.....	.....	.....
Persons engaged	6,254	4,798	4,468	3,548	2,844	30.3	7.4	25.9	24.8
Proprietors and firm members	3	3	6	10	21	.....	.....	.....	.....
Salaried employees	837	367	237	183	105	128.1	54.8	29.5	74.3
Wage earners (average number)	5,414	4,428	4,225	3,355	2,718	22.3	4.8	25.9	23.4
Primary horsepower	23,509	18,782	14,158	8,703	6,421	25.2	32.7	62.7	35.5
Capital	$49,803,688	$20,202,210	$14,721,702	$10,108,107	$7,176,198	145.4	37.8	45.6	40.9
Salaries and wages	8,297,546	3,204,608	2,750,367	2,020,089	1,521,174	158.9	16.5	36.2	32.8
Salaries	1,779,457	600,240	440,963	300,151	193,939	196.5	36.1	46.9	54.8
Wages	6,518,089	2,604,368	2,309,404	1,719,938	1,327,235	150.3	12.8	34.3	29.6
Paid for contract work	8,298	.....	27,645	.....	.....	.....	.....	.....	.....
Rent and taxes	2,124,077	79,801	53,517	[2] 23,708	[2] 31,978	2,561.7	49.1	58.8	5.4
Cost of materials	30,368,703	11,251,876	10,145,316	6,779,263	4,853,260	169.9	10.9	49.7	39.7
Value of products	52,673,206	17,602,336	15,813,331	10,388,237	7,807,105	199.2	11.3	52.2	33.1
Value added by manufacture [3]	22,304,503	6,350,460	5,668,015	3,608,974	2,953,845	251.2	12.0	57.1	22.2
OILCLOTH, ENAMELED.									
Number of establishments	11	13	12	11	9	.....	.....	.....	.....
Persons engaged	1,319	1,436	1,089	564	565	−8.1	31.9	93.1	−0.2
Proprietors and firm members	4	4	5	2	5	.....	.....	.....	.....
Salaried employees	185	209	108	34	48	−11.5	93.5	217.6	−29.2
Wage earners (average number)	1,130	1,223	976	528	512	−7.6	25.3	84.9	3.1
Primary horsepower	4,501	3,490	1,967	1,409	1,140	29.0	77.4	39.6	23.6
Capital	$10,782,957	$7,748,968	$4,912,436	$3,695,125	$1,702,904	39.2	57.7	32.9	117.0
Salaries and wages	1,604,754	945,024	724,261	284,898	401,462	69.8	30.5	154.2	−29.0
Salaries	403,877	336,077	208,120	61,079	100,584	20.2	61.5	240.7	−39.3
Wages	1,200,877	608,947	516,141	223,819	300,878	97.2	18.0	130.6	−25.6
Paid for contract work	7,500	.....	.....	4,023	.....	.....	.....	.....	.....
Rent and taxes	237,236	35,004	20,932	[2] 15,661	[2] 6,026	577.7	67.2	33.7	159.9
Cost of materials	11,140,723	6,523,987	5,404,785	3,270,746	2,696,412	70.8	20.7	65.2	21.3
Value of products	15,436,875	7,996,025	7,525,691	4,404,009	3,595,515	93.1	6.2	70.9	22.5
Value added by manufacture [3]	4,296,152	1,472,038	2,120,906	1,133,263	899,103	191.9	−30.6	87.2	26.0

[1] A minus sign (−) denotes decrease; percentages are omitted where base is less than 100. [2] Exclusive of internal revenue. [3] Value of products less cost of materials.

TABLE 2.—PERSONS ENGAGED IN THE INDUSTRY: 1919, 1914, AND 1909.

CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL. Male.	PER CENT OF TOTAL. Female.
OILCLOTH AND LINOLEUM	1919	7,573	6,915	658	91.3	8.7
	1914	6,234	5,946	288	95.4	4.6
	1909	5,557	5,344	213	96.2	3.8
Proprietors and officials	1919	261	260	1	99.6	0.4
	1914	132	132	.....	100.0	.....
	1909	111	110	1	99.1	0.9
Proprietors and firm members	1919	7	7	.....	100.0	.....
	1914	7	7	.....	100.0	.....
	1909	11	10	1	90.9	9.1
Salaried officers of corporations	1919	66	66	.....	100.0	.....
	1914	52	52	.....	100.0	.....
	1909	48	48	.....	100.0	.....
Superintendents and managers	1919	188	187	1	99.5	0.5
	1914	73	73	.....	100.0	.....
	1909	52	52	.....	100.0	.....
Clerks and other subordinate salaried employees.	1919	768	508	260	66.1	33.9
	1914	451	335	116	74.3	25.7
	1909	245	191	54	78.0	22.0
Wage earners (average number)	1919	6,544	6,147	397	93.9	6.1
	1914	5,651	5,479	172	97.0	3.0
	1909	5,201	5,043	158	97.0	3.0
16 years of age and over	1919	6,508	6,121	387	94.1	5.9
	1914	5,600	5,438	162	97.1	2.9
	1909	5,154	4,996	158	96.9	3.1
Under 16 years of age	1919	36	26	10	72.2	27.8
	1914	51	41	10	80.4	19.6
	1909	47	47	.....	100.0	.....
OILCLOTH AND LINOLEUM, FLOOR.	1919	6,254	5,738	516	91.7	8.3
	1914	4,798	4,645	153	96.8	3.2
	1909	4,468	4,331	137	96.9	3.1
Proprietors and officials	1919	200	200	.....	100.0	.....
	1914	85	85	.....	100.0	.....
	1909	82	81	1	98.8	1.2
Proprietors and firm members	1919	3	3	.....	100.0	.....
	1914	3	3	.....	100.0	.....
	1909	6	5	1	83.3	16.7
Salaried officers of corporations	1919	51	51	.....	100.0	.....
	1914	42	42	.....	100.0	.....
	1909	38	38	.....	100.0	.....
Superintendents and managers	1919	146	146	.....	100.0	.....
	1914	40	40	.....	100.0	.....
	1909	38	38	.....	100.0	.....
Clerks and other subordinate salaried employees.	1919	640	415	225	64.8	35.2
	1914	285	212	73	74.4	25.6
	1909	161	135	26	83.9	16.1
Wage earners (average number)	1919	5,414	5,123	291	94.6	5.4
	1914	4,428	4,348	80	98.2	1.8
	1909	4,225	4,115	110	97.4	2.6
16 years of age and over	1919	5,391	5,102	289	94.6	5.4
	1914	4,403	4,323	80	98.2	1.8
	1909	4,193	4,083	110	97.4	2.6
Under 16 years of age	1919	23	21	2	91.3	8.7
	1914	25	25	.....	100.0	.....
	1909	32	32	.....	100.0	.....
OILCLOTH, ENAMELED	1919	1,319	1,177	142	89.2	10.8
	1914	1,436	1,301	135	90.6	9.4
	1909	1,089	1,013	76	93.0	7.0
Proprietors and officials	1919	61	60	1	98.4	1.6
	1914	47	47	.....	100.0	.....
	1909	29	29	.....	100.0	.....
Proprietors and firm members	1919	4	4	.....	100.0	.....
	1914	4	4	.....	100.0	.....
	1909	5	5	.....	100.0	.....
Salaried officers of corporations	1919	15	15	.....	100.0	.....
	1914	10	10	.....	100.0	.....
	1909	10	10	.....	100.0	.....
Superintendents and managers	1919	42	41	1	97.6	2.4
	1914	33	33	.....	100.0	.....
	1909	14	14	.....	100.0	.....
Clerks and other subordinate salaried employees.	1919	128	93	35	72.7	27.3
	1914	166	123	43	74.1	25.9
	1909	84	56	28	66.7	33.3
Wage earners (average number)	1919	1,130	1,024	106	90.6	9.4
	1914	1,223	1,131	92	92.5	7.5
	1909	976	928	48	95.1	4.9
16 years of age and over	1919	1,117	1,019	98	91.2	8.8
	1914	1,197	1,115	82	93.1	6.9
	1909	961	913	48	95.0	5.0
Under 16 years of age	1919	13	5	8	38.5	61.5
	1914	26	16	10	61.5	38.5
	1909	15	15	.....	100.0	.....

TABLE 3.—WAGE EARNERS, BY MONTHS, FOR STATES: 1919.

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

INDUSTRY AND 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.	
OILCLOTH AND LINOLEUM.														
United States:														
1919	6,544	5,132	*4,945*	4,950	5,537	6,237	6,813	7,022	7,279	7,438	7,629	7,684	**7,862**	62.9
Males	6,147	4,838	*4,674*	*4,674*	5,240	5,872	6,395	6,558	6,818	6,963	7,159	7,202	**7,371**	63.4
Females	397	294	*271*	276	297	365	418	464	461	475	470	482	**491**	55.2
1914	5,651	**5,870**	5,859	5,859	5,774	5,727	5,736	*5,423*	5,449	5,525	5,619	5,446	5,525	92.4
1909	5,201	5,083	5,110	5,100	*5,057*	5,133	5,158	5,169	5,221	5,282	5,351	5,321	**5,435**	93.0
Massachusetts	342	260	*252*	263	286	344	345	370	392	381	**411**	401	399	61.3
New Jersey	2,393	*1,763*	1,774	1,904	1,998	2,205	2,468	2,585	2,642	2,739	2,809	2,851	**2,978**	59.2
Pennsylvania	2,549	2,048	1,891	*1,767*	2,183	2,535	2,705	2,728	2,837	2,918	2,950	2,996	**3,030**	58.3
OILCLOTH AND LINOLEUM, FLOOR.														
United States:														
1919	5,414	4,260	4,065	*4,030*	4,518	5,117	5,655	5,825	6,061	6,189	6,328	6,381	**6,539**	61.6
Males	5,123	4,048	3,876	*3,838*	4,321	4,857	5,337	5,481	5,715	5,829	5,979	6,022	**6,173**	62.2
Females	291	212	*189*	192	197	260	318	344	346	360	349	359	**366**	51.6
1914	4,428	**4,572**	4,556	4,564	4,499	4,503	4,528	4,267	4,263	4,359	4,431	*4,262*	4,332	93.2
1909	4,225	4,101	4,141	4,113	*4,092*	4,200	4,209	4,211	4,266	4,307	4,354	4,297	**4,414**	92.7
New Jersey	2,136	*1,544*	*1,544*	1,668	1,746	1,956	2,218	2,338	2,397	2,464	2,539	2,558	**2,660**	58.0
Pennsylvania	2,549	2,048	1,891	*1,767*	2,183	2,535	2,705	2,728	2,837	2,918	2,950	2,996	**3,030**	58.3
OILCLOTH, ENAMELED.														
United States:														
1919	1,130	*872*	880	920	1,019	1,120	1,158	1,197	1,218	1,249	1,301	1,303	**1,323**	65.9
Males	1,024	*790*	798	836	919	1,015	1,058	1,077	1,103	1,134	1,180	1,180	**1,198**	65.9
Females	106	*82*	*82*	84	100	105	100	120	115	115	121	123	**125**	65.6
1914	1,223	1,298	**1,303**	1,295	1,275	1,224	1,208	*1,156*	1,186	1,166	1,188	1,184	1,193	88.7
1909	976	982	969	987	965	*933*	949	958	955	975	997	**1,024**	1,021	91.1
Massachusetts	342	260	*252*	263	286	344	345	370	392	381	411	401	399	61.3
New Jersey	257	*219*	230	236	252	249	250	247	245	275	270	293	**318**	68.9

TABLE 4.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR 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.[1]	Between 48 and 54.	54.	Between 54 and 60.	60.
United States	1919	6,544	27	7	225	1,877	1,753	2,286	369
	1914	5,651	(2)	(2)	6	524	767	3,012	1,342
	1909	5,201	(2)	(2)	14	16	370	2,074	2,727
Massachusetts	1919	342	.....	.....	104	154	.....	84	.....
New Jersey	1919	2,393	27	7	121	1,059	502	677	.....
Pennsylvania	1919	2,549	.....	.....	.....	555	469	1,525	.....

[1] Includes 48 and under for 1914 and 1909.

[2] Corresponding figures not available.

TABLE 5.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR STATES: 1919.

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—															
			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 (average number).	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	32	6,544	.....	.....	4	53	5	162	5	422	10	1,354	4	1,580	3	1,969	1	1,004
1914	31	5,651	1	4	6	69	5	141	7	520	4	561	4	1,501	4	2,855	.....	.....
Massachusetts	4	342	.....	.....	.....	.....	1	22	1	84	2	236	.....	.....	.....	.....	.....	.....
New Jersey	14	2,393	.....	.....	1	7	3	105	1	74	7	970	1	324	1	913	.....	.....
Pennsylvania	5	2,549	.....	.....	1	20	.....	.....	.....	.....	.....	.....	1	469	2	1,056	1	1,004

TABLE 6.—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	32	31	31	6,544	5,651	5,201	$68,110,081	$25,598,361	$23,339,022	$26,600,655	$7,822,498	$7,788,921
Less than $100,000	.....	7	4	.....	92	49	.....	274,700	255,940	.....	83,446	(1)
$100,000 to $500,000	8	8	19	178	983	1,368	2,576,094	2,111,651	7,415,320	765,590	1,924,286	(1)
$500,000 to $1,000,000	4	7		389			2,778,863	4,818,870		887,797		(1)
$1,000,000 and over	20	9	8	5,977	4,576	3,784	62,755,124	18,393,140	15,667,753	24,947,268	5,814,766	(1)
	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	.....
Less than $100,000	.....	22.6	12.9	.....	1.6	0.9	.....	1.1	1.1	.....	1.1	.....
$100,000 to $500,000	25.0	25.8	61.3	2.7	17.4	26.3	3.8	8.2	31.8	2.9	24.6	.....
$500,000 to $1,000,000	12.5	22.6		6.0			4.1	18.8		3.3		.....
$1,000,000 and over	62.5	29.0	25.8	91.3	81.0	72.8	92.1	71.9	67.1	93.8	74.3	.....

[1] Figures not available.

TABLE 7.—CHARACTER OF OWNERSHIP: 1919.

CHARACTER OF OWNERSHIP.	Census year.	Number of establishments	WAGE EARNERS.		VALUE OF PRODUCTS.		CHARACTER OF OWNERSHIP.	Census year.	Number of establishments	WAGE EARNERS.		VALUE OF PRODUCTS.	
			Average number.	Per cent of total.	Amount.	Per cent of total.				Average number.	Per cent of total.	Amount.	Per cent of total.
All classes	1919	32	6,544	100.0	$68,110,081	100.0	Corporations	1919	28	6,340	96.9	$65,017,438	95.5
	1914	31	5,651	100.0	25,598,361	100.0		1914	27	5,491	97.2	24,487,014	95.7
	1909	31	5,201	100.0	23,339,022	100.0		1909	26	4,955	95.3	22,432,978	96.1
Individuals	1919	4	[1] 204	3.1	[1] 3,092,643	4.5							
	1914	4	[1] 160	2.8	[1] 1,111,347	4.3							
	1909	5	[1] 246	4.7	[1] 906,044	3.9							

[1] Includes two establishment in 1919 and 1914, and three in 1909 under "all others" to avoid disclosure of individual operations.

TABLE 8.—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
OILCLOTH AND LINOLEUM.									
Primary power, total	1,332	599	223	28,010	22,272	16,125	100.0	100.0	100.0
Owned	121	151	175	15,273	15,966	15,048	54.5	71.7	93.3
Steam [1]	120	148	174	15,271	15,486	15,046	54.5	69.5	93.3
Engines	115	(2)	(2)	13,530	(2)	(2)	48.3	.....	.....
Turbines	5	(2)	(2)	1,741	(2)	(2)	6.2	.....	.....
Internal-combustion engines	1	3	1	2	480	2	(3)	2.2	(3)
Rented	1,211	448	48	12,737	6,306	1,077	45.5	28.3	6.7
Electric	1,211	448	48	12,487	6,306	1,002	44.6	28.3	6.2
Other	.....	.....	.....	250	.....	75	0.9	.....	0.5
Electric	2,168	1,022	336	21,220	14,965	4,540	100.0	100.0	100.0
Rented	1,211	448	48	12,487	6,306	1,002	58.8	42.1	22.1
Generated by establishments reporting	957	574	288	8,733	8,659	3,538	41.2	57.9	77.9
OILCLOTH AND LINOLEUM, FLOOR.									
Primary power, total	886	438	175	23,509	18,782	14,158	100.0	100.0	100.0
Owned	113	124	142	14,323	13,521	13,333	60.9	72.0	94.2
Steam [1]	112	124	141	14,321	13,521	13,331	60.9	72.0	94.2
Engines	108	(2)	(2)	12,655	(2)	(2)	53.8	.....	.....
Turbines	4	(2)	(2)	1,666	(2)	(2)	7.1	.....	.....
Internal-combustion engines	1	.....	1	2	.....	2	(3)	.....	(3)
Rented	773	314	33	9,186	5,261	825	39.1	28.0	5.8
Electric	773	314	33	9,186	5,261	825	39.1	28.0	5.8
Electric	1,670	707	211	17,719	12,272	3,541	100.0	100.0	100.0
Rented	773	314	33	9,186	5,261	825	51.8	42.9	23.3
Generated by establishments reporting	897	393	178	8,533	7,011	2,716	48.2	57.1	76.7
OILCLOTH, ENAMELED.									
Primary power, total	446	161	48	4,501	3,490	1,967	100.0	100.0	100.0
Owned	8	27	33	950	2,445	1,715	21.1	70.1	87.2
Steam [1]	8	24	33	950	1,965	1,715	21.1	56.3	87.2
Engines	7	(2)	(2)	875	(2)	(2)	19.4	.....	.....
Turbines	1	(2)	(2)	75	(2)	(2)	1.7	.....	.....
Internal-combustion engines	.....	3	.....	.....	480	.....	.....	13.8	.....
Rented	438	134	15	3,551	1,045	252	78.9	29.9	12.8
Electric	438	134	15	3,301	1,045	177	73.3	29.9	9.0
Other	.....	.....	.....	250	.....	75	5.6	.....	3.8
Electric	498	315	125	3,501	2,693	999	100.0	100.0	100.0
Rented	438	134	15	3,301	1,045	177	94.3	38.8	17.7
Generated by establishments reporting	60	181	110	200	1,648	822	5.7	61.2	82.3

[1] Figures for horsepower include for 1909 the amounts reported under the head of "other" owned power.
[2] Not reported separately.
[3] Less than one-tenth of 1 per cent.

TABLE 9.—FUEL CONSUMED, BY STATES: 1919.

STATE.		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).	Bituminous (tons, 2,000 pounds).				
United States	1919	39,483	198,187	2,773	16,115	140	.....
	1914	43,673	176,825	625	828	(1)	1,215
Massachusetts		.....	6,720	.....	.....	.....	.....
New Jersey		20,663	77,543	1,263	.....	.....	.....
Pennsylvania		.....	86,306	1,458	7,440	140	.....
All other states		18,820	27,618	52	8,675	.....	.....

[1] Included with fuel oils in 1914.

SPECIAL STATISTICS.

The various kinds of products manufactured within the oilcloth and linoleum industry are accounted for in Table 10. Comparative quantities and values are given as far as possible for each product in 1909, 1914, and 1919, also the corresponding per cent of increase or decrease during the five-year period 1914–1919, and the 10-year period 1909–1919.

In 1919 there were 14 establishments in New Jersey, 5 in Pennsylvania, 4 in Massachusetts, 3 in Ohio, 2 in Maine, 2 in New York, 1 in Illinois, and 1 in Indiana.

The artificial leather shown in Table 10 was a subsidiary product of establishments engaged primarily in the manufacture of oilcloth and linoleum. In addition, 17 establishments in 1919 included in the classification "Upholstering materials, not elsewhere specified" reported the production of artificial leather valued at $26,281,966, compared with $6,097,293 reported by 10 establishments in 1914.

TABLE 10.—DETAILED STATISTICS ON QUANTITY AND VALUE: 1919, 1914, AND 1909.

PRODUCT.	1919	1914	1909	PER CENT OF INCREASE.[1] 1914–1919	PER CENT OF INCREASE.[1] 1909–1919
Total value	$68,110,081	$25,598,361	$23,339,022	166.1	191.8
Oilcloth (made on cotton back):					
Enameled—					
Square yards	8,460,738	18,357,097	17,338,440	−53.9	−51.2
Value	$3,421,188	$2,495,255	$2,265,146	37.1	51.0
Table, wall, shelf, and stair—					
Square yards	39,132,641	59,358,872	61,168,777	−34.1	−36.0
Value	$12,529,910	$9,025,348	$5,639,206	108.0	122.2
Linoleum (made on jute back):					
Linoleum, including cork carpet—					
Square yards	22,098,136	33,306,669	26,215,979	−33.7	−15.7
Value	$17,120,654	$10,043,436	$7,850,437	70.5	118.1
Inlaid linoleum—					
Square yards	9,834,332	8,479,202	4,460,275	16.0	120.5
Value	$10,336,391	$4,725,837	$2,994,491	118.7	245.2
Floor covering (made on felt back):					
Square yards	30,369,522	(2)	(2)	.....	.....
Value	$13,909,276	(2)	(2)	.....	.....
Artificial leather:					
Pyroxylin coated textiles—					
Square yards	3,332,085	(2)	(2)	.....	.....
Value	$3,922,558	(2)	(2)	.....	.....
All other—					
Square yards	10,300,416	(2)	(2)	.....	.....
Value	$4,821,190	(2)	(2)	.....	.....
All other products, value	$2,048,914	$2,308,485	$4,589,742	−11.2	−55.4

[1] A minus sign (−) denotes decrease.

[2] Not reported separately.

GENERAL TABLES.

Table 11 gives, 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 for the industry.

Table 12 presents, for 1919, statistics in detail for the industry as a whole, and for each state that can be shown separately without the possibility of disclosing the operations of individual establishments.

TABLE 11.—COMPARATIVE SUMMARY, BY STATES: 1919, 1914, AND 1909.

STATE.	Census year.	Number of establishments	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
United States	1919	32	6,544	28,010	$7,719	$41,509	$68,110
	1914	31	5,651	22,272	3,213	17,776	25,598
	1909	31	5,201	16,125	2,826	15,550	23,339
Massachusetts[1]	1919	4	342	1,361	325	4,341	5,747
	1909	3	220	375	118	1,211	1,704
New Jersey	1919	14	2,393	9,704	2,943	15,295	25,535
	1914	10	2,190	8,223	1,287	7,660	11,384
	1909	10	2,123	7,819	1,187	6,638	10,143
Pennsylvania[2]	1919	5	2,549	11,871	3,065	11,873	28,806
	1914	5	1,803	9,554	1,072	4,647	7,165
All other states	1919	9	1,200	5,074	1,386	10,000	8,022
	1914	16	1,658	4,495	854	5,469	7,049
	1909	18	2,858	7,931	1,521	7,701	11,492

[1] Not separately reported in 1914.

[2] Not separately reported in 1909.

TABLE 12.—DETAILED STATEMENT, BY STATES: 1919.

INDUSTRY AND STATE.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male	Under 16. Female	Capital.	EXPENSES. Salaries. Officials.	EXPENSES. Salaries. Clerks, etc.
OILCLOTH AND LINOLEUM.																	
United States	32	7,573	7	254	508	260	6,544	De 7,862	Fe 4,674	7,789	7,308	440	29	12	$60,586,645	$1,152,348	$1,030,986
Massachusetts	4	375	.....	20	7	6	342	Oc 411	Fe 252	399	331	54	4	10	2,691,690	84,258	30,484
New Jersey	14	2,739	5	95	168	78	2,393	De 2,978	Se 1,763	2,978	2,886	69	23	.....	24,119,752	462,180	313,316
Pennsylvania	5	3,016	.....	102	220	145	2,549	De 3,030	Mh 1,767	2,954	2,790	160	2	2	21,255,523	423,850	467,375
All other states	9	1,443	2	37	113	31	1,260	.....	.....	1,458	1,301	157	.....	.....	12,519,680	182,060	219,811
OILCLOTH AND LINOLEUM, FLOOR.																	
United States	21	6,254	3	197	415	225	5,414	De 6,539	Mh 4,030	6,463	6,113	325	23	2	49,803,688	922,871	856,586
New Jersey	10	2,419	1	71	143	68	2,136	De 2,660	Ja[1] 1,544	2,660	2,573	66	21	.....	21,287,275	400,951	285,178
Pennsylvania	5	3,016	.....	102	220	145	2,549	De 3,030	Mh 1,767	2,954	2,790	160	2	2	21,255,523	423,850	467,375
All other states [2]	6	819	2	24	52	12	729	.....	.....	849	750	99	.....	.....	7,260,890	98,070	104,033
OILCLOTH, ENAMELED.																	
United States	11	1,319	4	57	93	35	1,130	De 1,323	Ja 872	1,326	1,195	115	6	10	10,782,957	229,477	174,400
Massachusetts	4	375	.....	20	7	6	342	Oc 411	Fe 252	399	331	54	4	10	2,691,690	84,258	30,484
New Jersey	4	320	4	24	25	10	257	De 318	Ja 219	318	313	3	2	.....	2,832,477	61,229	28,138
All other states [3]	3	624	.....	13	61	19	531	.....	.....	609	551	58	.....	.....	5,258,790	83,990	115,778

INDUSTRY AND STATE.	EXPENSES—continued. Wages.	For contract work.	Rent and taxes. Rent of factory.	Rent and taxes. Taxes, Federal, state, county, and local.	For materials. Principal materials.	For materials. Fuel and rent of power.	Value of products.	Value added by manufacture.	POWER. Primary horsepower. Total.	Owned. Steam engines (not turbines).	Owned. Steam turbines.	Owned. Internal-combustion engines.	Rented.[4]	Electric horsepower generated in establishments reporting.
OILCLOTH AND LINOLEUM.														
United States	$7,718,966	$15,798	$8,321	$2,352,992	$39,892,145	$1,617,281	$68,110,081	$26,600,655	28,010	13,530	1,741	2	12,737	8,733
Massachusetts	324,758	7,500	.....	41,121	4,278,999	62,495	5,746,839	1,405,345	1,361	540	.....	.....	821	.....
New Jersey	2,942,921	8,298	.....	1,350,049	14,712,001	582,881	25,534,739	10,239,862	9,704	5,640	1,375	.....	2,689	3,308
Pennsylvania	3,064,992	.....	321	799,659	11,352,980	520,194	28,805,611	10,932,437	11,871	5,180	366	2	6,323	4,820
All other states	1,386,295	.....	8,000	162,163	9,548,165	451,711	8,022,892	4,023,011	5,074	2,170	.....	.....	2,904	605
OILCLOTH AND LINOLEUM, FLOOR.														
United States	6,518,089	8,298	321	2,123,756	29,020,819	1,347,884	52,673,206	22,304,503	23,509	12,655	1,666	2	9,186	8 533
New Jersey	2,655,789	8,298	.....	1,224,144	12,244,798	539,193	21,688,734	8,904,743	8,844	5,480	1,300	.....	2,064	3,108
Pennsylvania	3,064,992	.....	321	799,659	11,352,980	520,194	28,805,611	10,932,437	11,871	5,180	366	2	6,323	4,820
All other states [2]	797,308	.....	.....	99,953	5,423,041	288,497	2,178,861	2,467,323	2,794	1,995	.....	.....	799	605
OILCLOTH, ENAMELED.														
United States	1,200,877	7,500	8,000	229,236	10,871,326	269,397	15,436,875	4,296,152	4,501	875	75	.....	3,551	200
Massachusetts	324,758	7,500	.....	41,121	4,278,999	62,495	5,746,839	1,405,345	1,361	540	.....	.....	821	.....
New Jersey	287,132	.....	.....	125,905	2,467,203	43,688	3,846,005	1,335,119	860	160	75	.....	625	200
All other states [3]	588,987	.....	8,000	62,210	4,125,124	163,214	5,844,031	1,555,688	2,280	175	.....	.....	2,105	.....

[1] Same number reported for one or more other months.
[2] All other states embrace: Illinois, 1 establishment; Indiana, 1; Maine, 1; New York, 1; and Ohio, 2.
[3] All other states embrace: Maine, 1 establishment, New York, 1, and Ohio, 1.
[4] Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON

FOURTEENTH CENSUS OF THE UNITED STATES
MANUFACTURES: 1919

PAINT AND VARNISH, LINSEED OIL, AND BONE, CARBON, AND LAMP BLACK

Prepared under the supervision of EUGENE F. HARTLEY, Chief Statistician for Manufactures

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EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census did not cover establishments which were idle during the entire year or for which products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1919, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city, county, or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city, county, or state in which it was located. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products different from those covered by the class designation, and, on the other hand, may not represent the total product covered by this designation, because some products of this class may be made in establishments in which it is not the product of chief value.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1919 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the manufacturing industries were distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners.

The number of persons engaged in each industry, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where this date did not portray such conditions, an earlier date was requested.

In the case of employees other than wage earners the number thus reported for the representative date has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, by sex, without distinction of age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given in certain tables for each separate industry, is not totaled for all industries combined, because, in view of the variations of date, such a total is not believed to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation.

In order to determine as nearly as possible the age distribution of the average number of wage earners for an industry, the per cent distribution by age of the wage earners for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. The percentages thus obtained have been applied to the average number of wage earners for the year to determine the average numbers 16 years and over, and under 16, employed.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number of wage earners fluctuates from month to month in every industry, and in some cases to a very great extent. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month, and while representing the number according to the pay rolls to whom wages were paid on that date, no doubt represent a larger number than would be required to perform the work in any industry if all were continuously employed during the year.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a few wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital (amount actually invested).—The instructions on the schedule for securing data relating to capital were as follows:

"The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises."

These instructions were identical with those employed at the censuses of 1914 and 1909. The data compiled in respect to capital, however, at both censuses, as well as at all preceding censuses of manufactures, have been so defective as to be of little value except as indicating general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include certain Federal taxes and state, county, and local taxes. Under "Federal taxes" there are included the internal revenue tax on manufactures (tobacco, beverages, etc.), excise taxes when included in values reported for products, corporation capital stock tax, and corporation income tax, but not the income tax for individuals and partners.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of depreciation or interest, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power equipment of the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, fuel oils, gasoline and other volatile oils, and gas, and represent the quantity used during the year. As only the principal kinds of fuel are shown, comparison as to the total cost of all fuel is impracticable.

PAINT AND VARNISH.

GENERAL STATISTICS.

General character of the industry.—The statistics presented in this report include the industries designated as (1) Paints and (2) Varnishes. The statistics for each industry have been tabulated separately, each establishment being classified according to the product of chief value. The first group includes establishments engaged primarily in the manufacture of colors or pigments, as well as paints in paste form and already mixed for use. The principal products of establishments of the second group are mainly solutions of gums, resins, asphaltum, etc., in solvents, or vehicles, such as turpentine, linseed oil, alcohol, naphtha, benzine, etc. The industry embraces japans and lacquers, and the products are classified according to their character. There is considerable overlapping between the two groups, and hence the tables showing products in detail are presented for the combined industry, since many establishments manufacture both classes of products.

Comparative summary.—Table 1 presents the general statistics for the combined industry for the census years 1879 to 1919, inclusive.

Comparative summary for paint and varnish.—Table 2 presents the statistics for the combined paint and varnish industries, and the respective branches, for 1919 and 1914, with the percentage each component is of the combined industry.

Principal states, ranked by value of products.—Statistics are presented in Table 3 for the chief factors: Number of establishments, number of wage earners, value of products, and value added by manufacture, for all states for which the statistics can be reported separately, ranked according to value of products.

Persons engaged in the industry.—The age classification of the average number of wage earners, and other statistics for the combined industry in Table 4 is an estimate obtained by the method described in the "Explanation of terms." Figures for states will be found in Table 15.

Wage earners, by months.—The statistics for wage earners in Table 5 are intended to show the steadiness of employment, or the reverse, in accordance with the industrial conditions existing during the year.

Prevailing hours of labor.—Table 6 shows that, in 1919, 6,713 wage earners, or 31.2 per cent of the total number, were employed in establishments where the prevailing hours per week were 48 or less. This is comparable with 5.5 per cent in 1914 and 4.6 per cent in 1909. On the other hand, in 1919, only 3.4 per cent were in the "60" and "Over 60" groups, as compared with 18.4 per cent in 1914 and 27.9 per cent in 1909.

Size of establishments, by average number of wage earners.—Table 7 shows that a large number of the establishments credited to the industry are found in the lower groups. Of the total number, 404, or 48.7 per cent, are found in the groups employing "1 to 5," or "no wage earners," in 1919, as compared with 53.1 per cent in 1914 and 56.8 per cent in 1909. On the other hand, the drift toward larger establishments is evidenced by the statistics for the higher groups; 11 establishments, with 22.3 per cent of the wage earners, being found in the groups covering over 250 wage earners in 1919, as compared with 8 establishments and 17.6 per cent of the wage earners in 1914, and 3 establishments with 9.4 per cent in 1909.

Size of establishments, by value of products.—The average value of products per establishment for all classes, in 1919, was $410,056, as compared with $182,030, in 1914, and $157,888 in 1909. The increase from 1914 to 1919 was to a large degree due to enhanced values, and, as a result, Table 8, being based upon value of products, shows heavy gains in the higher groups at the expense of the lower groups.

Character of ownership.—Although establishments under corporate ownership are in the majority, yet the industry includes a considerable percentage of establishments owned by individuals or by firms and other forms of ownership of a nonincorporated character. These, however, are relatively small establishments and employed but a small percentage of the wage earners, and are represented also by correspondingly small percentages of the value of products. Table 9 shows that in 1919 the incorporated establishments constituted 75.7 per cent of the total number, as compared with 69.8 per cent in 1914 and 66.5 per cent in 1909.

Number and horsepower of types of prime movers.—Table 10 gives the total horsepower reported for the industry. Electric power is becoming more and more an important factor. Of the total primary power, 50.8 per cent was purchased electric power in 1919, as compared with 27 per cent in 1914 and 13.9 per cent in 1909.

Fuel consumed.—Table 11 shows the consumption of fuel, by kinds and by states. The figures for gas include both manufactured and natural gas.

TABLE 1.—COMPARATIVE SUMMARY FOR THE COMBINED INDUSTRY: 1919, 1914, 1909, 1904, 1899, 1889, AND 1879.

	1919	1914	1909	1904	1899	1889	1879	PER CENT OF INCREASE.[1] 1914–1919	1909–1914	1904–1909	1899–1904	1889–1899	1879–1889
Number of establishments	830	800	791	639	600	522	325	3.8	1.1	23.8	6.5	14.9	60.6
Persons engaged	34,030	25,682	21,896	16,480	13,819	(2)	(2)	32.5	17.3	32.9	19.3	.....	.....
Proprietors and firm members	298	391	456	439	412	(2)	(2)	−23.8	−14.3	3.9	6.6	.....	.....
Salaried employees	12,225	9,208	7,200	4,408	3,710	(2)	(2)	32.8	27.9	63.3	18.8	.....	.....
Wage earners (average number)	21,507	16,083	14,240	11,633	9,697	8,189	5,056	33.7	12.9	22.4	20.0	(2)	(2)
Primary horsepower	85,199	70,611	56,162	41,288	30,443	24,640	(2)	20.7	25.7	36.0	35.6	23.6	.....
Capital	$239,775,836	$129,533,935	$103,994,908	$75,486,214	$60,052,674	$45,318,146	$17,333,392	85.1	24.6	37.8	25.7	32.5	161.4
Salaries and wages	50,640,787	24,369,021	18,649,074	11,941,059	9,942,241	7,354,687	2,498,971	107.8	30.7	56.2	20.1	35.2	194.3
Salaries	26,522,628	14,188,733	10,378,361	5,677,451	5,016,651	(2)	(2)	86.9	36.7	82.8	13.2	.....	.....
Wages	24,118,159	10,180,288	8,270,713	6,263,608	4,925,590	(2)	(2)	136.9	23.1	32.0	27.2	.....	.....
Paid for contract work	729,885	91,602	91,549	146,734	197,055	(2)	(2)	696.8	0.1	−37.6	−25.5	.....	.....
Rent and taxes	8,399,760	1,647,370	977,751	[4] 665,568	[4] 621,975	(2)	(2)	409.9	68.5	(3)	(3)	(3)	(3)
Cost of materials	217,112,372	88,465,757	79,015,555	59,826,674	44,738,517	32,736,195	20,762,236	145.4	12.0	32.1	33.7	36.7	57.7
Value of products	340,346,803	145,623,691	124,889,422	90,839,609	69,502,235	54,233,681	29,111,941	133.7	16.6	37.5	30.6	28.3	86.3
Value added by manufacture [5]	123,234,431	57,157,934	45,873,867	31,012,935	24,823,718	21,497,486	8,349,705	115.6	24.6	47.9	24.9	15.5	157.5

[1] A minus sign (−) denotes decrease.
[2] Figures not available.
[3] Figures not strictly comparable.
[4] Exclusive of internal revenue.
[5] Value of products less cost of materials.

TABLE 2.—COMPARATIVE SUMMARY FOR PAINT AND VARNISH: 1919 AND 1914.

	TOTAL.		ESTABLISHMENTS ENGAGED PRIMARILY IN THE MANUFACTURE OF— Paint.		Varnish.		PER CENT OF TOTAL. Paint.		Varnish.	
	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914
Number of establishments	830	800	601	585	229	215	72.4	73.1	27.6	26.9
Persons engaged	34,030	25,682	26,645	20,072	7,385	5,610	78.3	78.2	21.7	21.8
Proprietors and firm members	298	391	226	304	72	87	75.8	77.7	24.2	22.3
Salaried employees	12,225	9,208	8,934	6,419	3,291	2,789	73.1	69.7	26.9	30.3
Wage earners (average number)	21,507	16,083	17,485	13,349	4,022	2,734	81.3	83.0	18.7	17.0
Primary horsepower	85,199	70,611	73,702	62,955	11,497	7,656	86.5	89.2	13.5	10.8
Capital	$239,775,836	$129,533,935	$177,314,815	$99,673,137	$62,461,021	$29,860,798	74.0	76.9	26.0	23.1
Salaries and wages	50,640,787	24,369,021	37,820,075	17,921,684	12,820,712	6,447,337	74.7	73.5	25.3	26.5
Salaries	26,522,628	14,188,733	18,269,704	9,606,461	8,252,924	4,582,272	68.9	67.7	31.1	32.3
Wages	24,118,159	10,180,288	19,550,371	8,315,223	4,567,788	1,865,065	81.1	81.7	18.9	18.3
Paid for contract work	729,885	91,602	689,986	73,637	39,899	17,965	94.5	80.4	5.5	19.6
Rent and taxes	8,399,760	1,647,370	6,331,973	1,313,289	2,067,787	334,081	75.4	79.7	24.6	20.3
Cost of materials	217,112,372	88,465,757	165,604,116	71,588,364	51,508,256	16,877,393	76.3	80.9	23.7	19.1
Value of products	340,346,803	145,623,691	250,714,379	112,408,742	83,632,424	33,214,949	75.4	77.2	24.6	22.8
Value added by manufacture [1]	123,234,431	57,157,934	91,110,263	40,820,378	32,124,168	16,337,556	73.9	71.4	26.1	28.6

[1] Value of product less cost of material.

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

STATE.	Number of establishments.	WAGE EARNERS. Average number.	Per cent distribution.	Rank.	VALUE OF PRODUCTS. Amount.	Per cent distribution.	Rank.	VALUE ADDED BY MANUFACTURE. Amount.	Per cent distribution.	Rank.
United States	830	21,507	100.0	.....	$340,346,803	100.0	.....	$123,234,431	100.0	.....
New York	148	3,872	18.0	1	66,243,534	19.5	1	26,625,526	21.6	1
Illinois	83	3,178	14.8	3	54,787,301	16.1	2	17,285,753	14.0	3
Ohio	94	2,929	13.6	4	50,477,810	14.8	3	18,170,959	14.7	2
Pennsylvania	104	3,279	15.2	2	38,845,266	11.4	4	13,345,065	10.8	4
New Jersey	63	1,994	9.3	5	31,815,368	9.3	5	11,005,200	8.9	5
Michigan	30	1,212	5.6	6	20,527,096	6.0	6	8,819,015	7.2	6
Missouri	37	991	4.6	7	16,558,775	4.9	7	5,486,124	4.5	7
California	46	737	3.4	8	11,846,040	3.5	8	4,164,459	3.4	8
Massachusetts	33	591	2.8	9	9,806,874	2.9	9	4,133,496	3.4	9
Indiana	23	257	1.2	13	4,315,023	1.3	12	1,514,655	1.2	12
Maryland	17	263	1.2	12	3,466,120	1.0	13	1,012,753	0.8	14
Minnesota	17	144	0.7	14	2,897,742	0.9	14	1,015,707	0.8	13
Nebraska	5	58	0.3	18	1,307,556	0.4	19	625,338	0.5	17
Colorado	7	76	0.4	17	1,168,001	0.3	20	479,419	0.4	21
Texas	8	52	0.2	19	1,019,069	0.3	22	504,489	0.4	19
West Virginia	4	132	0.6	15	864,447	0.3	23	468,773	0.4	22
Louisiana	3	34	0.2	21	767,342	0.2	25	252,157	0.2	25
Washington	6	29	0.1	22	486,783	0.1	26	219,696	0.2	26
Georgia	4	37	0.2	20	362,476	0.1	27	155,245	0.1	27
Iowa	4	10	(1)	24	268,434	0.1	28	108,808	0.1	28
Oregon	4	15	0.1	23	238,579	0.1	29	87,382	0.1	31
Maine	3	6	(1)	25	166,940	(1)	31	41,179	(1)	33
All other states	87	1,611	7.5	.....	22,110,227	6.5	.....	7,713,233	6.3	.....

[1] Less than one-tenth of 1 per cent.

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

CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL. Male.	PER CENT OF TOTAL. Female.
All classes	1919	34,030	28,831	5,199	84.7	15.3
	1914	25,682	22,777	2,905	88.7	11.3
	1909	21,896	19,496	2,400	89.0	11.0
Proprietors and officials	1919	2,971	2,871	100	96.6	3.4
	1914	2,135	2,091	44	97.9	2.1
	1909	2,016	1,960	56	97.2	2.8
Proprietors and firm members	1919	298	285	13	95.6	4.4
	1914	391	379	12	96.9	3.1
	1909	456	422	34	92.5	7.5
Salaried officers of corporations	1919	1,101	1,052	49	95.5	4.5
	1914	852	830	22	97.4	2.6
	1909	793	773	20	97.5	2.5
Superintendents and managers	1919	1,572	1,534	38	97.6	2.4
	1914	892	882	10	98.9	1.1
	1909	767	765	2	99.7	0.3
Clerks and other subordinate salaried employees.	1919	9,552	6,476	3,076	67.8	32.2
	1914	7,464	5,849	1,615	78.4	21.6
	1909	5,640	4,436	1,204	78.7	21.3
Wage earners (average number)	1919	21,507	19,484	2,023	90.6	9.4
	1914	16,083	14,837	1,246	92.3	7.7
	1909	14,240	13,100	1,140	92.0	8.0
16 years of age and over	1919	21,438	19,436	2,002	90.7	9.3
	1914	16,036	14,797	1,239	92.3	7.7
	1909	14,159	13,037	1,122	92.1	7.9
Under 16 years of age	1919	69	48	21	69.6	30.4
	1914	47	40	7	85.1	14.9
	1909	81	63	18	77.8	22.2

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

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

	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Per cent minimum is of maximum.
United States:														
1919	21,507	19,711	*19,707*	19,946	20,424	20,905	21,311	21,972	22,429	22,679	22,927	22,917	**23,156**	85.1
Males	19,484	17,927	*17,875*	18,060	18,446	18,891	19,232	19,873	20,292	20,545	20,804	20,833	**21,030**	85.0
Females	2,023	*1,784*	1,832	1,886	1,978	2,014	2,079	2,099	**2,137**	2,134	2,123	2,084	2,126	83.5
Paint	17,485	16,094	*16,070*	16,262	16,625	17,071	17,351	17,891	18,170	18,339	18,588	18,593	**18,766**	85.6
Males	15,843	14,652	*14,573*	14,716	15,004	15,422	15,651	16,181	16,432	16,633	16,887	16,918	**17,047**	85.5
Females	1,642	*1,442*	1,497	1,546	1,621	1,649	1,700	1,710	**1,738**	1,706	1,701	1,675	1,719	83.0
Varnish	4,022	*3,617*	3,637	3,684	3,799	3,834	3,960	4,081	4,259	4,340	4,339	4,324	**4,390**	82.4
Males	3,641	*3,275*	3,302	3,344	3,442	3,469	3,581	3,692	3,860	3,912	3,917	3,915	**3,983**	82.2
Females	381	342	*335*	340	357	365	379	389	399	**428**	422	409	407	78.3
1914	16,083	15,723	16,277	16,593	16,852	**16,905**	16,870	16,030	15,821	15,872	15,564	15,288	*15,201*	89.9
1909	14,240	*13,223*	13,835	14,360	14,635	**14,692**	14,582	14,202	14,141	14,236	14,444	14,296	14,231	90.0
California	737	*597*	651	638	703	719	731	773	**828**	777	820	808	799	72.1
Illinois	3,178	3,051	*3,016*	3,050	3,022	3,028	3,021	3,103	3,138	3,362	3,408	3,379	**3,558**	84.8
Michigan	1,212	1,100	*1,059*	1,088	1,137	1,186	1,162	1,167	1,282	1,289	**1,386**	1,346	1,352	76.4
Missouri	991	*811*	857	884	998	987	978	1,054	1,104	**1,113**	1,107	1,068	931	72.9
New Jersey	1,994	1,878	1,829	*1,810*	1,819	1,907	1,951	2,009	2,088	2,120	2,164	2,171	**2,182**	83.0
New York	3,872	*3,493*	3,528	3,570	3,657	3,795	3,945	4,051	4,062	**4,097**	4,038	4,096	4,132	85.3
Ohio	2,929	*2,598*	2,648	2,682	2,776	2,912	3,014	3,052	3,089	3,023	3,075	**3,154**	3,125	82.4
Pennsylvania	3,279	3,053	*3,047*	3,106	3,150	3,188	3,288	3,424	3,418	**3,438**	3,418	3,380	**3,438**	88.6

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

STATE AND CENSUS YEAR.	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.	Over 60.
United States:									
1919	21,507	1,057	758	4,898	7,475	2,280	4,300	524	215
Paint industry	17,485	768	348	4,136	5,406	2,018	4,092	502	215
Varnish industry	4,022	289	410	762	2,069	262	208	22	.....
1914	16,083	(2)	(2)	887	2,763	4,060	5,409	1,943	1,021
1909	14,240	(2)	(2)	656	2,332	2,601	4,681	3,440	530
California:[3]									
1919	737	27	22	441	121	45	78	3	.....
Illinois:									
1919	3,178	83	44	392	1,175	232	1,155	97	.....
1914	2,110	(2)	(2)	49	433	358	1,053	182	35
Michigan:									
1919	1,212	3	.....	8	207	665	322	7	.....
1914	878	(2)	(2)	1	16	455	379	27	.....
Missouri:									
1919	991	12	173	377	164	3	220	.....	42
1914	599	(2)	(2)	52	50	138	146	167	46
New Jersey:									
1919	1,994	150	289	418	507	154	374	8	94
1914	1,737	(2)	(2)	44	535	365	506	198	89
New York:									
1919	3,872	236	118	667	2,494	248	100	9	.....
1914	3,450	(2)	(2)	234	1,046	728	984	423	35
Ohio:									
1919	2,929	49	26	518	1,470	86	713	67	.....
1914	2,107	(2)	(2)	82	319	235	925	546	.....
Pennsylvania:									
1919	3,279	152	33	1,535	739	333	434	48	5
1914	2,643	(2)	(2)	180	70	853	617	143	780

[1] Includes 48 and under for 1914 and 1909.

[2] Corresponding figures not available.

[3] Not shown separately in 1914.

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

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—																	
			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 (average number).	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	830	21,507	49	355	960	219	2,509	100	3,097	56	3,977	40	6,163	9	2,919	1	852	1	1,030
Paint industry	601	17,485	33	256	670	151	1,706	71	2,204	48	3,413	32	4,942	8	2,608	1	852	1	1,030
Varnish industry	229	4,022	16	99	290	68	803	29	833	8	564	8	1,221	1	311	.....	.....	.....	.....
1914	800	16,083	40	385	935	217	2,354	81	2,664	38	2,761	31	4,532	7	2,281	1	556	.....	.....
1909	791	14,240	38	411	1,017	191	2,056	79	2,551	38	2,588	31	4,682	2	715	1	631	.....	.....
California	46	737	2	28	90	9	96	3	106	3	173	.....	.....	1	272	.....	.....	.....	.....
Illinois	83	3,178	2	31	88	18	214	13	403	12	843	6	778	.....	.....	1	852	.....	.....
Massachusetts	33	591	3	11	28	12	123	2	47	5	393	.....	.....	.....	.....	.....	.....	.....	.....
Michigan	30	1,212	2	13	32	6	78	3	85	2	170	3	395	1	452	.....	.....	.....	.....
Missouri	37	991	2	15	38	10	128	4	180	4	269	2	376	.....	.....	.....	.....	.....	.....
New Jersey	63	1,994	2	22	57	17	207	11	383	4	310	6	757	1	280	.....	.....	.....	.....
New York	148	3,872	8	61	166	38	453	20	585	11	776	9	1,606	1	286	.....	.....	.....	.....
Ohio	94	2,929	3	38	110	29	296	12	369	3	225	6	958	3	971	.....	.....	.....	.....
Pennsylvania	104	3,279	10	46	129	22	274	14	372	8	566	1	250	2	658	.....	.....	1	1,030

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.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes	830	800	791	21,507	16,083	14,240	$340,346,803	$145,623,691	$124,889,422	$123,234,431	$57,157,934	$45,873,867
Less than $5,000	53	85	104	34	54	82	133,873	209,101	244,517	66,092	105,631	121,015
$5,000 to $20,000	114	189	175	177	418	386	1,266,394	2,125,922	2,034,695	560,182	993,197	961,382
$20,000 to $100,000	230	261	273	940	1,538	1,734	12,160,855	12,790,449	13,241,833	4,409,576	4,866,301	5,516,438
$100,000 to $500,000	273	195	213	4,136	7,835	7,133	68,563,851	46,347,266	65,259,238	26,099,102	28,454,103	23,089,490
$500,000 to $1,000,000	68	37		2,842			47,000,247	25,391,487		16,338,826		
$1,000,000 and over	92	33	26	13,378	6,238	4,905	211,221,583	58,759,466	44,169,139	75,700,653	22,738,702	15,585,542
	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	6.4	10.6	13.1	0.2	0.3	0.6	(1)	0.1	0.2	0.1	0.2	0.3
$5,000 to $20,000	13.7	23.6	22.2	0.8	2.6	2.7	0.4	1.5	1.6	0.5	1.7	2.1
$20,000 to $100,000	27.7	32.6	34.5	4.4	9.6	12.2	3.6	8.8	10.6	3.6	8.5	12.0
$100,000 to $500,000	32.9	24.4	26.9	19.2	48.7	50.1	20.1	31.8	52.3	21.2	49.8	51.6
$500,000 to $1,000,000	8.2	4.6		13.2			13.8	17.4		13.3		
$1,000,000 and over	11.1	4.2	3.3	62.2	38.8	34.4	62.1	40.4	35.3	61.4	39.8	34.0

[1] Less than one-tenth of 1 per cent.

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

STATE AND CENSUS YEAR.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.						VALUE OF PRODUCTS.					
				Total.	In establishments owned by—			Per cent of total.			Of establishments owned by—			Per cent of total.	
	Individuals.	Corporations	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
United States:																
1919	128	628	74	21,507	529	20,237	741	2.5	94.1	3.4	$340,346,803	$7,968,219	$320,828,085	$11,550,499	2.3	94.3	3.4
Paint industry	93	451	57	17,485	411	16,370	704	2.4	93.6	4.0	256,714,379	5,143,101	241,017,967	10,550,311	2.0	93.9	4.1
Varnish industry	35	177	17	4,022	118	3,867	37	2.9	96.1	0.9	83,632,424	2,822,118	79,810,118	1,000,188	3.4	95.4	1.2
1914	152	558	90	16,083	827	14,489	767	5.1	90.1	4.8	145,623,691	5,791,435	133,240,662	6,591,594	4.0	91.5	4.5
1909	160	526	105	14,240	910	12,087	1,243	6.4	84.9	8.7	124,889,422	7,536,788	106,349,811	11,002,823	6.0	85.2	8.8
California:																	
1919	12	29	5	737	36	685	16	4.9	92.9	2.2	11,846,040	536,651	11,100,747	208,642	4.5	93.7	1.8
Illinois:																	
1919	11	68	4	3,178	83	3,081	14	2.6	96.9	0.4	54,787,301	1,430,281	52,749,977	607,043	2.6	96.3	1.1
1914	10	59	3	2,110	144	1,959	7	6.8	92.8	0.3	24,488,449	922,581	23,503,708	62,160	3.8	95.0	0.3
Michigan:																	
1919	3	25	2	1,212	[1] 9	1,203	.....	.....	99.3	.....	20,527,096	[1] 238,937	20,288,159	.....	1.2	98.8	.....
1914	2	22	2	878	.....	874	[2] 4	.....	99.5	0.5	8,306,609	.....	8,282,642	[2] 23,967	.....	99.7	0.3
Missouri:																	
1919	3	32	2	991	[1] 6	985	.....	.....	99.4	.....	16,558,775	[1] 135,405	16,423,370	.....	0.8	99.2	.....
1914	2	31	1	599	[1] 7	592	.....	1.2	98.8	.....	5,791,895	[1] 99,024	5,692,871	.....	1.7	98.3	.....

[1] Includes the group "All others."

[2] Includes the group "Individuals."

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

STATE AND CENSUS YEAR.	NUMBER OF ESTABLISHMENTS 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.		
	Individuals.	Corporations	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
New Jersey:																	
1919	12	48	3	1,994	34	1,907	53	1.7	95.6	2.7	$31,815,338	$677,670	$30,179,481	$958,217	2.1	94.9	3.0
1914	12	43	5	1,737	41	1,618	78	2.4	93.1	4.5	16,086,717	387,707	15,002,843	696,167	2.4	93.3	4.3
New York:																	
1919	27	109	12	3,872	147	3,596	129	3.8	92.9	3.3	66,243,534	2,628,376	60,840,215	2,774,943	4.0	91.8	4.2
1914	39	91	20	3,450	300	2,836	314	8.7	82.2	9.1	31,884,421	2,334,956	26,554,871	2,994,594	7.3	83.3	9.4
Ohio:																	
1919	10	77	7	2,929	26	2,878	25	0.9	98.3	0.9	50,477,810	509,351	49,393,102	575,357	1.0	97.9	1.1
1914	17	72	6	2,107	30	2,039	38	1.4	96.8	1.8	19,326,576	227,772	18,719,880	378,924	1.2	96.9	2.0
Pennsylvania:																	
1919	22	64	18	3,279	129	3,060	90	3.9	93.3	2.7	38,845,266	925,379	36,024,687	1,895,200	2.4	92.7	4.9
1914	32	62	29	2,643	196	2,355	92	7.4	89.1	3.5	16,004,616	998,521	14,176,902	829,193	6.2	88.6	5.2

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	3,612	2,159	1,378	85,199	70,611	56,162	100.0	100.0	100.0
Owned	444	578	651	41,559	48,533	47,487	48.8	68.7	84.6
Steam [1]	351	439	510	37,967	43,881	42,191	44.6	62.1	75.1
Engines	338	(2)	(2)	34,647	(2)	(2)	40.7	.....	.....
Turbines	13	(2)	(2)	3,320	(2)	(2)	3.9	.....	.....
Internal-combustion engines	67	107	110	2,573	3,226	3,290	3.0	4.6	5.9
Water wheels, turbines and motors	26	32	31	1,019	1,426	2,006	1.2	2.0	3.6
Rented	3,168	1,581	727	43,640	22,078	8,675	51.2	31.3	15.4
Electric	3,168	1,581	727	43,268	19,035	7,814	50.8	27.0	13.9
Other	.....	.....	.....	372	3,043	861	0.4	4.3	1.5
Electric	4,690	2,804	1,353	64,241	34,917	17,037	100.0	100.0	100.0
Rented	3,168	1,581	727	43,268	19,035	7,814	67.4	54.5	45.9
Generated by establishments reporting	1,522	1,223	626	20,973	15,882	9,223	32.6	45.5	54.1

[1] Figures for horsepower include for 1909 the amount reported under the head of "Other" owned power. [2] Not reported separately.

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

STATE.	Census year.	COAL.		Coke (tons, 2,000 lbs.)	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
		Anthracite [1] (tons, 2,240 lbs.).	Bituminous (tons, 2,000 lbs.).				
United States:							
Paint and varnish	1919	93,545	440,717	36,319	54,213	1,821	261,291
Paint industry	.....	76,186	406,889	17,047	51,312	738	207,610
Varnish industry	.....	17,359	33,828	19,272	2,901	1,083	53,681
Paint and varnish	1914	81,566	301,554	25,461	23,584	(2)	366,695
Per cent of increase [3]	.....	14.7	46.1	42.6	134.6	.....	−28.7
California	1919	.....	4	41	17,214	.....	12,761
Connecticut	1919	111	1,688	20	6,000	.....	.....
Illinois	1919	74	89,248	8,153	8,670	4	10,617
	1914	35	72,456	4,212	5,126	(2)	2,418
Indiana	1919	5	1,903	432	350	37	2,727
Kansas	1919	.....	32,635	.....	.....	1	66
Kentucky	1919	.....	1,414	1,137	.....	.....	317
Maryland	1919	15	9,144	.....	.....	35	138
Massachusetts	1919	296	6,300	803	.....	31	6,653
	1914	1,331	5,972	2,245	358	(2)	36
Michigan	1919	3	19,289	3,836	.....	231	628
	1914	21	19,582	2,598	.....	.....	2,131
Minnesota	1919	22	765	28	.....	120	1,892
	1914	13	2,729	68	2	(2)	825
Missouri	1919	25	37,485	1,219	12,968	20	254
	1914	4	20,613	211	1	(2)	1,138
New Jersey	1919	6,825	54,542	3,595	5,087	100	68,773
	1914	20,921	49,062	3,113	60	(2)	10,451
New York	1919	33,648	26,798	6,768	834	380	7,826
	1914	48,696	19,199	4,707	375	(2)	4,048
Ohio	1919	8,772	25,524	7,191	247	601	60,160
	1914	13	18,026	3,510	9	(2)	223,179
Pennsylvania	1919	21,872	105,604	2,698	2,293	67	75,678
	1914	9,703	65,886	2,040	561	(2)	107,042
Tennessee	1919	.....	2,178	62	.....	.....	.....
Texas	1919	4	.....	68	500	18	301
Virginia	1919	6,423	1,031	103	.....	14	88
West Virginia	1919	.....	1,520	.....	.....	.....	1,686
Wisconsin	1919	15,330	13,785	.....	.....	(2)	9,423
All other states	1919	120	9,860	165	50	162	1,303
	1914	799	28,029	2,727	17,092	(2)	15,427

[1] Includes some semianthracite coal. [2] Included in figures for fuel oils. [3] A minus sign (−) denotes decrease.

SPECIAL STATISTICS.

Materials and products: Comparative statistics.—Table 12 presents statistics of materials and products for 1919, in comparison with 1914 and 1909. There is a considerable production of paints and varnishes by establishments falling under other industry classifications, which are here included, and the figures for specific products represent total production irrespective of the industry classification of the producing establishments.

TABLE 12.—MATERIALS AND PRODUCTS: 1919, 1914, AND 1909.

	1919	1914	1909
Number of establishments	886	857	863
Paint industry	601	585	588
Varnish industry	229	215	203
Subsidiary paint and varnish products, other industries	56	57	72
MATERIALS.			
Total cost	$223,091,742	$88,980,635	$79,136,194
Paint industry	$165,604,116	$71,588,364	$62,458,250
Varnish industry	51,508,256	16,877,393	16,557,305
Other industries, producing paint and varnish as subsidiary products	5,979,370	514,878	120,639
Pig lead:			
Tons (2,000 lbs.)	192,558	150,762	159,163
Cost	$22,159,573	$11,488,113	$12,380,524
Grain alcohol:			
Gallons	2,985,735	1,061,324	356,225
Cost	$1,724,112	$436,509	$226,724
Wood alcohol:			
Gallons	244,561	987,451	1,325,807
Cost	$303,998	$422,122	$693,362
Linseed oil:			
Gallons	27,037,192	24,481,623	(1)
Cost	$43,721,595	$12,049,218	(1)
China wood oil:			
Gallons	6,196,134	(1)	(1)
Cost	$10,254,039	(1)	(1)
Cottonseed oil:			
Gallons	16,506	(1)	(1)
Cost	$24,028	(1)	(1)
Corn oil:			
Gallons	55,074	(1)	(1)
Cost	$76,739	(1)	(1)
Soya-bean oil:			
Gallons	2,753,173	(1)	(1)
Cost	$3,630,634	(1)	(1)
Other oils (fish oil, tar oil, kerosene, creosote, parilla, hempseed oil, etc.):			
Gallons	8,749,494	(1)	(1)
Cost	$3,373,988	(1)	(1)
Benzol:			
Gallons	1,665,605	(1)	(1)
Cost	$400,162	(1)	(1)
Turpentine:			
Gallons	6,081,902	(1)	(1)
Cost	$6,961,982	(1)	(1)
MATERIALS—continued.			
Rosin:			
Pounds	85,917,127		
Cost	$5,411,192		
Copal, damar, or kauri:			
Pounds	18,235,774		
Cost	$3,250,165		
Shellac:		48,902,000	(1)
Pounds	7,785,319	$4,797,944	(1)
Cost	$4,653,619		
Other gums:			
Pounds	17,116,381		
Cost	$1,873,210		
Fuel and rent of power	4,122,151	1,592,230	1,306,297
All other materials	111,150,555	58,194,499	64,529,287
PRODUCTS.			
Total value	$381,916,186	$149,173,400	$127,472,819
Paint industry	256,714,379	112,408,742	94,572,005
Varnish industry	83,032,424	33,214,949	30,317,417
Paint and varnish subsidiary products of other industries	41,569,383	3,549,709	2,583,397
Colors (pigments)	72,457,266	17,450,482	18,134,869
Paints in oil	168,525,448	70,582,461	57,380,539
Water paints and kalsomine	5,351,918	2,202,281	1,981,161
Varnishes and japans	86,814,800	36,142,256	31,758,735
Fillers:			
Liquid—			
Gallons	2,605,285	965,036	1,166,533
Value	$1,835,573	$670,033	$828,393
Paste—			
Pounds	15,508,344		
Value	$1,480,529		
Dry—		49,587,548	65,148,395
Pounds	1,473,164	$1,318,720	$1,199,595
Value	$71,285		
Putty:			
Pounds	66,681,514	69,828,017	67,767,348
Value	$3,164,254	$1,250,421	$1,169,683
Linseed oil, raw:			
Gallons	1,693,414	2,230,988	2,098,696
Value	$2,888,623	$1,201,839	$1,106,181
Linseed oil, boiled:			
Gallons	611,126	572,561	1,379,025
Value	$1,014,814	$306,569	$806,846
Other oils:			
Gallons	3,504,333	(1)	(1)
Value	$3,115,999	$999,392	(1)
Bleached shellac:			
Pounds	8,799,191	8,654,514	3,905,593
Value	$5,955,732	$1,806,802	$772,240
Dryers:			
Gallons	408,572	1,047,140	(1)
Value	$511,485	$257,725	(1)
All other products, value	$28,698,400	$14,984,419	$12,334,577

[1] Figures not available.

In some cases the products reported include subsidiary products that fall under other industry classifications. The value of same, so far as they can be identified, amounted in 1919 to $4,886,038. The net product balance therefore for the combined industries, crediting subsidiary products from other industries, and debiting subsidiary products to other industries, will be $377,036,151.

The table presents the materials in detail, quantities and cost, but carries under products the group totals for colors, paints in oil, water paints and kalsomine, and varnishes and japans. The detailed statistics for these groups will be found in Table 13.

Table 13 gives the detailed statistics for products for 1919 and 1914, distributed by states, together with the number of producing establishments.

TABLE 13.—DETAILED STATISTICS OF PRODUCTS—QUANTITY, VALUE, AND NUMBER OF ESTABLISHMENTS, BY STATES: 1919 AND 1914.

PRODUCT AND STATE.	1919			1914		
	Number of establishments.	Quantity.	Value.	Number of establishments.	Quantity.	Value.
		Pounds.			*Pounds.*	
COLORS (PIGMENTS) [1]	....	.....	$72,457,266	....	.....	$17,450,482
White lead, dry	21	262,959,465	.....	20	279,269,860	.....
For sale	21	80,454,977	6,318,504	18	71,643,812	3,697,702
Illinois	4	22,630,278	1,942,033	3	16,783,007	950,147
Pennsylvania	5	12,787,614	1,146,804	4	10,295,241	517,772
New York	3	5,401,781	502,625	3	12,341,619	631,642
All other states	9	39,635,304	2,727,042	8	32,223,945	1,598,141
Made and consumed	17	182,504,488	.....	20	207,626,048	.....
Zinc oxide [2]	16	279,321,235	24,082,299	....	.....	.....
Pennsylvania	4	223,465,331	19,736,298	....	(3)	(3)
Illinois	4	13,931,600	1,293,349	....	.....	.....
All other states	8	41,924,304	3,052,652	....	.....	.....
Lithopone [4]	14	154,622,275	.....	7	48,972,062	.....
For sale	14	151,200,696	9,757,559	7	48,972,062	1,857,510
New Jersey	4	55,124,026	3,615,545	3	22,710,825	877,184
Pennsylvania	3	36,043,537	2,306,186	....	(3)	(3)
Illinois	3	16,414,656	1,025,759	....	(3)	(3)
All other states	4	43,618,477	2,810,069	4	26,261,237	980,326
Made and consumed	2	3,421,579	.....	....	.....	.....
Lead oxides	16	165,106,671	.....	24	61,335,290	.....
For sale	16	162,474,216	12,748,344	22	58,642,588	3,281,716
Missouri	3	58,591,582	3,702,075	3	3,224,070	232,180
Pennsylvania	4	41,785,966	3,448,004	5	18,107,863	930,496
All other states	9	62,096,668	5,598,265	14	37,310,655	2,119,040
Made and consumed	4	2,632,455	.....	7	2,692,702	.....
Carbon black [5]	3	905,192	49,046	....	(3)	(3)
Barytes	4	39,906,000	455,257	6	46,920,380	325,922
Vermilion (true)	5	327,454	237,825	4	322,759	200,134
Fine colors (n. e. s.)	11	6,681,210	2,384,054	18	6,914,513	913,004
New York	5	3,191,719	1,458,683	6	2,513,300	450,419
All other states	6	3,489,491	925,371	12	4,401,213	462,585
Chrome yellow, orange, or green	23	9,494,800	2,081,440	29	13,771,726	1,318,863
Reported as—						
Chrome yellow	8	2,370,648	612,310	15	5,747,317	641,534
Orange or green	9	2,985,680	666,705	14	8,024,409	677,329
New York	4	2,405,482	478,412	3	1,989,878	183,356
All other states	5	580,198	188,293	11	6,034,531	493,973
Chrome yellow, orange, or green	6	4,138,472	802,425	....	(3)	(3)
Iron buff or other earth colors	34	202,181,787	3,778,942	23	92,896,956	797,819
Pennsylvania	13	124,746,769	2,433,231	4	28,791,520	199,576
New York	7	19,189,048	425,966	....	(3)	(3)
All other states	14	58,245,070	919,745	19	64,105,436	598,243
Prussian blue	11	944,649	645,179	18	3,938,021	609,846
Illinois	3	156,928	118,594	....	(3)	(3)
New Jersey	3	193,309	86,471	....	(3)	(3)
All other states	5	594,412	440,114	....	(3)	(3)
Other dry colors	39	37,447,782	5,480,028	58	95,616,993	3,616,445
New York	10	8,894,287	2,346,911	20	14,844,816	1,274,060
New Jersey	9	9,809,241	1,975,482	6	7,023,877	816,963
Illinois	3	6,471,972	369,727	5	2,311,282	297,932
Pennsylvania	4	501,790	114,005	11	58,130,582	933,862
All other states	13	11,770,492	673,903	16	13,306,436	293,628
Pulp colors, sold moist	19	30,084,301	3,262,284	29	22,110,527	1,054,290
Pennsylvania	5	15,359,815	1,335,181	5	4,767,853	180,066
New York	5	10,335,681	1,307,541	10	11,336,894	583,417
New Jersey	5	2,272,615	271,266	5	4,125,114	157,406
All other states	4	2,116,190	348,296	9	1,880,666	133,401
Other mineral colors	8	38,263,989	1,176,505	....	(3)	(3)
PAINTS IN OIL	....	.....	168,525,448	....	.....	70,582,461
In paste form (ground in oil)	....	.....	49,183,229	....	.....	20,038,131
White lead	145	237,358,672	25,606,609	214	281,417,563	18,141,444
Illinois	15	75,793,862	7,992,259	23	73,019,593	5,000,591
New York	15	39,321,030	4,322,900	20	63,805,600	3,795,370
PAINTS IN OIL—Contd.						
In paste form (ground in oil)—Contd.						
White lead—Contd.		*Pounds.*			*Pounds.*	
Ohio	17	35,408,775	$4,140,545	26	29,011,498	$1,910,042
Pennsylvania	23	28,837,497	3,252,483	38	41,526,000	2,470,052
Missouri	10	28,733,270	2,899,186	14	34,389,924	2,180,674
California	10	15,950,033	1,717,362	12	11,635,836	711,944
New Jersey	7	7,137,979	700,927	10	12,210,626	668,300
Massachusetts	7	1,012,726	93,902	8	2,914,735	171,563
Indiana	6	538,893	62,026	8	832,890	53,369
Tennessee	5	241,750	31,568	5	102,779	7,855
All other states	30	4,382,857	393,451	50	11,968,082	1,171,684
Zinc oxide	121	14,342,051	1,770,751	158	9,551,840	730,918
Maryland	4	4,041,000	491,082	....	(3)	(3)
New Jersey	8	4,482,877	409,625	7	2,944,815	230,500
New York	13	1,903,214	315,970	19	1,239,995	82,350
California	15	1,583,491	221,421	16	1,143,578	74,502
Missouri	7	667,550	93,224	8	322,352	25,180
Pennsylvania	16	593,115	79,160	25	1,746,243	179,632
Illinois	10	218,562	36,443	17	963,116	53,745
Massachusetts	4	193,519	27,404	5	54,949	4,378
Tennessee	5	123,400	20,940	4	29,943	3,044
Ohio	12	60,538	10,665	17	215,583	22,436
Colorado	4	9,804	1,221	....	(3)	(3)
Indiana	3	2,500	432	4	62,050	4,700
All other states	20	462,481	63,164	36	829,216	50,451
All other paints in paste form	281	146,578,395	21,805,869	301	129,042,678	10,165,819
New York	32	30,180,770	5,683,534	38	22,202,906	1,985,570
Ohio	37	18,014,708	3,244,078	40	13,024,015	1,064,064
Illinois	34	22,563,497	2,701,571	26	19,308,740	1,365,922
New Jersey	14	15,296,177	2,205,917	14	9,333,604	1,108,394
Pennsylvania	40	14,727,206	1,588,435	57	28,190,754	1,404,036
Wisconsin	5	5,511,847	1,266,930	6	4,165,767	333,873
Michigan	6	11,053,705	1,165,716	9	7,485,471	731,917
California	19	6,731,721	957,481	17	4,107,727	474,396
Massachusetts	13	5,794,632	776,509	13	3,459,871	343,960
Missouri	16	5,201,378	610,088	14	3,311,460	403,319
Minnesota	5	1,824,672	329,095	5	1,785,554	183,966
Kentucky	6	1,819,826	312,014	8	4,224,946	255,950
Maryland	4	1,772,878	195,313	3	443,160	35,567
Indiana	9	1,237,153	173 560	9	1 767 362	138 469
Tennessee	6	1 073 480	166 778	3	201 977	19 341
Virginia	4	1 578.129	151,003	....	(3)	(3)
Colorado	5	295,583	51,271	....	(3)	(3)
Texas	4	207,776	31,007	4	89,252	7,761
All other states	22	1,683,257	195,569	35	5,940,092	309,314
		Gallons.			*Gallons.*	
Already mixed for use	508	59,646,832	119,342,219	448	40,745,563	41,544,280
Ohio	68	12,154,953	24,787,950	58	8,281,238	8,551,040
Illinois	45	11,237,001	21,965,838	34	8,467,040	7,818,936
New York	72	6,282,237	13,541,790	63	5,112,386	5,948,258
Pennsylvania	60	5,055,630	10,341,233	68	3,099,564	2,862,000
New Jersey	34	5,072,462	9,442,801	23	2,967.518	2,803,888
Michigan	19	4,092,597	8,651,866	17	2,546,901	2,807,279
Missouri	23	3,267,734	6,368,023	20	1,845,557	1,712,959
California	36	3,170,928	5,679,394	26	1,421,680	1,410,498
Wisconsin	5	1,431,803	2,180,209	6	775,426	835,129
Kentucky	13	1,086,667	2,031,067	13	1,018,286	964,162
Massachusetts	16	914,214	1,986,821	15	748,594	907,359
Indiana	17	732,328	1,773,750	14	372,032	395,234
Minnesota	10	708,729	1,712,431	9	1,000,859	1,103,033
Maryland	10	937,949	1,461,342	6	645,097	709,066
Nebraska	5	474,205	1,131,487	4	192,043	215,959
Colorado	7	438,179	942,018	5	304,827	347,045
Texas	7	536,031	874,518	6	184,250	202,256
Tennessee	7	285,456	849,434	7	264,976	352,784
Rhode Island	4	224,842	500,762	4	438,634	413,246
Connecticut	4	253,190	498,026	6	209,287	271,656
Virginia	7	162,048	405,867	3	129,010	123,010
Washington	5	153,000	314,816	7	107,468	138,326
Iowa	4	141,049	236,018	5	82,634	76,683
West Virginia	3	103,132	213,537	....	(3)	(3)
Kansas	6	133,583	145,848	....	(3)	(3)
Georgia	3	63,566	139,167	5	103,250	112,674
Florida	4	20,315	36,649	....	(3)	(3)
All other states	14	513,004	1,129,557	24	427,006	461,800

[1] In addition, in 1919, 155,648 tons of zinc and lead pigments, valued at $25,810,671; and in 1914, 106,791 tons, valued at $9,978,710, were made direct from ores. Figures for natural mineral pigments for 1919 are not available, but in 1914, 66,766 tons; valued at $633,390, were marketed.

[2] In addition, in 1919, 6,185,602 pounds of zinc oxide (comprising 4,299,602 pounds, valued at $374,188; and 1,886,000 pounds made and consumed in the producing establishments) were produced by chemical establishments. Total production of zinc oxide, 1919, 285,506,837 pounds.

[3] Figures not available.

[4] Marketed production of lithopone as reported by Geological Survey, 1919, 78,365 tons (2,000 pounds); 1914, 32,819 tons.

[5] Production of carbon black by establishments in the paint industry. Total production of carbon black (from natural gas), 52,056,940 pounds; value, $3,816,000.

TABLE 13.—DETAILED STATISTICS OF PRODUCTS—QUANTITY, VALUE, AND NUMBER OF ESTABLISHMENTS, BY STATES: 1919 AND 1914—Continued.

PRODUCT AND STATE.	1919			1914		
	Number of establishments.	Quantity.	Value.	Number of establishments.	Quantity.	Value.
WATER PAINTS AND KALSOMINE	....	*Pounds.*	$5,351,918	....	*Pounds.*	$2,202,281
Dry or in paste	61	106,797,920	4,549,113	59	61,904,258	2,055,180
New York	15	51,599,620	2,003,629	19	31,191,409	1,051,983
Illinois	7	12,420,067	835,785	8	11,304,884	409,069
New Jersey	3	12,728,872	596,092	3	12,818,350	362,259
California	5	16,820,120	532,936	....	(1)	(1)
Missouri	5	5,318,035	194,576	4	487,763	44,800
Ohio	6	2,648,200	156,285	5	1,500,616	45,569
Michigan	5	2,664,371	113,693	....	(1)	(1)
Pennsylvania	6	1,301,477	48,348	7	305,499	14,070
All other states	9	1,296,258	61,769	13	4,295,737	127,430
		Gallons.			*Gallons.*	
Mixed for use	12	359,129	802,805	12	297,173	147,101
VARNISHES AND JAPANS	....	.....	86,814,800	....	.....	36,142,256
Oleoresinous varnishes	186	28,116,160	40,044,863	168	17,801,438	18,762,390
New York	26	5,367,111	9,358,203	28	4,866,219	5,061,508
Ohio	30	5,115,175	7,218,545	31	3,268,124	2,887,622
New Jersey	24	3,401,810	5,544,201	22	2,626,073	3,979,321
Illinois	25	4,594,475	5,134,512	18	2,762,458	2,775,662
Michigan	9	3,249,205	4,785,119	6	1,362,907	1,894,621
Wisconsin	3	929,001	1,488,902	....	(1)	(1)
Pennsylvania	18	1,503,725	1,419,140	21	458,946	394,904
Massachusetts	5	843,566	1,378,323	6	493,918	435,114
California	11	729,730	946,123	9	481,647	364,021
Kentucky	3	878,828	890,000	....	(1)	(1)
Missouri	7	451,543	590,777	....	(1)	(1)
Indiana	3	214,320	286,885	3	365,050	298,872
Minnesota	3	218,000	276,482	....	(1)	(1)
Virginia	4	159,319	244,719	....	(1)	(1)
All other states	15	460,352	482,932	24	1,116,096	670,694
Spirit varnishes, not turpentine	153	2,974,118	8,105,537	161	2,964,172	3,080,425
New York	30	1,047,442	2,695,855	39	809,382	811,944
Massachusetts	7	331,589	1,842,935	8	711,774	705,702
New Jersey	16	422,421	940,042	17	128,380	211,306
Illinois	16	226,408	614,215	11	608,528	638,934
Michigan	4	150,121	277,728	7	44,212	48,401
Indiana	7	122,404	277,135	6	69,366	80,337
California	7	95,828	272,214	8	85,003	96,079
Pennsylvania	20	135,386	259,474	25	106,802	180,969
Ohio	16	109,390	242,753	17	97,200	84,001
Missouri	6	97,935	202,242	4	18,026	14,777
Wisconsin	3	48,325	162,346	....	(1)	(1)
Rhode Island	4	33,888	99,206	3	26,674	48,831
Virginia	3	1,526	3,678	....	(1)	(1)
All other states	14	151,455	215,714	16	168,726	159,144
Damar and similar turpentine and benzine varnishes	184	6,356,387	10,273,773	167	3,297,371	2,865,256
Illinois	17	1,282,830	2,374,486	24	680,592	738,051
Ohio	33	1,045,715	1,857,080	27	151,659	172,309
New York	30	1,429,054	1,843,012	28	185,225	205,780
Missouri	5	412,207	642,311	3	78,050	22,891
Kentucky	4	416,447	635,320	3	893,882	743,730
New Jersey	20	318,326	537,918	16	636,665	337,521
Indiana	4	264,310	512,826	6	67,627	65,172
Pennsylvania	27	429,204	492,851	30	300,268	285,705
Massachusetts	7	253,133	437,779	8	58,854	61,227
Michigan	5	199,268	388,161	5	99,296	106,916
California	11	113,642	173,603	5	42,645	20,076

PRODUCT AND STATE.	1919			1914		
	Number of establishments.	Quantity.	Value.	Number of establishments.	Quantity.	Value.
VARNISHES AND JAPANS—Continued.						
Damar and similar turpentine and benzine varnishes—Continued.		*Gallons.*			*Gallons.*	
Maryland	3	65,848	$138,913	....	(1)	(1)
Tennessee	3	1,200	7,225	....	(1)	(1)
All other states	15	125,203	257,812	12	93,008	$96,878
Pyroxylin varnishes	10	500,061	923,464	24	852,571	1,308,796
New York	3	14,106	28,124	8	405,858	666,681
All other states	7	485,955	895,340	16	446,713	642,115
Drying japans and dryers	195	5,940,969	5,558,956	203	6,560,406	3,015,907
New Jersey	21	748,191	851,106	21	593,142	364,207
New York	28	594,514	837,135	30	789,772	461,387
Ohio	29	842,920	708,887	39	1,228,184	556,681
Pennsylvania	32	1,024,305	688,713	32	1,610,416	597,503
Illinois	21	822,984	678,713	22	759,252	367,033
Michigan	5	458,678	447,454	7	294,857	151,389
Kentucky	5	457,115	366,484	6	271,593	102,523
Massachusetts	4	240,956	221,805	10	227,111	103,184
California	13	212,936	164,564	6	107,320	43,385
Missouri	8	90,736	110,316	4	76,163	34,654
Wisconsin	3	79,965	100,506	....	(1)	(1)
Indiana	3	91,980	72,353	8	263,716	82,598
Virginia	3	64,000	65,000	....	(1)	(1)
Tennessee	4	13,830	16,730	....	(1)	(1)
All other states	16	197,859	229,190	18	338,880	151,363
Baking japans and lacquers	105	5,375,220	5,877,629	118	4,888,816	2,960,856
New Jersey	9	1,612,972	1,938,558	14	458,539	720,235
Ohio	20	970,759	1,046,705	23	651,462	353,212
New York	16	552,572	836,127	23	1,029,721	772,575
Illinois	13	616,102	736,544	15	201,410	156,227
Michigan	4	818,144	640,604	5	372,031	184,931
Kentucky	3	400,487	300,917	....	(1)	(1)
Pennsylvania	15	112,087	93,031	17	1,416,190	234,457
California	7	106,938	67,589	4	35,807	16,515
Missouri	3	28,270	44,107	3	32,775	19,803
Indiana	3	31,158	15,715	5	288,710	64,625
All other states	12	125,731	157,732	9	407,571	438,276
Other products of the varnish group; asphaltums, brewer's pitch, gloss oils, lithographic varnish, removers, substitutes, varnish stains, etc.	....	.....	14,645,763	....	.....	4,148,617
New York	....	.....	5,601,550	....	.....	.....
New Jersey	....	.....	1,990,755	....	.....	.....
Illinois	....	.....	1,899,477	....	.....	.....
Connecticut	....	.....	34,127	....	.....	.....
Michigan	....	.....	1,169,557	....	.....	.....
Massachusetts	....	.....	803,732	....	.....	.....
Ohio	....	.....	747,290	....	.....	(1)
Wisconsin	....	.....	541,897	....	.....	.....
Pennsylvania	....	.....	620,181	....	.....	.....
California	....	.....	230,379	....	.....	.....
Indiana	....	.....	179,356	....	.....	.....
Kentucky	....	.....	54,576	....	.....	.....
All other states	....	.....	772,886	....	.....	.....

[1] Figures not available.

GENERAL TABLES.

Table 14 is a comparative summary, by states, for 1919, 1914, and 1909, for the principal items, namely, number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products.

Table 15 presents for 1919 the detailed statistics for the two branches of the industry, paints and varnishes, by states.

TABLE 14.—COMPARATIVE SUMMARY, BY STATES: 1919, 1914, AND 1909.

STATE.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
United States	1919	830	21,507	85,199	$24,118	$217,112	$340,346
	1914	800	16,083	70,611	10,180	88,465	145,624
	1909	791	14,240	56,162	8,271	79,016	124,889
California	1919	46	737	3,734	930	7,682	11,846
	1914	38	392	1,587	310	2,872	4,082
	1909	35	396	1,387	275	2,652	3,758
Georgia	1919	4	37	110	37	207	362
	1914	6	27	322	11	162	225
	1909	7	35	95	16	172	222
Illinois	1919	83	3,178	14,012	3,221	37,502	54,787
	1914	72	2,110	9,908	1,300	15,477	24,489
	1909	74	1,792	7,108	1,114	12,902	20,434
Indiana	1919	23	257	944	236	2,800	4,315
	1914	22	178	793	122	922	1,482
	1909	18	200	521	74	683	1,108
Iowa	1919	4	10	90	16	160	268
	1914	4	25	226	14	94	156
	1909	4	18	170	13	85	154
Maryland	1919	17	263	711	279	2,453	3,466
	1914	9	145	453	82	669	1,028
	1909	12	127	450	55	700	1,001
Massachusetts	1919	33	591	1,644	592	5,673	9,807
	1914	34	490	1,411	301	2,621	4,876
	1909	41	428	1,819	251	2,075	3,469
Minnesota	1919	17	144	652	133	1,782	2,898
	1914	15	144	1,065	98	1,061	1,684
	1909	14	164	420	101	889	1,489
Missouri	1919	37	991	4,388	$1,287	$11,074	$16,559
	1914	34	599	2,775	393	3,749	5,792
	1909	32	685	2,706	366	4,698	6,828
Nebraska	1919	5	58	234	54	682	1,308
	1914	6	67	400	45	624	958
	1909	4	112	425	68	849	1,254
New Jersey	1919	63	1,994	7,321	2,305	20,810	31,815
	1914	60	1,737	7,505	1,071	9,941	16,086
	1909	63	1,493	5,924	844	8,226	12,767
New York	1919	148	3,872	13,838	4,119	39,618	66,244
	1914	150	3,450	14,648	2,282	18,592	31,884
	1909	147	3,047	10,857	1,863	17,895	28,559
Ohio	1919	94	2,929	10,450	3,187	32,307	50,478
	1914	95	2,107	8,721	1,295	11,340	19,327
	1909	87	1,535	5,572	904	8,570	13,617
Pennsylvania	1919	104	3,279	13,866	4,120	25,500	38,845
	1914	114	2,643	11,691	1,591	10,400	16,005
	1909	114	1,992	9,862	1,102	9,201	14,020
Texas	1919	8	52	316	55	515	1,019
	1914	8	35	165	21	159	284
	1909	5	21	67	14	49	84
All other states	1919	144	3,115	12,889	3,547	28,348	46,330
	1914	132	2,024	8,941	1,244	9,783	17,266
	1909	134	2,195	8,779	1,211	9,370	16,125

TABLE 15.—DETAILED STATE

	STATES.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male	Under 16. Female	Capital.
	PAINTS.															
1	United States	601	26,645	226	1,941	4,735	2,258	17,485	De 18,766	Fe 16,070	18,716	16,931	1,724	41	20	$177,314,845
2	California	41	915	17	87	15	80	716	Au 804	Ja [1] 581	762	688	71	3	.....	7,051,672
3	Colorado	7	155	1	13	49	16	76	Ap 84	De 69	73	60	13	.....	.....	1,289,098
4	Georgia	4	94	.....	17	35	5	37	Oc 40	Ja 34	39	36	3	.....	.....	412,611
5	Illinois	50	4,365	15	271	998	441	2,640	De 3,002	Ap 2,482	2,825	2,539	284	2	.....	27,648,999
6	Indiana	17	293	4	37	63	31	158	Se 173	Fe 147	160	136	24	.....	.....	1,284,378
7	Iowa	4	30	.....	8	9	3	10	Jy [1] 11	Ja [1] 8	11	11	.....	.....	.....	203,758
8	Kentucky	13	307	.....	35	58	19	195	Au 223	Ja 159	200	141	59	.....	.....	1,386,528
9	Maryland	14	374	15	29	52	20	258	Au 296	Ja 175	294	258	36	.....	.....	2,142,270
10	Massachusetts	19	418	2	36	78	27	275	De 298	Mh [1] 250	311	286	24	.....	1	2,223,528
11	Michigan	24	1,800	6	119	423	233	1,019	Oct 1,167	Fe 887	1,124	1,004	118	1	1	12,174,996
12	Minnesota	12	244	5	30	72	20	117	Je 128	No 101	112	85	27	.....	.....	1,948,735
13	Missouri	30	1,464	6	108	326	126	898	Se 1,006	Ja 737	927	845	82	.....	.....	9,278,049
14	Nebraska	5	119	.....	16	30	15	58	My 66	Ja 51	58	53	5	.....	.....	891,730
15	New Jersey	33	1,881	10	143	241	155	1,332	No 1,446	Ap 1,230	1,429	1,339	86	2	2	15,175,523
16	New York	97	3,989	38	278	602	296	2,835	No 2,996	Ja 2,564	3,001	2,616	377	2	6	25,081,398
17	Ohio	61	3,569	16	228	788	340	2,197	No 2,379	Ja 1,930	2,349	2,098	251	.....	.....	23,193,526
18	Pennsylvania	88	4,430	54	306	582	344	3,144	Se 3,290	De 2,927	3,313	3,180	102	29	2	31,685,058
19	Tennessee	11	185	4	23	21	11	126	Oc 133	Mh 117	129	119	10	.....	.....	785,796
20	Texas	8	92	5	11	18	6	52	No 62	Ja 38	55	52	3	.....	.....	432,172
21	Virginia	10	162	3	21	21	13	104	Fe 108	My 98	107	106	1	.....	.....	1,088,074
22	Washington	6	53	.....	9	9	6	29	Je 31	Ja 26	32	29	3	.....	.....	373,637
23	West Virginia	4	183	3	15	24	9	132	Au 168	Ap 94	167	96	71	.....	.....	691,060
24	Wisconsin	9	626	5	33	142	74	372	De 475	Fe 313	475	421	44	2	8	5,152,939
25	All other states [2]	34	897	17	68	79	28	705	.....	.....	763	733	30	.....	.....	5,719,343
	VARNISHES.															
1	United States	229	7,385	72	732	1,741	818	4,022	De 4,390	Ja 3,617	4,445	4,028	404	11	2	$62,461,021
2	California	5	42	6	4	7	4	21	De 28	Ja 12	28	23	5	.....	.....	143,808
3	Connecticut	4	41	2	11	11	2	15	No 23	Ja 11	18	18	.....	.....	.....	287,576
4	Illinois	33	1,087	6	111	282	150	538	Oc 588	Fe 471	562	501	59	1	1	8,753,274
5	Indiana	6	205	1	31	50	24	99	De 120	Ja 69	124	114	10	.....	.....	1,291,853
6	Maryland	3	12	5	.....	2	.....	5	(3) 5	(3) 5	5	5	.....	.....	.....	44,966
7	Massachusetts	14	556	3	52	119	66	316	Fe 342	Jy 277	306	272	34	.....	.....	4,097,926
8	Michigan	5	452	1	47	119	92	193	No 222	Ma 169	206	187	19	.....	.....	3,408,004
9	Minnesota	5	51	.....	8	11	5	27	De 29	Ap [1] 26	29	28	1	.....	.....	308,564
10	Missouri	7	141	1	16	26	5	93	Je 108	Mh 71	106	79	26	.....	1	807,625
11	New Jersey	36	1,038	8	87	205	76	662	Oc 756	Fe 569	787	718	67	2	.....	8,343,913
12	New York	51	1,948	20	176	506	209	1,037	De 1,137	Fe 919	1,146	1,051	88	7	.....	22,131,282
13	Ohio	33	1,272	13	107	267	153	732	De 819	Ja 608	819	735	83	1	.....	9,262,919
14	Pennsylvania	16	253	4	45	50	19	135	De 150	Ja 117	150	145	5	.....	.....	1,955,066
15	All other states [2]	16	287	2	37	86	13	149	.....	.....	159	152	7	.....	.....	1,624,245

[1] Same number reported for one or more other months.

[2] All other states embrace: Alabama, 1 establishment; Connecticut, 5; Delaware, 3; District of Columbia, 1; Florida, 4; Kansas, 5; Louisiana, 2; Maine, 1; New Mexico, 1; North Carolina, 1; Oklahoma, 1; Oregon, 2; Rhode Island, 4; South Carolina, 1; Utah, 2.

MENT, BY STATES: 1919.

EXPENSES.										POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.		Value of products.	Value added by manufacture.	Primary horsepower.					Electric horsepower 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 and turbines.	Internal-combustion engines.	Water wheels and motors	Rented (electric).		
PAINTS.																
$7,987,233	$10,282,471	$19,550,371	$689,986	$693,874	$5,638,099	$162,037,931	$3,566,185	$256,714,379	$91,110,263	73,702	33,224	2,462	959	37,057	19,168	1
294,872	307,088	900,199	500,000	38,691	446,964	7,310,948	78,521	11,433,902	4,044,033	3,717	350	29	.....	3,338	.....	2
59,083	63,078	108,129	.....	4,372	51,926	681,825	6,757	1,168,001	479,419	228	.....	.....	.....	228	.....	3
49,615	26,760	36,410	.....	4,713	12,413	204,486	2,745	362,476	155,245	110	.....	.....	.....	110	.....	4
1,200,322	2,110,035	2,650,880	1,708	82,907	592,709	29,040,877	584,636	43,061,694	13,436,181	11,835	4,785	75	.....	6,975	3,621	5
77,304	116,317	135,878	.....	27,736	46,559	1,627,729	12,967	2,419,500	778,804	731	.....	8	.....	723	.....	6
28,521	41,049	16,047	.....	3,748	4,759	157,559	2,067	268,434	108,808	90	.....	.....	.....	90	.....	7
123,228	114,126	155,320	.....	8,590	76,075	1,889,203	10,273	2,786,468	886,992	846	5	30	.....	811	.....	8
100,068	127,961	273,622	.....	6,572	17,081	2,333,567	60,500	3,376,725	982,658	661	215	58	.....	388	.....	9
148,157	203,453	288,626	26	33,938	86,403	2,031,725	40,607	3,647,675	1,575,343	1,087	643	12	.....	432	73	10
449,812	1,034,354	1,275,903	1,667	31,621	478,599	9,460,905	103,437	16,435,155	6,870,813	3,850	1,875	164	.....	1,811	1,214	11
90,846	133,647	118,427	.....	13,294	167,350	1,593,952	17,020	2,512,132	901,160	620	80	.....	.....	540	14	12
407,864	618,312	1,182,022	200	55,796	199,431	9,500,015	218,087	14,531,437	4,813,335	3,905	2,210	.....	.....	1,695	1,011	13
56,415	62,277	54,176	.....	8,268	50,800	677,713	4,505	1,307,556	625,338	234	.....	.....	.....	234	.....	14
560,789	540,806	1,502,511	81,880	23,857	456,406	11,612,339	444,654	18,500,897	6,443,904	5,522	3,869	50	29	1,574	2,126	15
1,374,425	1,486,078	2,984,497	44,495	196,402	653,195	26,723,199	528,477	44,129,831	16,878,155	11,145	6,321	253	140	4,431	2,449	16
1,091,126	1,432,871	2,315,325	24,052	60,091	1,200,986	23,360,149	237,619	36,848,364	13,250,596	8,187	1,520	500	.....	6,167	1,242	17
1,128,459	1,211,734	3,952,211	7,810	51,557	651,719	22,682,083	785,482	35,747,820	12,280,255	13,421	7,219	307	760	5,135	4,669	18
48,276	40,494	99,839	.....	5,075	10,412	1,013,326	16,255	1,520,669	491,088	899	395	.....	.....	504	.....	19
41,908	30,002	54,335	.....	5,840	34,149	508,944	5,636	1,019,069	504,489	316	.....	.....	.....	316	.....	20
78,246	48,555	103,539	1,500	6,010	13,828	685,918	28,127	1,141,775	427,730	393	160	.....	30	203	.....	21
38,400	18,187	37,420	.....	3,080	4,790	263,737	3,350	486,783	219,696	175	.....	.....	.....	175	.....	22
147,900	32,600	101,767	.....	420	31,032	384,866	10,808	864,447	468,773	790	180	210	.....	400	150	23
149,066	333,786	415,286	.....	11,084	255,344	4,911,060	139,125	6,702,258	1,652,073	1,742	1,492	.....	.....	250	799	24
242,531	148,901	788,002	26,648	102,12	95,169	3,381,805	224,130	6,441,311	2,835,375	3,198	1,905	766	.....	527	1,800	25
VARNISHES.																
$3,694,724	$4,558,200	$4,567,788	$39,899	$196,779	$1,871,008	$50,952,290	$555,966	$83,632,424	$32,124,168	11,497	4,743	111	60	6,583	1,805	1
11,139	12,009	30,389	.....	1,545	2,691	289,720	1,992	412,138	120,426	17	.....	.....	.....	17	.....	2
26,557	23,813	18,574	.....	.....	2,815	141,593	2,613	235,174	90,968	86	35	.....	.....	51	.....	3
559,278	682,254	569,772	18,410	97,711	156,889	7,798,526	77,509	11,725,607	3,849,572	2,177	1,212	15	.....	950	150	4
104,958	132,591	99,177	.....	120	22,811	1,147,765	11,907	1,895,523	735,851	213	85	.....	.....	128	.....	5
.....	2,810	5,304	.....	1,237	1,168	58,212	1,088	89,395	30,095	50	.....	.....	.....	50	.....	6
276,919	300,279	302,933	.....	4,421	380,194	3,569,244	31,802	6,159,199	2,558,153	557	9	.....	.....	548	.....	7
149,327	259,122	268,709	.....	.....	139,505	2,114,125	29,614	4,091,941	1,948,202	553	.....	.....	.....	553	4	8
13,803	21,423	11,402	.....	400	9,754	167,907	3,156	385,610	114,547	32	.....	.....	.....	32	.....	9
73,458	70,046	104,916	.....	2,586	17,646	1,344,122	10,427	2,027,338	672,789	483	255	.....	.....	228	.....	10
546,697	583,501	801,440	14,896	7,106	166,071	8,642,513	110,662	13,314,471	4,561,296	1,799	1,145	.....	60	594	583	11
976,209	1,308,248	1,134,341	3,518	51,645	648,700	12,231,712	134,620	22,113,703	9,747,371	2,693	1,074	24	.....	1,595	387	12
515,337	624,138	870,632	.....	7,715	222,918	8,606,309	102,774	13,629,446	4,920,363	2,263	565	17	.....	1,681	673	13
231,439	200,060	167,239	75	10,144	25,842	2,014,295	18,341	3,097,446	1,061,810	445	321	55	.....	69	.....	14
209,603	328,906	182,960	3,000	12,149	74,004	2,826,247	19,461	4,455,433	1,709,725	129	42	.....	.....	87	8	15

[3] Same number reported throughout year.
[4] All other states embrace: Kansas, 1 establishment; Kentucky, 4; Louisiana, 1; Maine, 2; North Carolina, 1; Oregon, 2; Rhode Island, 2; Tennessee, 1; Virginia, 1; Wisconsin, 1.

LINSEED OIL.

GENERAL STATISTICS.

General character of the industry.—Reports were received at the census of manufactures, 1919, from 26 establishments engaged primarily in the expressing of oil from flaxseed, with cake and meal as by-products. There was also a considerable production of linseed oil reported by establishments in the paint and varnish industry. The production figures aim to cover total production.

Comparative summary.—Table 16 gives the general statistics for the census years 1899 to 1919, inclusive. At the census of 1879 the industry was represented by 81 establishments, with products valued at $15,394,000; in 1869, 77 establishments and $8,882,000; in 1859, 94 establishments with $5,982,000; and in 1849, 168 establishments with products valued at $1,949,000.

Principal states, ranked by value of products.—Table 17 summarizes the more important statistics for the industry, by states, ranked according to the value of products, New Jersey, which ranks third, being included with "All other states."

Persons engaged in the industry.—The age classification of the average number of wage earners in Table 18 is an estimate obtained by the method described in the "Explanation of terms." Figures for the states will be found in Table 26.

Wage earners, by months.—Table 19 is designed to show the steadiness of employment, or the reverse, in accordance with the industrial conditions existing during the year. Very few females are employed in this industry as wage earners, the average number constituting but 2 per cent of the total number.

Prevailing hours of labor.—As shown in Table 20, the majority of the wage earners fall under the higher groups, over 60 per cent being in the groups "60" and "Over 60" hours per week in 1919, though this proportion is materially less than was the case in 1914, when it was nearly 95 per cent.

Size of establishments, by average number of wage earners.—The figures in Table 21 show a growth in size of establishments for the period 1914–1919, and comparatively few are found in the lower groups. In 1919 the average number of wage earners for all plants was 84, compared with 59 in 1914.

Size of establishments, by value of products.—Measured by value of products, the establishments also are found in the higher groups. No establishment reported in 1919 products less than $100,000, and of the 26 establishments, 2 reported products in excess of $100,000 but less than $500,000; and 2 with products in excess of $500,000, but less than $1,000,000. The remaining establishments, 22 in number, reported products in excess of $1,000,000, aggregating $118,729,553, or 98.4 per cent of the total amount for the industry. These establishments employed 2,119 wage earners, or 97.5 per cent of the total number, and showed value added by manufacture to the amount of $19,756,094, or 98.5 per cent of the total for the industry. In 1914 there were 15 establishments in the "$1,000,000 and over" group, with 1,292 wage earners, products valued at $40,233,000 and value added by manufacture, $4,417,000.

Character of ownership.—Only 2 establishments in 1919 were not under corporate ownership, these being firms. In 1914, of the 25 establishments, 21 were corporations, 1 was owned individually, and 3 were firms.

Number and horsepower of types of prime movers.—Table 22 presents statistics concerning power. Electric power is a growing factor, and in 1919 purchased electric power constituted 46.5 per cent of the primary power, compared with 39.5 per cent in 1914 and 23.7 in 1909. In addition, a considerable portion of the owned power is utilized in electric generation.

Fuel consumed.—Table 23 presents statistics for fuel consumed, by kinds and by states.

TABLE 16.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

	1919	1914	1909	1904	1899	PER CENT OF INCREASE.[1] 1914–1919	1909–1914	1904–1909	1899–1904
Number of establishments	26	25	29	30	48	.....	.....	.....	.....
Persons engaged	2,751	1,998	1,753	1,518	(2)	37.7	14.0	15.5	.....
Proprietors and firm members	4	10	9	13	(2)	.....	.....	.....	.....
Salaried employees	574	500	292	156	285	14.8	71.2	87.2	−45.3
Wage earners (average number)	2,173	1,488	1,452	1,349	1,328	46.0	2.5	7.6	1.6
Primary horsepower	17,621	15,511	13,211	9,473	8,491	13.6	17.4	39.5	11.6
Capital	$73,954,035	$39,872,712	$18,931,829	$9,849,695	$15,460,512	85.5	110.6	92.2	−36.3
Salaries and wages	4,461,672	2,053,286	1,632,474	1,208,943	1,139,558	117.3	25.3	35.0	6.1
Salaries	1,409,403	926,117	739,862	423,309	446,247	52.2	25.2	74.8	−5.1
Wages	3,052,269	1,127,169	892,612	785,634	693,311	170.8	26.3	13.6	13.3
Paid for contract work	6,201	10,242	20,000	.....	(2)	−39.5	−48.8	(2)	(2)
Rent and taxes	1,299,858	140,594	94,520	[3] 50,337	(2)	824.5	48.7	87.8	(2)
Cost of materials	100,577,538	39,555,408	31,034,576	23,153,151	24,395,775	154.3	27.5	34.0	−5.1
Value of products	120,638,100	44,882,538	36,738,694	27,577,152	27,184,331	168.8	22.2	33.2	1.4
Value added by manufacture (value of products less cost of materials	20,060,562	5,327,130	5,704,118	4,424,001	2,788,556	276.6	−6.6	28.9	58.7

[1] A minus sign (−) denotes decrease; percentages are omitted where base is less than 100. [2] Figures not available. [3] Exclusive of internal revenue.

TABLE 17.—PRINCIPAL STATES, RANKED BY VALUE OF PRODUCTS: 1919.

STATE.	Number of establishments.	WAGE EARNERS. Average number.	Per cent distribution.	Rank.	VALUE OF PRODUCTS. Amount (expressed in thousands).	Per cent distribution.	Rank.	VALUE ADDED BY MANUFACTURE. Amount (expressed in thousands).	Per cent distribution.	Rank.
United States	26	2,173	100.0	...	$120,638	100.0	...	$20,060	100.0	...
New York	6	582	26.8	1	35,595	29.5	1	6,208	30.9	1
Minnesota	6	483	22.2	3	$33,238	27.6	2	$4,442	22.1	3
Ohio	3	270	12.4	4	9,369	7.8	4	1,608	8.0	4
All other states	11	838	38.6	...	42,436	35.2	...	7,802	38.9	..

TABLE 18.—PERSONS ENGAGED IN THE INDUSTRY: 1919, 1914, AND 1909.

CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL. Male.	Female.
All classes	1919	2,751	2,541	210	92.4	7.6
	1914	1,998	(1)	(1)	.....	.....
	1909	1,753	.....	.....	.....	.....
Proprietors and officials	1919	117	116	1	99.1	0.9
	1914	108	(1)	(1)	.....	.....
Proprietors and firm members	1919	4	4	.....	100.0	.....
	1914	10	(1)	(1)	.....	.....
Salaried officers of corporations	1919	48	47	1	97.9	2.1
	1914	40	(1)	(1)	.....	.....
Superintendents and managers	1919	65	65	.....	100.0	.....
	1914	58	(1)	(1)	.....	.....
Clerks and other subordinate salaried employees.	1919	461	295	166	64.0	36.0
	1914	402	(1)	(1)	.....	.....
Wage earners (average number)	1919	2,173	2,130	43	98.0	2.0
	1914	1,488	1,487	1	99.9	0.1
16 years of age and over	1919	2,173	2,130	43	98.0	2.0
	1914	1,488	1,487	1	99.9	0.1

[1] Figures not available.

TABLE 19.—WAGE EARNERS, BY MONTHS, FOR STATES: 1919.

[The 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. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Per cent minimum is of maximum.
United States:														
1919	2,173	2,119	1,963	*1,825*	1,907	2,101	2,137	**2,465**	2,333	2,395	2,211	2,308	2,312	74.0
Males	2,130	2,052	1,905	*1,762*	1,874	2,078	2,114	**2,434**	2,302	2,365	2,163	2,255	2,256	72.4
Females	43	67	58	63	33	*23*	*23*	31	31	30	48	53	56	34.3
1914	1,488	1,770	1,680	1,614	1,352	1,274	*1,104*	1,118	1,236	1,289	1,733	**1,853**	1,833	59.6
Minnesota	483	461	453	449	454	*416*	476	**577**	517	498	500	492	503	72.1
New York	582	631	532	*404*	467	524	568	665	686	**740**	533	585	649	54.6
Ohio	270	295	276	274	268	272	264	269	*248*	255	257	274	288	84.1

TABLE 20.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR STATES: 1919.

STATE.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—					
		48.	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
United States.....1919..	2,173	288	25	515	.....	904	441
1914..	1,488	1	.....	.....	78	220	1,189
Minnesota.....	483	.....	25	146	.....	248	64

STATE.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—					
		48.	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
New York.....	582	198	.....	.....	.....	194	190
Ohio.....	270	.....	.....	114	.....	66	90

TABLE 21.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR STATES: 1919.

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—											
			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.	
	Establishments.	Wage earners (average number).	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
United States.....1919..	26	2,173	1	5	3	41	6	192	8	566	7	1,031	1	338
1914..	25	1,488	1	1	5	81	8	282	7	465	3	401	1	258
Minnesota.....	6	483	.....	.....	.....	.....	2	50	2	137	2	296	.....	.....
New York.....	6	582	.....	.....	.....	.....	1	46	2	153	3	383	.....	.....
Ohio.....	3	270	.....	.....	.....	.....	.....	.....	2	156	1	114	.....	.....

TABLE 22.—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.....	223	158	116	17,621	15,511	13,211	100.0	100.0	100.0
Owned.....	34	54	57	9,425	9,380	10,080	53.5	60.5	76.3
Steam engines (not turbines).....	33	51	54	9,175	9,024	9,720	52.1	58.2	73.6
Internal-combustion engines.....	.....	2	2	.....	115	160	.....	0.7	1.2
Water wheels, turbines, and motors.....	1	1	1	250	250	200	1.4	1.6	1.5
Rented—Electric.....	189	104	59	8,196	6,122	3,131	46.5	39.5	23.7
Electric.....	312	162	110	10,875	8,289	3,931	100.0	100.0	100.0
Rented.....	189	104	59	8,196	6,122	3,131	75.4	73.9	79.6
Generated by establishments reporting.....	123	58	51	2,679	2,167	800	24.6	26.1	20.4

TABLE 23.—FUEL CONSUMED, BY STATES: 1919.

STATE.	COAL.		Coke (tons, 2,000 lbs.).	Gas (1,000 cubic feet).
	Anthracite (tons, 2,240 lbs.).	Bituminous (tons, 2,000 lbs.).		
United States.....1919..	31,893	73,871	85	757
1914..	13,660	85,402	131	26,447
Minnesota.....	3,500	22,414	.....	.....

STATE.	COAL.		Coke (tons, 2,000 lbs.).	Gas (1,000 cubic feet).
	Anthracite (tons, 2,240 lbs.).	Bituminous (tons, 2,000 lbs.).		
New York.....	22,303	.....	.....	.....
Ohio.....	.....	15,292	85	.....
All other states.....	6,000	36,165	.....	757

SPECIAL STATISTICS.

Table 24 presents the statistics for materials and products for the census year 1919. Detailed statistics of production were not reported at the prior censuses.

TABLE 24.—MATERIALS AND PRODUCTS: 1919.

[Tons, 2,000 pounds.]

MATERIAL AND PRODUCT.	Value.
MATERIALS.	
Total cost	$100,577,538
Flaxseed:	
Consumption, tons	631,458
Linseed-oil mills—	
Tons	604,258
Cost	$89,584,459
Average unit cost, ton	$148.25
Estimated consumption by establishments in other industries, manufacturing linseed oil, tons	27,200
Other oil materials (not flaxseed), copra, castor beans, etc	$6,143,670
Fuel and rent of power	$669,479
All other materials	$4,179,930
PRODUCTS.	
Total value	$124,494,503
Linseed-oil industry, all products	120,638,100
Subsidiary products of other industries (paint and varnish)	3,856,403
PRODUCTS—continued.	
Linseed oil:	
Raw oil—	
Total production, gallons	$55,121,234
For sale—	
Gallons	32,243,931
Value	$50,847,956
Produced for consumption (including boiling) in same establishment, gallons	22,877,303
Boiled oil—	
Gallons	22,156,323
Value	$36,762,221
Linseed cake—	
Tons	244,803
Value	$15,819,433
Linseed meal—	
Tons	164,338
Value	$10,615,777
Vegetable oils, other than linseed (products of linseed-oil mills): [1]	
Gallons	6,997,972
Value	$9,388,802
All other products	$1,060,314

[1] Includes the following vegetable oils, products of linseed-oil mills (not total production of same): Coconut or copra, 4,363,953 gallons, valued at $6,176,845; castor, 590,927 gallons, valued at $951,157; soya bean, 212,102 gallons, valued at $399,526; peanut, 188,270 gallons, valued at $313,419; other, and unclassified vegetable oils, 1,692,720 gallons, valued at $1,547,855; total, 6,997,972 gallons, valued at $9,388,802.

The statistics given in the report on Animal and Vegetable Fats and Oils, 1919, for linseed-oil production and flaxseed consumption, compiled from quarterly reports, exceed somewhat the figures given in the above table. The consumption of flaxseed, 1919, as given in said report, was 691,737 net tons, and the production of linseed oil 58,821,792 gallons, which amount of linseed oil exceeds the quantity reported for the census of manufactures by 6.7 per cent. This may be due to duplications in certain quarterly reports or possibly to establishments that made and consumed linseed oil, without marketing any of same, not reporting as manufacturers thereof.

GENERAL TABLES.

Table 25 gives for 1919 and 1914 a comparative summary, by states, for number of establishments, average number of wage earners, primary horsepower, cost of materials, and value of products; and Table 11 presents for 1919 the detailed statistics for the industry, by states.

TABLE 25.—COMPARATIVE SUMMARY, BY STATES: 1919 AND 1914.

STATE.	Census year.	Number of establishments	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
United States	1919	26	2,173	17,621	$3,052	$100,578	$120,638
	1914	25	1,488	15,511	1,127	39,555	44,883
	1909	20	1,452	13,211	893	31,035	36,739
Minnesota	1919	6	483	4,102	647	28,796	33,238
	1914	6	400	4,467	326	11,270	12,357
New York	1919	6	582	5,951	$888	$29,387	$35,595
	1914	6	538	5,147	378	14,121	16,687
Ohio	1919	3	270	1,516	275	7,761	9,399
	1914	3	150	1,603	116	3,642	3,956
All other states	1919	11	838	6,052	1,242	34,634	42,436
	1914	10	400	4,294	307	10,513	11,881

TABLE 26.—DETAILED STATEMENT, BY STATES: 1919.

STATE.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Capital.	EXPENSES. Salaries and wages. Officials.	Salaries and wages. Clerks, etc.
United States	26	2,751	4	113	295	166	2,173	Jy 2,465	Mh 1,825	2,318	2,263	55	$73,954,065	$836,465	$572,938
Minnesota	6	617	.....	30	65	39	483	Jy 577	My 416	504	498	6	19,648,821	342,482	125,290
New York	6	754	2	32	89	49	582	Se 740	Mh 404	706	704	2	29,338,293	165,139	172,392
Ohio	3	357	.....	17	43	27	270	Ja 295	Au 248	250	246	4	3,822,151	89,725	96,106
All other states [1]	11	1,023	2	34	98	51	838	No 957	Mh 698	858	815	43	21,144,800	239,119	179,180

STATE.	EXPENSES—continued. Salaries and wages—Continued. Wage earners.	For contract work.	Rent and taxes. Rent of factory.	Taxes, Federal, state, county, and local	For materials. Principal materials.	Fuel and rent of power.	Value of products.	Value added by manufacture.	POWER. Primary horsepower. Total.	Owned. Steam engines (not turbines).	Owned. Water power.[2]	Rented (electric).	Electric horsepower generated in establishments reporting.
United States	$3,052,269	$6,201	$4,256	$1,295,602	$99,908,059	$669,479	$120,638,100	$20,060,562	17,621	9,175	250	8,196	2,679
Minnesota	646,813	.....	.....	333,945	28,623,332	172,652	33,237,740	4,441,756	4,102	2,480	.....	1,622	79
New York	888,347	6,201	.....	531,132	29,216,719	170,342	35,594,760	6,207,699	5,951	1,706	250	3,995	365
Ohio	275,212	.....	612	105,992	7,696,538	64,214	9,368,779	1,608,027	1,516	850	.....	666	250
All other states [1]	1,241,897	.....	3,644	324,533	34,371,470	262,271	42,436,821	7,803,080	6,052	4,139	.....	1,913	1,985

[1] All other states embrace: Illinois, 2 establishments; Iowa, 2; Kansas, 1; New Jersey, 2; Oregon, 1; Washington, 1; and Wisconsin, 2.
[2] Includes water wheels and turbines (irrespective of ownership of water supply).

BONE, CARBON, AND LAMP BLACK.

GENERAL STATISTICS.

General character of the industry.—The census classification covers establishments engaged primarily in the carbonization of bone in retorts, producing bone black, "char," or animal charcoal; in the manufacture of carbon black by the imperfect combustion of natural gas; and of lampblack from the smoke of the imperfect combustion of coal or wood tar or petroleum, rosin, etc. The production of ivory black by the carbonization of ivory scrap and waste is also included. At censuses prior to 1909 the industry was known as "Bone, ivory, and lamp black."

Comparative summary.—Table 27 gives the general statistics for the census years 1899 to 1919, inclusive. At the census of 1889, 24 establishments were reported, with products valued at $1,030,030; in 1879, 18 establishments and $661,376 in value of products; in 1869, 9 establishments and $193,800 in value of products; in 1859, 24 establishments and $376,710 in value of products; and in 1849, 5 establishments with $42,250 in value of products.

Persons engaged in the industry.—The total number of persons engaged in the industry in 1919 was 826, comprising 675 wage earners, 108 proprietors and officials, and 43 clerks. Of the total number employed, only 2.2 per cent were females, most of whom were clerks.

Wage earners, by months.—The largest number of wage earners reported for any month of 1919 was 695 for October, and the smallest 654, 94.1 per cent of the maximum, was reported for January.

Prevailing hours of labor.—The majority of the wage earners were employed in establishments where the prevailing hours of labor per week were in excess of 54. Of the 675 wage earners only 17.3 per cent were reported for establishments working 54 or less hours per week.

Size of establishments, by average number of wage earners.—Table 28 presents the statistics by size groups according to number of wage earners. The average for all establishments was 19 in 1919, 13 in 1914, and 8 in 1909.

Size of establishments, by value of products.—The average value of products per establishment increased from $40,500 in 1909 to $54,206 in 1914, and to $176,749 in 1919. Table 29 shows a general advance from lower to higher groups for 1919 as compared with 1914, due essentially to advance in values.

Character of ownership.—There were 26 establishments in the industry in 1919 under corporate ownership, with products valued at $4,698,012, or 75.9 per cent of the total for the industry, 6 owned individually, with 17.6 per cent of all products; and 3 by firms, with 6.5 per cent. In 1914, 18 establishments under corporate ownership had products valued at $1,075,098, or 73.5 per cent of the total, and 7 were individual establishments, and 2 were firms.

Number and horsepower of types of prime movers.—Table 30 presents the statistics concerning power. Of the total primary power, 26.4 per cent was purchased electric power in 1919 as compared with 4 per cent in 1914.

Fuel consumed.—The industry is a large consumer of natural gas. In 1919 the consumption as reported was 49,495,995,000 cubic feet of gas, together with 6,661 net tons of bituminous coal, 25 long tons of anthracite, and 1,200 barrels of oil. The fuels consumed in 1914 included 19,470,270,000 cubic feet of gas, 1,872 net tons of bituminous coal, and 375 long tons of anthracite.

TABLE 27.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

	1919	1914	1909	1904	1899	PER CENT OF INCREASE.[1]			
						1914–1919	1909–1914	1904–1909	1899–1904
Number of establishments	35	27	27	25	15	.....	.....	.....	.....
Persons engaged	826	437	302	258	123	89.0	44.7	17.1	109.8
Proprietors and firm members	30	17	7	11	17	76.5	142.9	−36.4	−35.3
Salaried employees	121	81	67	47	21	49.4	20.9	42.6	123.8
Wage earners (average number)	675	339	228	200	85	99.1	48.7	14.0	135.3
Primary horsepower	1,857	1,816	1,023	1,085	365	2.3	77.5	−5.7	197.3
Capital	$9,790,167	$4,995,400	$1,841,966	$1,663,143	$782,247	96.0	171.2	10.8	112.6
Salaries and wages	1,120,718	336,001	227,660	153,649	69,757	233.5	47.6	48.2	120.3
Salaries	312,386	105,180	78,333	48,490	23,650	197.0	34.3	61.5	105.0
Wages	808,332	230,821	149,327	105,159	46,107	250.2	54.6	42.0	128.1
Paid for contract work	4,500	350	.....	.....	891	.....	.....	.....	.....
Rent and taxes	177,186	21,995	22,351	[2] 12,156	8,885	705.6	−1.6	83.9	36.8
Cost of materials	[2] 848,059	686,240	444,608	203,396	105,712	315.0	54.3	118.6	92.4
Value of products	4,186,204	1,463,569	1,093,494	647,717	359,787	322.7	33.8	68.8	80.0
Value added by manufacture [3]	3,338,145	777,329	648,886	444,321	254,075	329.4	19.8	46.0	74.9

[1] A minus sign (−) denotes decrease; percentages are omitted where base is less than 100. [2] Exclusive of internal revenue. [3] Value of products less cost of materials.

TABLE 28.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS: 1919, 1914, AND 1909.

CLASS.	BONE, CARBON, AND LAMP BLACK.								
	Number of establishments.			Wage earners (average number).			Per cent distribution.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909
Total	35	27	27	675	339	228	100.0	100.0	100.0
Establishments employing—									
1 to 5 wage earners	10	14	15	39	41	50	5.8	12.1	21.9
Establishments employing—Continued.									
6 to 20 wage earners	16	10	9	183	130	118	27.1	38.3	51.8
21 to 50 wage earners	6	1	2	173	44	60	25.6	13.0	26.3
Over 50 wage earners	3	2	.....	280	124	.....	41.5	36.6	.....

TABLE 29.—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	35	27	27	675	339	228	$6,186,204	$1,463,569	$1,093,494	$3,338,145	$777,329	$648,886
Less than $5,000	1	3	3	6	7	2	25,881	12,543	7,114	11,971	8,397	4,502
$5,000 to $20,000	2	7	7		19	33		88,015	86,163		53,995	56,624
$20,000 to $100,000	15	11	13	114	92	99	805,883	447,723	519,114	405,602	285,308	306,517
$100,000 to $500,000	[1] 17	6	4	[1] 555	221	94	[1] 5,354,440	915,288	481,103	[1] 2,920,572	429,629	281,243
	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	2.9	11.1	11.1	0.9	2.1	0.9	0.4	0.9	0.6	0.4	1.1	0.7
$5,000 to $20,000	5.7	25.9	25.9		5.6	14.5		6.0	7.9		6.9	8.7
$20,000 to $100,000	42.9	40.8	48.2	16.9	27.1	43.4	13.0	30.6	47.5	12.2	36.7	47.2
$100,000 to $500,000	48.6	22.2	14.8	[1] 82.2	65.2	41.2	[1] 86.6	62.5	44.0	487.4	55.3	43.3

[1] Includes the group "$1,000,000 and over."

TABLE 30.—NUMBER AND HORSEPOWER OF TYPES OF PRIME MOVERS: 1919 AND 1914.

POWER.	Number of engines or motors, 1919.	HORSEPOWER.			
		Amount.		Per cent distribution.	
		1919	1914	1919	1914
Primary power, total	85	1,857	1,816	100.0	100.0
Owned	51	1,366	1,713	73.6	94.3
Steam engines (not turbines)	9	455	502	24.0	27.6
Internal-combustion engines	42	911	1,211	49.6	66.7
Rented	34	491	103	26.4	5.7
Electric	34	491	73	26.4	4.0
Other	.....	.....	30	.....	1.7
Electric	34	491	81	100.0	100.0
Rented	34	491	73	100.0	90.1
Generated by establishments reporting	.....	.....	8	.....	9.9

SPECIAL STATISTICS.

Table 31 presents the production statistics for bone, carbon, and lamp black for 1919 in comparison with 1914 and 1909. The statistics include production by all classes of establishments, those producing carbon, bone, or lamp black as a subordinate or subsidiary product, as well as those included within the classified industry. The figures, however, do not include black pigments made and consumed by paint manufacturers and marketed in paint or other form, the production of such intermediates not being reported separately.

TABLE 31.—PRODUCTS: 1919, 1914, AND 1909.

	1919	1914	1909
Number of establishments	46	39	57
The classified industries:			
Carbon black	29	20	27
Bone black	6	7	
Lampblack			
Other industries	11	12	30
PRODUCTS.			
Total value	$8,462,363	$2,971,633	$2,160,552
The classified industries:			
Carbon black (all products)	3,934,233	1,463,569	1,093,494
Bone black (all products)	2,251,971		
Lampblack (all products)			
Subsidiary products from other industries (fertilizers and paints)	2,276,159	1,508,064	1,067,058

	1919	1914	1909
PRODUCTS—continued.			
Carbon black:			
Number of establishments [1]	32	20	18
Pounds	52,056,940	22,869,000	
Value	$3,816,000	$918,011	$625,514
Average value per 100 pounds	$7.30	$4.00	
Bone black: [1]			
Number of establishments	9	7	7
Pounds	47,506,000	44,509,000	
Value	$2,372,524	$1,532,000	$1,070,333
Average value per 100 pounds	$5.00	$3.45	
Lampblack:			
Number of establishments [1]	5	12	32
Value [2]	$1,390,719	$503,856	$439,707
All other products	883,120	17,686	24,998

[1] Distribution by states, 1919: Carbon black (32)—West Virginia, 16; Lousiana, 7; Pennsylvania, 2; and 1 each in Kentucky, Minnesota, Montana, New York, Oklahoma, Pennsylvania, and Wyoming. Bone black (9)—1 each in California, Florida, Illinois, Louisiana, Massachusetts, Michigan, New Jersey, Pennsylvania, and Texas. Lampblack (5)—Pennsylvania, 3; Massachusetts, 1; and New Jersey, 1.

[2] Includes for 1919, $480,387 the value of 3,393,480 pounds, and $910,332 quantity not reported; total quantity estimated 9,827,000 pounds; and for 1914, $215,212 the value of 4,786,394 pounds, and $288,644 quantity not reported; total quantity estimated 11,200,000 pounds.

GENERAL TABLES.

Table 32 gives for 1919, 1914, and 1909 the comparative statistics for the United States and for West Virginia.

Table 7 presents for 1919 the statistics in detail for the United States and for Louisiana and West Virginia, the only states for which detailed statistics can be given.

TABLE 32.—COMPARATIVE SUMMARY, BY STATES: 1919, 1914, AND 1909.

STATE.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
United States	1919	35	675	1,857	$808	$2,848	$6,186
	1914	27	339	1,816	231	686	1,464
	1909	27	228	1,023	149	445	1,093
West Virginia	1919	16	242	393	282	1,231	2,407
	1914	18	161	1,016	106	387	851
	1909	16	101	641	66	249	596
All other states	1919	19	433	1,464	$526	$1,617	$3,779
	1914	9	178	800	125	299	613
	1909	11	127	382	83	196	497

TABLE 33.—DETAILED STATEMENT, BY STATES: 1919.

INDUSTRY AND STATE.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Number, 15th day of— Maximum month.	Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Capital.	EXPENSES. Salaries and wages. Officials.	EXPENSES. Salaries and wages. Clerks, etc.
United States	35	826	30	78	32	11	675	Oct 698	Jan 658	684	682	2	$9,790,167	$265,813	$46,573
Carbon black	29	528	29	50	22	5	422	Oct 444	Jan 403	424	424	.....	8,177,386	137,035	25,893
Bone and lamp black	6	298	1	28	10	6	253	Dec 260	Sept 243	260	258	2	1,612,781	128,778	20,680
Louisiana	7	156	5	11	10	1	129	Oct 140	July 121	134	134	.....	2,891,015	29,221	10,950
West Virginia	16	298	24	23	6	3	242	Feb 258	Nov 229	236	236	.....	4,223,057	74,230	10,994
All other states	12	372	1	44	16	7	304	Dec 317	June 298	314	312	2	2,676,095	162,362	24,629

INDUSTRY AND STATE.	EXPENSES—continued. Salaries and wages—Con. Wage earners.	For contract work.	Rent and taxes. Rent of factory.	Taxes, Federal, state, county, and local.	For materials. Principal materials.	Fuel and rent of power.	Value of products.	Value added by manufacture.	POWER. Primary horsepower. Total.	Owned. Steam engines (not turbines).	Owned. Internal-combustion engines.	Rented (electric).
United States	$808,332	$4,500	$3,515	$173,671	$1,461,364	$1,386,695	$6,186,204	$3,338,145	1,857	455	911	491
Carbon black	492,642	4,500	1,295	139,569	618,824	1,333,902	3,934,233	1,981,507	712	80	632	.....
Bone and lamp black	315,690	.....	2,220	34,102	842,540	52,793	2,251,071	1,356,638	1,145	375	279	491
Louisiana	134,968	.....	.....	53,589	178,377	284,816	1,002,400	539,297	240	40	200	.....
West Virginia	282,179	.....	875	33,672	369,020	862,124	2,407,136	1,175,992	393	40	353	.....
All other states	391,185	4,500	2,440	86,410	913,967	239,755	2,776,578	1,622,856	1,224	375	358	491

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

WASHINGTON

FOURTEENTH CENSUS OF THE UNITED STATES

MANUFACTURES: 1919

PAPER AND WOOD PULP

Prepared under the supervision of EUGENE F. HARTLEY, Chief Statistician for Manufactures

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EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census did not cover establishments which were idle during the entire year or for which products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1919, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city, county, or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city, county, or state in which it was located. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products different from those covered by the class designation, and, on the other hand, may not represent the total product covered by this designation, because some products of this class may be made in establishments in which it is not the product of chief value.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1919 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the manufacturing industries were distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners.

The number of persons engaged in each industry, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where this date did not portray such conditions, an earlier date was requested.

In the case of employees other than wage earners the number thus reported for the representative date has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, by sex, without distinction of age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given in certain tables for each separate industry, is not totaled for all industries combined, because, in view of the variations of date, such a total is not believed to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation.

In order to determine as nearly as possible the age distribution of the average number of wage earners for an industry, the per cent distribution by age of the wage earners for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. The percentages thus obtained have been applied to the average number of wage earners for the year to determine the average numbers 16 years and over, and under 16, employed.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number of wage earners fluctuates from month to month in every industry, and in some cases to a very great extent. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month, and while representing the number according to the pay rolls to whom wages were paid on that date, no doubt represent a larger number than would be required to perform the work in any industry if all were continuously employed during the year.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a few wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital (amount actually invested).—The instructions on the schedule for securing data relating to capital were as follows:

"The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises."

These instructions were identical with those employed at the censuses of 1914 and 1909. The data compiled in respect to capital, however, at both censuses, as well as at all preceding censuses of manufactures, have been so defective as to be of little value except as indicating general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include certain Federal taxes and state, county, and local taxes. Under "Federal taxes" there are included the internal revenue tax on manufactures (tobacco, beverages, etc.), excise taxes when included in values reported for products, corporation capital stock tax, and corporation income tax, but not the income tax for individuals and partners.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of depreciation or interest, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power equipment of the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, fuel oils, gasoline and other volatile oils, and gas, and represent the quantity used during the year. As only the principal kinds of fuel are shown, comparison as to the total cost of all fuel is impracticable.

PAPER AND WOOD PULP.

GENERAL STATISTICS.

General character of the industry.—The figures covering the paper and wood-pulp industry, as here considered, are derived from a consolidation of reports made by three classes of establishments: (1) Mills engaged in the manufacture of paper exclusively, (2) mills making wood pulp exclusively, and (3) mills that manufacture both pulp and paper. Mills of the first class purchase all, and a majority of those in the third class purchase a part, of the pulp they use. A portion of this material is imported, but the greater part is the product of the mills making pulp exclusively or of the combined paper and pulp mills. For this reason the combined value of products and combined cost of materials include considerable duplication, amounting to approximately $80,000,000 in 1919 and about $32,000,000 in 1914, these amounts representing approximately the value of wood pulp of domestic origin consumed in establishments other than where produced. Since a greater portion of the industry is represented by mills manufacturing both pulp and paper, separate figures for the three classes have no great significance, and therefore are shown in Table 2 only.

Comparative summary.—A summary of the paper and wood-pulp industry as a whole is given in Table 1 for each census from 1879 to 1919, inclusive.

The industry has made a remarkable growth in the last 40 years, and shows a substantial increase at each successive census in the most important items in this table. The larger increases, however, from 1914 to 1919, in salaries and wages, cost of materials, and value of products, are due largely to a general rise of prices and wages following the World War, and do not, therefore, fairly measure the growth of the industry for that period. A truer index of the conditions is found in the increases in the average number of wage earners and primary horsepower. The addition of the Federal income tax since 1914 will account for the increase in "Rent and taxes."

In 1919 the value added by manufacture was 40.7 per cent of the total value of products, as compared with 35.8 per cent in 1914, 38.2 per cent in 1909, and 41 per cent in 1904.

The total value of products in 1919 includes by-products to the value of $24,807,046, of which paper boxes to the value of $12,793,151 was the principal item. On the other hand, in addition to the total value of products shown in this table, 5 establishments, engaged primarily in the manufacture of paper boxes, roofing materials, and other products, reported paper to the value of $1,064,772.

Summary of the industry.—Table 2 gives the principal statistics for establishments making paper only, pulp only, and for those producing both paper and pulp. Of the 729 establishments engaged in the industry in 1919, 497, or 68.2 per cent, made paper only; 61, or 8.4 per cent, pulp only; and 171, or 23.5 per cent, made both paper and pulp. In 1919, 47.5 per cent of the total value of products was made in paper mills, 4.6 per cent in pulp mills, and 47.9 per cent in combined paper and pulp mills.

Principal states, ranked by value of products.—Table 3 presents, by states, the number of wage earners, value of products, and value added by manufacture, the states being arranged according to the value of products in 1919. A number of states, for which data can not be shown without disclosing individual operations, ranked higher than some named in the table. Although 32 were represented in the industry in 1919, the 8 leading states, named in order of rank, produced 78.5 per cent of the total value of products.

Persons engaged in the industry.—The classification by sex, for 1919 was reported separately, but for 1914 and 1909, was obtained in the same manner as the distribution by age. The age classification of the average number of wage earners in Table 4 is an estimate obtained by the method described in the "Explanation of terms."

Wage earners, by months, for selected states.—As shown by Table 5, the number of wage earners employed in the industry, month by month, ranged from a maximum of 120,762 in November to a minimum of 107,762 in April, the minimum number being equivalent to 89.2 per cent of the maximum. Figures are given for all states, reporting an average of over 600 wage earners, that could be shown without disclosing operations of individual establishments, while for the United States the number of males and females is also shown.

Average number of wage earners, by prevailing hours of labor per week, for selected states.—Table 6 shows a marked shortening of the working day for the industry since 1914. In that year only 18.3 per cent were reported as employed fewer than 54 hours per week as against 67.9 per cent in 1919. In 1914 the "60" and "Over 60" groups constituted 55.5 per cent of the total wage earners, as compared with 18.8 per cent in 1919.

Size of establishments, by average number of wage earners, for selected states.—Analysis of Table 7 brings out the fact that in 1919, 97,198 wage earners, or 85.4 per cent of the total number, were reported by establishments which employed more than 100 wage earners. The most important group, both as to number of establishments and number of wage earners, was that comprising establishments which employed

101 to 250 wage earners. The average number of wage earners per establishment in 1919 for the United States as a whole was 156 as compared with 123 in 1914. For New York, Maine, and Massachusetts, the three leading states in the industry, the averages per establishment were 113, 335, and 166, respectively.

Size of establishments, by value of products.—At the censuses of 1909 and 1914, establishments with products valued at "$100,000 to $1,000,000" constituted one group, but at the census of 1919 this group was subdivided into "$100,000 to $500,000" and "$500,000 to $1,000,000." Separate figures for the number of establishments and value of products have been compiled, however, from the returns for 1914. The table, therefore, gives combined figures for these two groups in the case of all items for 1909, and in the case of average number of wage earners and value added by manufacture for 1914. The statistics in Table 8 show the degree of concentration of production in large establishments. In 1919 the groups "$500,000 to $1,000,000" and "$1,000,000 and over" included 384 establishments, or 52.7 per cent of the total number for the industry, employed 101,822 wage earners, or 89.5 per cent of the total average number, and reported products to the value of $722,367,366, or 91.7 per cent of the total value of products.

Character of ownership.—Table 9 emphasizes the predominance of the corporate form of ownership. Corporations owned 88.8 per cent of the total number of establishments, employed 96.8 per cent of the total average number of wage earners, and reported 96.4 per cent of the value of products. During the five-year period 1914 to 1919 the average number of wage earners in corporations increased 26,577, or 31.8 per cent, and the value of products $444,131,819, or 140.8 per cent.

Number and horsepower of types of prime movers.—From 1914 to 1919, as shown by Table 10, there was an increase in the total horsepower for the industry of 229,860 horsepower, or 14.2 per cent. Of the total primary power used in this industry, water power is the principal kind, contributing 49.2 per cent of the total power reported. A notable increase in the use of electrically driven equipment is shown, at each census period, in horsepower of electric motors operated by both current purchased and current generated by the establishments reporting. A greater part of the latter represents water power transformed into electric energy.

Fuel consumed, by states.—Table 11 shows the principal kinds of fuel used for the industry in 1919 and 1914 and also gives separately the amounts consumed in states requiring considerable quantities of fuel for manufacturing purposes. Because of the extensive use of water power, the consumption of fuel in the paper and wood-pulp industry is comparatively small. Bituminous coal, in 1919 as in 1914 and 1909, was the principal fuel used. The largest amount was reported by Pennsylvania, the sixth state in value of products, with New York the leading state second. New York reported the greatest consumption of anthracite, and, together with New Hampshire and New Jersey, reported 83.2 per cent of this kind of coal.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, 1899, 1889, AND 1879.

	1919	1914	1909	1904	1899	1889	1879	PER CENT OF INCREASE.[1] 1914–1919	1909–1914	1904–1909	1899–1904	1889–1899	1879–1889
Number of establishments	729	718	777	761	763	649	742	1.5	−7.6	−5.7	1.8	17.6	−12.5
Persons engaged	124,935	95,516	81,473	70,051	53,012	(2)	(2)	30.8	17.2	36.4	53.7	.....	.....
Proprietors and firm members	171	221	250	309	431	(2)	(2)	−22.6	−11.6	−28.5	−42.0	.....	.....
Salaried employees	11,005	6,838	5,245	3,778	2,935	(2)	(2)	60.9	30.4	81.0	78.7	.....	.....
Wage earners (average number)	113,759	88,457	75,978	65,964	49,646	31,050	25,631	28.6	16.4	34.1	53.0	59.9	21.1
Primary horsepower	1,851,014	1,621,154	1,304,265	1,093,708	762,118	297,724	(2)	14.2	24.3	48.2	71.1	156.0	.....
Capital	$905,794,583	$534,624,600	$409,348,505	$277,444,471	$167,507,713	$89,829,548	$48,139,652	69.4	30.6	92.7	144.4	86.5	86.6
Salaries and wages	165,643,386	66,163,815	50,314,643	38,116,244	25,247,337	14,975,485	8,970,133	150.4	31.5	73.6	99.3	68.6	66.9
Salaries	29,952,744	12,918,176	9,510,141	6,097,032	4,500,911	(2)	(2)	131.9	35.8	111.9	111.3	.....	.....
Wages	135,690,642	53,245,639	40,804,502	32,019,212	20,746,426	(2)	(2)	154.8	30.5	66.3	96.7	.....	.....
Paid for contract work	487,240	539,626	527,915	118,403	320,846	(2)	(2)	−9.7	2.2	355.8	64.5	.....	.....
Rent and taxes	34,911,259	4,403,053	2,637,540	[3] 1,582,116	[3] 1,336,215	(2)	(2)	677.0	70.4	.....	.....	.....	.....
Cost of materials	467,482,637	213,181,286	165,442,341	111,251,478	70,530,236	44,228,480	34,802,132	119.3	28.9	91.6	134.6	59.5	26.9
Value of products	788,059,377	332,147,175	267,656,904	188,715,189	127,326,162	78,937,184	57,366,860	137.3	24.1	76.0	110.2	61.3	37.6
Value added by manufacture [4]	320,576,740	118,965,889	102,214,623	77,463,711	56,795,926	34,708,704	22,504,728	169.5	16.4	53.6	80.0	63.6	54.2

[1] A minus sign (−) denotes decrease. [2] Figures not available. [3] Exclusive of internal revenue. [4] Value of products less cost of materials.

TABLE 2.—SUMMARY OF THE INDUSTRY: 1919 AND 1914.

	TOTAL.		MILLS MAKING—					
			Paper only.		Pulp only.		Both paper and pulp.	
	1919	1914	1919	1914	1919	1914	1919	1914
Number of establishments	729	718	497	495	61	63	171	160
Persons engaged	124,935	95,516	56,796	46,299	6,309	5,807	61,830	43,410
Proprietors and firm members	171	221	143	179	21	30	7	12
Salaried employees	11,005	6,838	5,610	3,639	481	403	4,914	2,796
Wage earners (average number)	113,759	88,457	51,043	42,481	5,807	5,374	56,909	40,602
Primary horsepower	1,851,014	1,621,154	561,698	479,846	143,371	161,107	1,145,945	980,201
Capital	$905,794,583	$534,624,600	$363,382,919	$177,413,070	$42,081,327	$36,027,869	$500,330,337	$321,183,661
Salaries and wages	165,643,386	66,163,815	72,985,153	31,444,202	7,591,403	4,004,939	85,066,830	30,714,674
Salaries	29,952,744	12,918,176	14,660,500	6,763,344	1,066,848	749,711	14,225,396	5,405,121
Wages	135,690,642	53,245,639	58,324,653	24,680,858	6,524,555	3,255,228	70,841,434	25,309,553
Paid for contract work	487,240	539,626	134,286	114,128	11,652	44,311	341,302	381,187
Rent and taxes (including internal revenue)	34,911,259	4,493,053	14,252,913	1,793,242	1,889,252	375,666	18,769,094	2,324,145
Cost of materials	467,482,637	213,181,286	237,402,880	103,678,513	22,686,708	13,733,080	207,393,049	95,769,693
Value of products	788,059,377	332,147,175	374,362,494	158,426,850	35,884,802	20,526,386	377,812,081	153,193,939
Value added by manufacture [1]	320,576,740	118,965,889	136,959,614	54,748,337	13,198,094	6,793,306	170,419,032	57,424,246

[1] 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	729	113,759	100.0	....	$788,059	100.0	....	$320,577	100.0	...
New York	156	17,571	15.4	1	129,381	16.4	1	52,427	16.4	1
Maine	39	13,058	11.5	2	93,917	11.9	2	39,246	12.2	2
Massachusetts	78	12,960	11.4	3	87,160	11.1	3	33,396	10.4	4
Wisconsin	57	12,789	11.2	4	80,328	10.2	4	35,128	11.0	3
Michigan	39	9,561	8.4	6	66,300	8.4	5	25,946	8.1	6
Pennsylvania	56	9,843	8.7	5	64,716	8.2	6	29,073	9.1	5
Ohio	49	6,899	6.1	7	55,098	7.0	7	19,388	6.0	7
New Hampshire	27	5,000	4.4	8	41,826	5.3	8	16,992	5.3	8
New Jersey	33	3,108	2.7	9	20,361	2.6	9	8,365	2.6	10
Minnesota	9	2,523	2.2	10	20,138	2.6	10	8,730	2.7	9
Indiana	26	2,214	1.9	11	$15,120	1.9	11	$5,606	1.8	12
Illinois	19	1,831	1.6	15	14,357	1.8	12	5,144	1.6	14
Virginia	10	1,951	1.7	13	13,602	1.7	13	5,807	1.8	11
Connecticut	44	1,999	1.8	12	12,939	1.6	14	4,722	1.5	15
Vermont	20	1,832	1.6	14	10,863	1.4	15	4,200	1.3	16
Washington	6	1,610	1.4	16	10,653	1.4	16	5,591	1.7	13
Maryland	10	1,408	1.2	18	9,917	1.3	17	3,101	1.0	18
California	7	806	0.7	21	5,805	0.7	20	2,398	0.7	20
West Virginia	9	956	0.8	20	4,888	0.6	21	1,588	0.5	21
Delaware	5	683	0.6	22	4,573	0.6	22	1,344	0.4	22
Kansas	3	291	0.3	26	1,779	0.2	25	658	0.2	25
Iowa	4	136	0.1	30	662	0.1	30	319	0.1	31
All other states	23	4,730	4.2	....	23,726	3.0	....	11,309	3.5	...

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

CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL.	
					Male.	Female.
All classes	1919	124,935	111,778	13,157	89.5	10.5
	1914	95,516	85,022	10,494	89.0	11.0
	1909	81,473	70,916	10,557	87.0	13.0
Proprietors and officials	1919	4,017	3,901	116	97.1	2.9
	1914	2,425	2,393	32	98.7	1.3
	1909	2,298	2,269	29	98.7	1.3
Proprietors and firm members	1919	171	144	27	84.2	15.8
	1914	221	205	16	92.8	7.2
	1909	250	232	18	92.8	7.2
Salaried officers of corporations	1919	1,312	1,285	27	97.9	2.1
	1914	887	877	10	98.9	1.1
	1909	773	766	7	99.1	0.9
Superintendents and managers	1919	2,534	2,472	62	97.6	2.4
	1914	1,317	1,311	6	99.5	0.5
	1909	1,275	1,271	4	99.7	0.3
Clerks and other subordinate salaried employees.	1919	7,159	4,500	2,659	62.9	37.1
	1914	4,634	3,540	1,094	76.4	23.6
	1909	3,197	2,393	804	74.9	25.1
Wage earners (average number)	1919	113,759	103,377	10,382	90.9	9.1
	1914	88,457	79,089	9,368	89.4	10.6
	1909	75,978	66,254	9,724	87.2	12.8
16 years of age and over	1919	113,603	103,295	10,308	90.9	9.1
	1914	88,351	79,018	9,333	89.4	10.6
	1909	75,721	66,151	9,570	87.4	12.6
Under 16 years of age	1919	156	82	74	52.6	47.4
	1914	106	71	35	67.0	33.0
	1909	257	103	154	40.1	59.9

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

[The 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	113,759	113,179	109,184	108,451	*107,762*	108,258	109,901	114,337	115,920	117,878	118,797	**120,762**	120,679	89.2
Males	103,377	102,766	99,396	98,510	*98,095*	98,341	99,681	103,829	105,222	107,067	107,953	109,826	**109,838**	89.3
Females	10,382	10,413	9,788	9,941	*9,667*	9,917	10,220	10,508	10,698	10,811	10,844	**10,936**	10,841	88.4
1914	88,457	89,140	89,235	89,756	**89,916**	89,633	88,389	87,061	*86,725*	88,847	88,830	87,018	86,934	96.5
1909	75,978	74,986	75,788	76,291	75,983	77,013	76,829	75,009	*74,517*	75,147	76,026	76,717	**77,430**	96.2
California	806	695	756	*688*	696	743	789	855	**932**	918	890	876	834	73.8
Connecticut	1,999	1,965	*1,837*	1,903	1,910	1,900	1,963	1,990	2,035	2,096	2,077	2,117	**2,195**	83.7
Delaware	683	705	675	691	692	669	*650*	655	663	707	708	**718**	663	90.5
Illinois	1,831	1,921	1,806	*1,687*	1,833	1,811	1,724	**1,941**	1,823	1,871	1,750	1,921	1,884	86.9
Indiana	2,214	2,247	2,100	2,031	*2,008*	2,010	2,232	2,265	2,304	2,373	**2,395**	2,316	2,287	83.8
Maine	13,058	12,620	12,698	12,983	*12,434*	12,462	12,492	13,311	13,518	**13,650**	13,540	13,537	13,451	91.1
Maryland	1,408	1,586	626	*623*	982	1,363	1,462	1,588	1,625	1,716	**1,807**	1,788	1,730	34.5
Massachusetts	12,960	12,651	*11,971*	12,432	12,220	12,192	12,643	12,949	13,020	13,575	13,845	13,929	**14,093**	84.9
Michigan	9,561	9,223	9,185	*9,063*	9,110	9,294	9,505	9,765	9,941	9,866	9,905	**9,996**	9,879	90.7
Minnesota	2,523	**2,681**	2,660	2,545	2,599	2,590	2,556	2,337	*2,305*	2,372	2,452	2,524	2,655	86.0
New Hampshire	5,000	4,815	4,479	*4,477*	4,797	4,820	4,979	5,161	5,213	5,300	5,183	**5,639**	5,137	79.4
New Jersey	3,108	3,029	2,827	2,948	*2,799*	2,827	2,922	3,213	3,374	3,384	**3,406**	3,335	3,232	82.2
New York	17,571	17,551	17,190	17,270	16,788	*16,412*	16,466	16,796	17,283	18,318	18,608	18,951	**19,219**	85.4
Ohio	6,899	6,838	6,463	6,384	*6,306*	6,438	6,726	7,171	7,382	6,894	7,431	**7,464**	7,291	84.5
Pennsylvania	9,843	9,730	9,521	*9,342*	9,378	9,485	9,556	9,842	10,058	10,184	10,212	10,351	**10,447**	89.4
Vermont	1,832	1,717	1,690	1,675	*1,671*	1,754	1,845	1,967	1,849	1,928	1,964	1,952	**1,972**	84.7
Virginia	1,951	1,919	*1,785*	1,869	1,931	1,873	1,945	1,992	2,006	**2,046**	2,029	2,030	1,987	87.2
Washington	1,610	1,480	*1,442*	1,521	1,578	1,584	1,566	1,597	1,619	1,682	1,705	1,745	1,801	80.1
West Virginia	956	1,171	1,100	*854*	901	942	924	953	943	939	918	903	924	72.9
Wisconsin	12,789	12,894	12,914	12,352	*12,183*	12,301	12,471	12,769	12,937	13,007	13,061	13,235	**13,394**	90.6

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.[1]	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
United States	1919	113,759	3,994	1,228	64,979	6,998	11,332	3,801	8,011	13,416
	1914	88,457	(2)	(2)	10,624	5,581	12,702	10,427	18,993	30,130
	1909	75,978	(2)	(2)	5,595	6,063	3,448	6,592	22,941	31,339
California [3]	1919	806	16	.....	790	.....	.....	.....	.....	.....
Connecticut	1919	1,999	361	.....	225	283	226	92	364	448
	1914	1,898	(2)	(2)	100	179	79	288	417	835
Delaware	1919	683	.....	.....	100	.....	.....	2	.....	581
	1914	591	.....	.....	.....	.....	.....	3	474	114
Illinois	1919	1,831	37	.....	626	.....	98	238	104	728
	1914	1,704	.....	.....	.....	.....	231	.....	227	1,246
Indiana	1919	2,214	.....	58	615	.....	153	94	387	907
	1914	1,620	(2)	(2)	128	.....	.....	.....	658	834
Maine	1919	13,058	.....	.....	8,694	700	3,549	.....	.....	115
	1914	10,033	(2)	(2)	1,666	1,677	3,753	2,221	12	704
Maryland	1919	1,408	.....	.....	864	.....	.....	.....	.....	544
	1914	1,586	.....	.....	.....	.....	51	.....	356	1,179
Massachusetts	1919	12,960	2,453	.....	7,533	2,263	.....	74	359	278
	1914	13,401	(2)	(2)	5,171	1,705	3,140	2,006	620	750
Michigan	1919	9,561	.....	.....	5,310	1,904	2,011	226	9	101
	1914	6,051	.....	.....	.....	278	1,016	623	1,482	2,652
Minnesota	1919	2,523	.....	.....	1,672	.....	.....	.....	544	307
	1914	1,345	.....	.....	.....	.....	.....	.....	900	445
New Hampshire	1919	5,000	.....	.....	3,972	485	123	.....	280	140
	1914	3,005	(2)	(2)	915	1,114	270	780	22	894
New Jersey	1919	3,108	667	.....	832	454	56	451	205	443
	1914	2,027	.....	.....	.....	.....	78	780	438	1,622
New York	1919	17,571	.....	.....	11,938	151	880	.....	1,182	3,411
	1914	13,570	(2)	(2)	1,672	.....	2,671	680	3,380	5,167
Ohio	1919	6,899	270	.....	1,873	.....	437	1,518	783	2,018
	1914	5,430	.....	.....	.....	.....	829	344	820	3,437
Pennsylvania	1919	9,843	.....	1,170	3,437	752	28	403	1,877	2,176
	1914	7,447	.....	.....	.....	2	29	1,016	3,244	3,156
Vermont	1919	1,832	.....	.....	1,313	.....	171	11	241	96
	1914	1,264	.....	.....	211	626	123	136	40	128
Virginia	1919	1,951	.....	.....	1,559	.....	55	.....	100	237
	1914	1,260	.....	.....	.....	.....	.....	.....	286	974
Washington	1919	1,610	.....	.....	1,610	.....	.....	.....	.....	.....
	1914	877	.....	.....	.....	.....	.....	485	.....	392
West Virginia	1919	956	.....	.....	630	.....	161	78	75	12
	1914	1,033	.....	.....	.....	.....	.....	66	666	301
Wisconsin	1919	12,789	190	.....	7,546	.....	3,375	614	945	119
	1914	8,968	(2)	(2)	378	.....	.....	485	4,473	3,632

[1] Includes 48 and under for 1914 and 1909.

[2] Corresponding figures not available.

[3] Figures not available for 1914.

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

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—															
	Establishments.	Wage earners (average number).	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..	729	113,759	24	76	87	1,179	158	5,140	139	10,166	204	33,732	70	24,017	38	26,340	9	13,109
1914..	718	88,457	29	95	114	1,540	172	5,856	134	9,660	183	29,991	60	20,630	21	14,615	5	6,070
California	7	806	.....	.....	1	16	.....	.....	2	120	4	670	.....	.....	.....	.....	.....	.....
Connecticut	44	1,999	5	15	13	177	14	447	6	428	6	932	.....	.....	.....	.....	.....	.....
Delaware	5	683	1	2	.....	.....	.....	.....	1	100	2	297	1	284	.....	.....	.....	.....
Illinois	19	1,831	.....	.....	.....	.....	5	199	7	529	7	1,103	.....	.....	.....	.....	.....	.....
Indiana	26	2,214	.....	.....	2	30	9	325	6	482	9	1,377	.....	.....	.....	.....	.....	.....
Maine	39	13,058	.....	.....	4	57	3	94	8	617	10	1,671	6	2,004	4	2,852	4	5,763
Maryland	10	1,408	2	4	.....	.....	5	140	.....	.....	2	400	.....	.....	1	864	.....	.....
Massachusetts	78	12,960	.....	.....	4	42	9	309	15	1,117	37	6,309	11	3,694	2	1,489	.....	.....
Michigan	39	9,561	2	6	3	23	2	63	4	280	13	2,305	11	3,718	3	2,036	1	1,139
Minnesota	9	2,523	.....	.....	.....	.....	1	32	1	96	2	269	3	1,011	2	1,115	.....	.....
New Hampshire	27	5,000	.....	.....	8	107	8	256	4	264	3	418	3	1,447	.....	.....	1	2,508
New Jersey	33	3,108	1	5	2	32	12	403	8	515	8	1,135	1	351	1	667	.....	.....
New York	156	17,571	7	22	20	291	48	1,580	31	2,274	32	5,098	11	3,669	7	4,637	.....	.....
Ohio	49	6,899	.....	.....	3	46	14	429	12	898	14	2,085	4	1,455	1	621	1	1,36[illegible]
Pennsylvania	56	9,843	5	20	11	142	11	342	6	354	10	1,675	7	2,122	5	3,866	1	1,32[illegible]
Vermont	20	1,832	.....	.....	4	56	6	167	5	374	4	595	.....	.....	1	640	.....	.....
Virginia	10	1,951	.....	.....	.....	.....	2	55	2	155	5	1,002	.....	.....	1	739	.....	.....
Washington	6	1,610	.....	.....	.....	.....	.....	.....	2	159	3	623	.....	.....	1	828	.....	.....
West Virginia	9	956	.....	.....	1	12	3	112	3	236	1	144	1	452	.....	.....	.....	.....
Wisconsin	57	12,789	1	2	3	45	5	139	10	713	21	3,810	10	3,501	7	4,576	.....	.....

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.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes	729	718	777	113,759	88,457	75,978	$788,059,377	$332,147,175	$267,656,964	$320,576,740	$118,965,889	$102,214,623
Less than $5,000	4	10	20	7	20	49	10,463	31,787	64,416	3,203	16,952	28,968
$5,000 to $20,000	20	44	57	89	330	466	242,112	580,160	719,516	81,117	275,052	322,819
$20,000 to $100,000	87	159	203	1,409	3,399	4,415	5,374,576	9,287,827	11,354,011	2,215,182	3,389,035	4,757,258
$100,000 to $500,000	234	292	447	10,432	49,882	48,532	60,064,860	74,199,728	161,938,623	23,837,665	61,646,087	61,229,578
$500,000 to $1,000,000	146	145		16,857			105,969,952	100,700,145		41,096,888		
$1,000,000 and over	238	68	50	84,965	34,826	22,516	615,397,414	147,347,528	93,580,398	253,342,685	53,638,763	35,876,000
	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	0.5	1.4	2.6	(1)	(1)	0.1	(1)	(1)	(1)	(1)	(1)	(1)
$5,000 to $20,000	2.7	6.1	7.3	0.1	0.4	0.6	(1)	0.2	0.3	(1)	0.2	0.3
$20,000 to $100,000	11.9	22.1	26.1	1.2	3.8	5.8	0.7	2.8	4.2	0.7	2.8	4.7
$100,000 to $500,000	32.1	40.7	57.5	9.2	56.4	63.9	7.6	22.3	60.5	7.4	51.8	59.9
$500,000 to $1,000,000	20.0	20.2		14.8			13.6	30.3		12.8		
$1,000,000 and over	32.7	9.5	6.4	74.7	39.4	29.6	78.1	44.4	35.0	79.0	45.1	35.1

[1] Less than one-tenth of 1 per cent.

TABLE 9.—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.
Total	1919	729	113,759	$788,059,377	$320,576,740
	1914	718	88,457	332,147,175	118,965,889
Individual	1919	33	648	3,879,687	1,418,680
	1914	49	857	2,634,573	961,751
Corporation	1919	647	110,134	759,532,959	310,807,387
	1914	608	83,557	315,401,140	112,411,490
All other	1919	49	2,977	24,646,731	8,350,673
	1914	61	4,043	14,111,462	5,592,648

CHARACTER OF OWNERSHIP.	Census year.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
Per cent distribution:					
Individual	1919	4.5	0.6	0.5	0.4
	1914	6.8	1.0	0.8	0.8
Corporation	1919	88.8	96.8	96.4	97.0
	1914	84.7	94.5	95.0	94.5
All other	1919	6.7	2.6	3.1	2.6
	1914	8.5	4.6	4.2	4.7

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	11,753	9,049	6,990	1,851,014	1,621,154	1,304,265	100.0	100.0	100.0
Owned	5,752	6,434	6,229	1,613,037	1,484,255	1,264,185	87.1	91.6	96.9
Steam [1]	3,157	2,980	2,705	698,983	597,840	469,364	37.8	36.9	36.0
Engines	2,918	(2)	(2)	559,208	(2)	(2)	30.2	.....	.....
Turbines	239	(2)	(2)	139,775	(2)	(2)	7.6	.....	.....
Internal-combustion engines	37	62	46	3,191	9,674	6,675	0.2	0.6	0.5
Water wheels, turbines, and motors	2,558	3,392	3,478	910,863	876,741	788,146	49.2	54.1	60.4
Rented	6,001	2,615	761	237,977	136,899	40,080	12.9	8.4	3.1
Electric	6,001	2,615	761	236,662	127,699	38,610	12.8	7.9	3.0
Other	.....	.....	.....	1,315	9,200	1,470	0.1	0.6	0.1
Electric	17,756	8,210	2,963	583,586	325,211	130,120	100.0	100.0	100.0
Rented	6,001	2,615	761	236,662	127,699	38,610	40.6	39.3	29.7
Generated by establishments reporting	11,755	5,595	2,202	346,924	197,512	91,510	59.4	60.7	70.3

[1] Figures for horsepower include for 1909 the amount reported under the head of "Other" owned power.

[2] Not reported separately.

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

STATE.	Census year.	COAL.		Coke (tons, 2,000 lbs.).	Fuel oil (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
		Anthracite (tons, 2,240 lbs.).	Bituminous (tons, 2,000 lbs.).				
United States	1919	869,948	7,863,150	63,384	2,117,674	2,440	286,660
	1914	741,177	6,268,853	15,455	635,329	(1)	2,260,562
California	1919	.....	.....	.....	151,366	.....	256,287
	1914	.....	.....	.....	120,085	.....	.....
Connecticut	1919	4,161	167,679	.....	46,002	24	.....
	1914	10,458	133,406	.....	.....	.....	.....
Delaware	1919	.....	66,282	.....	10,448	.....	.....
	1914	890	60,927	.....	69	.....	.....
Illinois	1919	.....	275,179	5,568	1,016	115	.....
	1914	.....	307,517	.....	.....	.....	.....
Indiana	1919	2,295	341,971	476	.....	5	.....
	1914	.....	287,582	.....	2,218	(1)	19,550
Maine	1919	8,779	763,348	.....	492,599	.....	.....
	1914	51,574	631,522	.....	334	.....	.....
Maryland	1919	.....	171,970	.....	.....	55	.....
	1914	.....	121,653	530	.....	.....	1,588
Massachusetts	1919	64,120	520,492	.....	62,278	.....	5,000
	1914	80,012	458,974	.....	273	.....	146
Michigan	1919	.....	846,634	1,915	.....	533	.....
	1914	.....	513,410	.....	.....	.....	.....
Minnesota	1919	.....	198,472	.....	.....	.....	.....
	1914	.....	97,820	.....	.....	.....	.....
New Hampshire	1919	179,355	158,457	.....	522,000	.....	.....
	1914	82,154	222,727	.....	.....	.....	.....
New Jersey	1919	129,058	120,959	522	51,235	112	.....
	1914	183,119	105,818	.....	1,206	(1)	.....
New York	1919	415,064	984,537	2,753	283	121	.....
	1914	273,764	928,160	.....	1,361	(1)	10
Ohio	1919	275	706,985	.....	5,126	.....	.....
	1914	.....	625,807	12,051	179	.....	210,388
Pennsylvania	1919	43,951	1,071,733	1,459	150	101	.....
	1914	27,491	777,020	936	802	(1)	543,669
Vermont	1919	22,890	65,948	4,143	.....	40	.....
	1914	21,920	44,303	.....	.....	.....	.....
Virginia	1919	.....	196,940	800	600	100	.....
	1914	.....	152,855	.....	600	(1)	.....
Washington	1919	.....	19,218	.....	347,651	28	.....
	1914	.....	8,047	.....	246,061	(1)	.....
West Virginia	1919	.....	102,601	.....	.....	.....	11,373
	1914	.....	50,089	200	.....	.....	1,375,190
Wisconsin	1919	.....	800,733	37,757	.....	25	.....
	1914	795	512,641	1,738	14,500	(1)	21,188
All other states	1919	.....	283,012	7,991	426,920	1,181	14,000
	1914	.....	228,566	.....	247,641	(1)	88,833

[1] Included in figures for fuel oils.

SPECIAL STATISTICS.

Detailed statistics of quantity and cost of materials and quantity and value of products.—Certain additional information concerning the quantity and cost of materials and quantity and value of products was collected by means of a supplemental schedule, data for which are presented in the following tables.

Materials.—Table 12 presents detailed statistics of the materials used in the industry in 1919, 1914, 1909, and 1904.

TABLE 12.—DETAILED STATISTICS OF QUANTITY AND COST OF MATERIALS: 1919, 1914, 1909, AND 1904.

	1919	1914	1909	1904
Total cost	$467,482,637	$213,181,286	$165,442,341	$111,251,478
Pulp wood, cost	$87,386,083	$39,408,453	$34,477,540	$20,800,871
Wood pulp purchased:				
Tons [1]	1,595,980	1,521,980	1,241,914	877,702
Cost	$118,967,841	$54,207,932	$43,861,357	$27,633,164
Ground, domestic—				
Tons	398,133	379,263	333,313	317,286
Cost	$16,249,210	$7,540,922	$6,764,475	$5,754,259
Ground, imported—				
Tons	100,440	153,463	119,536	
Cost	$3,537,460	$3,148,755	$2,723,033	
Soda fiber, domestic—				
Tons	153,639	155,635	145,163	120,978
Cost	$13,074,318	$6,764,892	$6,464,870	$5,047,105
Soda fiber, imported—				
Tons	25	5,289	9,463	
Cost	$1,807	$297,838	$397,994	
Sulphite fiber, domestic—				
Tons	564,776	436,196	453,636	433,160
Cost	$54,389,663	$19,762,127	$19,041,329	$16,567,122
Sulphite fiber, imported—				
Tons	159,307	261,172	172,393	
Cost	$14,606,807	$12,128,105	$8,143,397	
Sulphate fiber, domestic—				
Tons	72,440	16,414	[2] 8,410	[2] 6,278
Cost	$6,350,229	$679,326	[2] $326,259	[2] $264,678
Sulphate fiber, imported—				
Tons	108,584	88,497		
Cost	$9,333,251	$3,486,540		
Screenings, mechanical—				
Tons	9,488	4,806	(3)	(3)
Cost	$321,006	$41,841	(3)	(3)
Screenings, chemical—				
Tons	29,148	21,245	(3)	(3)
Cost	$1,104,090	$357,586	(3)	(3)
Rags, including cotton and flax waste and sweepings:				
Tons	277,849	361,667	357,470	294,552
Cost	$24,217,978	$12,151,288	$10,721,559	$8,864,607
Paper stock:				
High-grade shavings, including old and waste paper—				
Tons	1,854,386	1,509,081	983,882	588,543
Cost	$43,567,775	$19,161,400	$13,691,120	$7,430,335
Manila stock:				
Rope—				
Tons	68,235	64,256	117,080	107,029
Cost	$5,114,426	$2,492,094	$3,560,033	$2,502,332
Jute bagging, waste, threads, etc.—				
Tons	48,759	56,914		
Cost	$2,031,827	$1,553,473		
Straw:				
Tons	353,399	307,839	303,137	304,585
Cost	$3,594,947	$1,675,598	$1,460,282	$1,502,886
Other stock for making paper:				
Tons	106,850	97,276	29,422	(3)
Cost	$4,494,388	$1,778,669	$479,959	$1,963,066
China clay:				
Tons	258,533	(3)	(3)	(3)
Cost	$4,421,157	(3)	(3)	(3)
Bleaching powder:				
Tons	139,914	(3)	(3)	(3)
Cost	$5,647,952	(3)	(3)	(3)
Sulphur:				
Tons	187,794	136,458	(3)	130,400
Cost	$5,014,736	$3,134,699	(3)	$3,221,834
All other materials, cost	$162,963,527	$77,617,680	$57,190,491	$37,332,383

[1] Quantities are reported in tons of 2,000 pounds.
[2] Reported as "Other chemical fiber."
[3] Not reported separately.

The total cost of all materials given for each year includes considerable duplication, due to the use of products of one establishment as materials in another. This is especially true of purchased domestic wood pulp, the cost of which is included in that of the pulp wood used as materials by the pulp mills, and again in that of the wood pulp used as material by the paper mills.

The item "All other materials" includes chemicals (except sulphur and bleaching powder), sizing, dyestuffs, casein, mill supplies and other materials to the amount of $107,963,572; and $54,999,955, covering the cost of fuel and rent of power.

Wood consumed in the manufacture of wood pulp.—Table 13 shows the quantity and cost of pulp wood used in the manufacture of wood pulp for the years 1919, 1914, and 1904, and the quantity only, together with the total cost, for 1909. In 1909 the schedule used for this industry did not provide for reporting the kind or quantity of pulp wood used.

Spruce, which continues to be the principal wood used in the manufacture of pulp, was 58.2 per cent of the total quantity consumed in 1919, as compared with 59.5 per cent in 1914.

More detailed statistics relating to pulp-wood consumption is published in the special report of the Census Bureau entitled "Pulp-wood consumption and wood-pulp production."

TABLE 13.—WOOD CONSUMED IN THE MANUFACTURE OF WOOD PULP: 1919, 1914, 1909, AND 1904.

KIND.	1919	1914	1909 [1]	1904
Total:				
Cords	5,477,832	4,470,763	4,001,607	3,050,717
Cost	$87,386,083	$39,408,453	$34,477,540	$20,800,871
Spruce, domestic:				
Cords	2,313,419	1,892,739	1,653,249	1,732,531
Cost	$39,783,167	$17,893,673	(2)	$11,937,852
Spruce, imported:				
Cords	873,795	768,056	768,332	538,305
Cost	$18,219,970	$9,008,609	(2)	$4,570,017
Poplar, domestic:				
Cords	180,160	328,513	302,876	213,058
Cost	$3,214,901	$2,714,210	(2)	$1,506,971
Poplar, imported:				
Cords	158,220	61,644	25,622	35,313
Cost	$2,851,583	$582,924	(2)	$251,600
Hemlock:				
Cords	795,154	602,754	559,657	(2)
Cost	$8,760,805	$4,176,542	(2)	(2)
Pine:				
White and jack pine—				
Cords	59,147	62,037	(2)	(2)
Cost	$620,491	$353,188	(2)	(2)
Yellow pine [3]—				
Cords	234,463	79,322	(2)	(2)
Cost	$2,745,368	$466,855	(2)	(2)
Balsam fir, domestic:				
Cords	181,840	125,295	(2)	(2)
Cost	$2,491,833	$1,200,499	(2)	(2)
Balsam fir, imported:				
Cords	103,974	.....	.....	.....
Cost	$2,028,983	.....	.....	.....
Yellow poplar:				
Cords	72,605	(2)	(2)	(2)
Cost	$1,090,649	(2)	(2)	(2)
Beech, birch, maple, etc.:				
Cords	184,111	(2)	(2)	(2)
Cost	$2,228,481	(2)	(2)	(2)
Slabs and other mill waste:				
Cords	175,081	273,887	.....	.....
Cost	$1,691,307	$1,225,840	.....	.....
All other wood:				
Cords	[4] 142,863	296,515	691,871	531,510
Cost	$1,658,545	$1,786,113	(2)	$2,534,431

[1] The figures relating to quantity for 1909 represent the wood used by all mills manufacturing wood pulp, including a few for which it was not the primary product. The total cost given for that year, however, refers only to the wood used by mills making pulp as their primary product.
[2] Not reported separately.
[3] Reported as southern pine in 1914.
[4] Includes: Cottonwood, 20,830 cords; white fir, 31,138 cords; gum, 30,355 cords; tamarack, 44,042 cords; and "All other wood," 16,498 cords.

Principal kinds of wood used, by states.—Table 14 shows separately for the five states in the industry, consuming the largest amount of pulp wood, and for "All other states" as a group, the quantity and cost of the principal kinds of wood used in the manufacture of pulp in 1919. Maine led in the consumption of pulp wood in 1919, using 23.3 per cent of the total for the industry. New York followed, using 19.3 per cent of the total.

TABLE 14.—PRINCIPAL KINDS OF WOOD USED, BY STATES: 1919.

KIND.	United States.	Maine.	New Hampshire.	New York.	Pennsylvania.	Wisconsin.	All other states.
Total:							
Cords	5,477,832	1,279,852	375,597	1,055,145	423,822	854,185	1,489,231
Cost	$87,386,083	$24,795,623	$7,297,625	$20,498,405	$6,873,612	$10,242,909	$17,677,909
Spruce:							
Cords	3,187,214	1,034,540	262,805	860,972	121,653	282,370	624,874
Cost	$58,003,137	$20,456,085	$5,006,702	$17,184,826	$2,359,439	$4,365,858	$8,630,227
Poplar:							
Cords	338,380	172,936	68	103,653	45,633	2,643	13,447
Cost	$6,066,484	$3,136,080	$1,032	$1,882,168	$847,759	$20,865	$178,580
Hemlock:							
Cords	795,154	10,129	1,172	55,722	8,737	417,868	301,526
Cost	$8,760,805	$203,591	$16,487	$929,416	$125,471	$4,377,358	$3,108,482
All other wood:							
Cords	982,003	58,201	92,347	21,685	192,847	145,436	471,487
Cost	$12,864,350	$976,744	$1,880,816	$385,688	$3,103,610	$1,432,397	$5,085,095
Slabs, and other mill waste:							
Cords	175,081	4,046	19,205	13,113	54,952	5,868	77,897
Cost	$1,691,307	$23,123	$392,588	$116,307	$437,333	$46,431	$675,525

Kind and quantity of wood pulp used.—The kinds and quantity of wood pulp, domestic and foreign, used in the industry during the years 1919, 1914, 1909, and 1904 are shown in Table 15.

The quantity of wood pulp used in the manufacture of paper shows a steady increase from census to census, the consumption in 1919 being almost double the amount in 1904. Considerably more than half the pulp produced in 1919 was made by establishments which used it themselves in the manufacture of paper.

Ground wood pulp represented 41.7 per cent of the total quantity consumed in 1919; sulphite fiber, 40.2 per cent; soda fiber, 9.9 per cent; and all other wood pulp, 8.2 per cent.

There was a decrease of 26.8 per cent in imported wood pulp in 1919 over 1914, due in a large measure to conditions brought about by the World War.

TABLE 15.—KIND AND QUANTITY OF WOOD PULP USED: 1919, 1914, 1909, AND 1904.

KIND.	Census year.	WOOD PULP USED.[1] Total.	Produced and consumed in same establishment.	Purchased.
Total	1919	4,019,696	2,423,716	1,595,980
	1914	3,490,123	1,968,143	1,521,980
	1909	2,826,591	1,584,677	1,241,914
	1904	2,018,764	1,141,062	877,702
Ground	1919	1,675,063	1,176,490	498,573
	1914	1,504,955	972,229	532,726
	1909	1,321,368	868,519	452,849
	1904	1,012,862	695,576	317,286
Domestic	1919	1,574,623	1,176,490	398,133
	1914	1,351,492	972,229	379,263
	1909	1,201,832	868,519	333,313
Imported	1919	100,440	.....	100,440
	1914	153,463	.....	153,463
	1909	119,536	.....	119,536
Soda fiber	1919	396,031	242,367	153,664
	1914	345,354	184,430	160,924
	1909	297,408	142,782	154,626
	1904	187,382	66,404	120,978

[1] Tons, 2,000 pounds.

TABLE 15.—KIND AND QUANTITY OF WOOD PULP USED: 1919, 1914, 1909, AND 1904—Continued.

KIND.	Census year.	WOOD PULP USED.[1] Total.	Produced and consumed in same establishment.	Purchased.
Sulphite fiber	1919	1,617,478	893,395	724,083
	1914	1,429,528	732,160	697,368
	1909	1,199,405	573,376	626,029
	1904	812,242	379,082	433,160
Domestic	1919	1,458,171	893,395	564,776
	1914	1,168,356	732,160	436,196
	1909	1,027,012	573,376	453,636
Bleached	1919	504,485	218,541	285,944
Unbleached	1919	953,686	674,854	278,832
Imported	1919	159,307	.....	159,307
	1914	261,172	.....	261,172
	1909	172,393	.....	172,393
Bleached	1919	44,859	.....	44,859
Unbleached	1919	114,448	.....	114,448
Sulphate fiber	1919	265,819	84,795	181,024
	1914	154,553	49,642	104,911
	1909	[2] 8,410	.....	[2] 8,410
	1904	[2] 6,278	.....	[2] 6,278
Domestic	1919	157,235	84,795	72,440
	1914	66,056	49,642	16,414
Bleached	1919	31,268	23,203	8,065
Unbleached	1919	125,967	61,532	64,435
Imported	1919	108,584	.....	108,584
	1914	88,497	.....	88,497
Bleached	1919	5,374	.....	5,374
Unbleached	1919	103,210	.....	103,210
Screenings, mechanical	1919	20,161	10,673	9,488
	1914	15,586	10,780	4,806
Screenings, chemical	1919	45,144	15,996	29,148
	1914	40,147	18,902	21,245

[1] Tons, 2,000 pounds. [2] Reported as "Other chemical fiber."

The rapid increase in the consumption of sulphate fiber during recent years is due largely to its use in the manufacture of kraft wrapping paper, the production of which has grown rapidly since 1909.

Materials, by states.—Table 16 shows, by states, the quantity and cost of the several kinds of wood pulp purchased, and the other principal paper stocks used in the industry in 1919, with the quantities alone for 1914 and 1909. Wood pulp made by establishments which used it in the manufacture of paper is not included.

TABLE 16.—MATERIALS, BY STATES: 1919, 1914, AND 1909.

MATERIAL AND STATE.	WOOD PULP PURCHASED.			
	1919		1914	1909
	Cost.	Quantity (tons, 2,000 lbs.).	Quantity (tons, 2,000 lbs.).	Quantity (tons, 2,000 lbs.).
Total	$118,967,841	1,595,980	1,521,980	1,241,914
Ground, total	19,786,670	498,573	532,726	452,849
New York	8,872,157	220,709	236,027	150,844
Maine	4,071,910	110,890	110,466	98,553
Wisconsin	1,771,919	43,958	53,827	64,959
All other states	5,070,684	123,016	132,406	138,493
Soda fiber, total	13,076,125	153,664	160,924	154,626
Massachusetts	4,608,031	58,275	44,102	38,434
Ohio	2,244,624	25,827	33,855	27,326
Michigan	1,185,726	13,030	12,833	14,950
All other states	5,037,744	56,532	70,134	73,916
Sulphite fiber, total	68,996,470	724,083	697,368	626,029
Massachusetts	12,221,099	110,150	113,036	91,103
New York	11,350,489	142,840	123,013	162,847
Ohio	9,885,543	99,384	86,559	47,167
Michigan	6,918,237	67,931	42,765	29,070
Wisconsin	6,853,194	77,025	89,952	84,884
Pennsylvania	4,061,665	40,527	40,009	30,712
New Hampshire	2,745,156	29,221	(1)	(1)
All other states	14,961,087	157,005	202,034	180,246
Sulphate fiber, total	15,683,480	181,024	104,911	
Massachusetts	2,399,356	25,949	12,786	
New York	2,125,319	22,046	16,455	[2] 8,410
Ohio	1,175,094	13,729	9,017	
Pennsylvania	753,537	8,140	10,202	
All other states	9,230,174	111,160	56,451	
Screenings, mechanical and chemical, total	1,425,096	38,636	26,051	(3)
Rags, including cotton and flax waste and sweepings, total	24,217,978	277,849	361,667	357,470
Massachusetts	9,490,326	69,465	79,307	93,558
Pennsylvania	3,225,995	55,238	63,975	64,654
Ohio	1,979,338	29,544	37,303	33,744
Wisconsin	1,516,010	13,387	17,222	(1)
New Jersey	1,054,076	13,595	26,818	20,484
All other states	6,952,233	96,620	137,042	145,030
Paper stock, including high-grade shavings and old and waste paper, total	43,567,775	1,854,386	1,509,981	983,882
Michigan	9,084,055	300,908	200,370	114,497
New York	4,983,299	229,086	188,379	155,436
Massachusetts	4,846,672	157,995	137,716	106,216
Ohio	4,439,189	180,803	200,996	93,239
Illinois	3,726,466	169,629	124,815	75,439
Pennsylvania	2,986,835	163,932	125,171	106,159
New Jersey	2,713,874	157,087	154,879	114,437
Connecticut	2,295,481	97,883	111,282	75,169
Indiana	1,875,794	106,029	94,227	52,509
All other states	6,615,210	290,974	172,146	90,790
Manila stock, including jute bagging, rope, waste, threads, etc., total	7,206,253	116,994	121,170	117,080
Ohio	1,257,347	18,802	39,230	25,949
New Jersey	995,673	13,820	17,008	21,162
All other states	4,953,233	84,372	64,932	69,969
Straw, total	3,594,947	353,399	307,839	303,137
Indiana	1,312,867	143,715	93,556	140,580
Illinois	806,778	86,215	74,327	57,254
All other states	1,475,302	123,469	139,956	105,303

[1] Included in "All other states."
[2] Reported as "Other chemical fiber."
[3] Not reported separately.

Products.—Detailed statistics, relating to the quantity and value of paper and wood pulp manufactured, are given in Table 17 for 1919, 1914, 1909, and 1904.

The total for each year includes considerable duplication, due principally to the fact that the greater portion of the wood pulp produced for sale is purchased by paper mills, with the result that its value, already reported by the pulp mills, enters again into that of the finished products made by the paper mills. The amount of such duplication, however, was of about equal relative importance at each census.

In quantity, boards were the leading product of the industry in 1919, but in value this product was exceeded in importance by book paper (plain, coated, and plate), at each census since 1904. The total tonnage of paper of all kinds in 1919 amounted to 6,098,530, an increase of 828,483 tons, or 15.7 per cent, over the amount reported for 1914.

The four leading kinds of paper, ranked by quantity produced, were boards, 1,867,064 tons; news, 1,323,880 tons; book, 961,095 tons; and wrapping, 831,372 tons, or 30.6 per cent, 21.7 per cent, 15.8 per cent, 13.6 per cent, respectively, of the total amount reported.

The steady decrease of straw and bogus or wood manila wrapping paper is most noticeable and closely corresponds to the increased production of kraft paper. Because of its strength this paper is rapidly taking the place of other kinds of paper for all purposes requiring strong wrappers.

The proportion of wood pulp manufactured and made into paper in the same establishments was practically the same as in 1914, in which year it was 68.5 per cent as compared with 68.7 per cent in 1919. In tonnage ground wood pulp was of chief importance, representing 43.2 per cent of the total production in 1919.

TABLE 17.—DETAILED STATISTICS OF QUANTITY AND VALUE OF PRODUCTS: 1919, 1914, 1909, AND 1904.

PRODUCTS.[1]	1919	1914	1909	1904
Total value	$738,059,377	[2] $332,147,175	[2] $267,656,964	$188,715,189
News paper, in rolls and sheets:				
Tons	1,323,880	1,313,284	1,168,098	912,822
Value	$98,559,359	$52,942,774	$46,390,041	$35,906,460
Hanging papers:				
Tons	69,445	96,527	92,158	62,606
Value	$6,043,390	$4,488,910	$4,431,514	$3,013,464
Poster, novel, tablet, lining, etc.:[3]				
Tons	80,394	7,883	7,456	(4)
Value	$7,272,755	$490,766	$465,519	(4)
Book paper:				
Book, machine finished—				
Tons	532,413			
Value	$76,772,582			
Book, sized and supercalendered—		786,626	575,616	434,509
Tons	286,407	$58,496,221	$42,846,674	$31,156,728
Value	$41,498,194			
Coated—				
Tons	132,454	117,342	95,213	(4)
Value	$24,009,614	$11,605,584	$9,413,961	(4)
Plate, lithograph, map, woodcut, etc.—				
Tons	9,821	9,332	6,498	19,837
Value	$1,556,372	$588,332	$555,352	$1,458,343
Cover paper:				
Tons	22,163	21,679	17,578	22,150
Value	$5,643,191	$2,809,377	$1,982,853	$2,023,986
Fine paper:				
Ledger and highest grade—				
Tons	30,584			
Value	$12,254,967			
Pole dried—				
Tons	48,564			
Value	$19,868,978			
Air dried—				
Tons	28,786			
Value	$9,514,618			
Machine dried—		247,728	198,213	146,832
Tons	59,674	$34,054,918	$29,076,638	$22,249,170
Value	$14,665,308			
Sulphite bond—				
Tons	82,467			
Value	$17,484,179			
All other—				
Tons	75,108			
Value	$13,952,756			

[1] Quantities reported in tons of 2,000 pounds.
[2] In addition, in 1919 paper to the value of $1,064,772 was produced by 5 establishments engaged primarily in the manufacture of paper boxes, roofing materials, and other products; in 1914 to the value of $2,767,407 was produced by 9 establishments; and in 1909 to the value of $2,567,267, by 15 establishments of this character.
[3] Reported as "Poster" in 1914 and 1909.
[4] Not reported separately.

TABLE 17.—DETAILED STATISTICS OF QUANTITY AND VALUE OF PRODUCTS: 1919, 1914, 1909, AND 1904—Continued.

	1919	1914	1909	1904
PRODUCTS—continued.				
Wrapping paper:				
Manila (rope, jute, etc.)—				
Tons	111,782	77,878	73,731	86,826
Value	$15,493,141	$7,070,254	$6,989,436	$6,136,080
Heavy (mill wrappers, etc.)—				
Tons	135,501	98,780	108,561	96,092
Value	$11,315,201	$3,588,357	$4,380,794	$4,035,588
Straw—				
Tons	5,895	15,606	32,988	54,232
Value	$457,606	$519,309	$870,419	$1,389,348
Bogus or wood manila, all grades—				
Tons	126,175	353,987	367,932	228,371
Value	$12,047,371	$17,975,636	$19,777,707	$10,099,772
Kraft—				
Tons	192,583	109,753	12,661	(1)
Value	$26,575,194	$6,949,244	$936,940	(1)
All other—				
Tons	259,436	225,795	167,194	177,870
Value	$37,180,784	$13,269,953	$9,265,095	$8,774,804
Tag stock (rope, jute, and sulphite):				
Tons	27,092	29,230	(1)	(1)
Value	$5,459,980	$1,935,693	(1)	(1)
Boards:				
Wood pulp—				
Tons	179,747	116,419	71,036	60,863
Value	$14,887,881	$4,227,493	$2,639,496	$2,347,250
Straw—				
Tons	228,248	175,424	171,789	167,278
Value	$12,229,837	$4,270,519	$3,750,851	$4,367,560
News—				
Tons	88,839	127,966	74,606	38,560
Value	$4,604,082	$3,502,134	$2,215,469	$1,174,216
Binders', trunk, and press—				
Tons	43,091	61,453	92,012	(1)
Value	$3,787,860	$2,663,744	$3,819,071	(1)
Leather—				
Tons	28,167	26,689		
Value	$2,263,288	$1,177,189		
Cardboard, bristol board, card middles, tickets, etc.—				
Tons	84,987	83,010	51,449	39,060
Value	$11,104,105	$5,376,434	$3,352,151	$2,704,444
Chip—				
Tons	695,963	(2)	(2)	(2)
Value	$37,749,210	(2)	(2)	(2)
All other—				
Tons	518,022	700,844	422,196	253,950
Value	$37,464,380	$23,052,095	$13,720,697	$9,070,531
Tissue paper:				
High-grade—				
Tons	31,025			
Value	$11,137,550			
White, colored and waxing—				
Tons	36,545			
Value	$7,644,052			
Manila and No. 2 white—				
Tons	23,985	115,401	77,745	43,925
Value	$3,589,279	$11,535,720	$8,553,054	$5,056,438
Towel and napkin—				
Tons	19,266			
Value	$5,144,895			
Toilet—				
Tons	79,740			
Value	$13,178,847			
Blotting paper:				
Tons	13,420	14,157	9,577	8,702
Value	$3,209,137	$1,457,897	$1,186,180	$1,046,790
Building, roofing, asbestos, and sheathing paper:				
Tons	195,244	243,908	225,824	145,024
Value	$17,737,341	$9,475,733	$9,251,368	$4,845,628
All other paper:				
Tons	191,617	93,346	96,577	106,296
Value	$29,690,905	$7,464,182	$6,869,169	$6,729,820
Wood pulp made for sale or for consumption in mills other than those in which produced:				
Tons	1,100,303	912,490	910,846	780,706
Value	$80,095,047	$31,677,717	$30,177,366	$23,144,574
Ground—				
Steamed—				
Tons	61,411	313,051	310,747	273,400
Value	$2,224,664	$5,686,919	$5,649,466	$4,323,495
Not steamed—				
Tons	284,518			
Value	$9,504,137			

[1] Not reported separately. [2] Included in "All other boards."

TABLE 17.—DETAILED STATISTICS OF QUANTITY AND VALUE OF PRODUCTS: 1919, 1914, 1909, AND 1904—Continued.

	1919	1914	1909	1904
PRODUCTS—continued.				
Wood pulp made for sale or for consumption in mills other than those in which produced—Continued.				
Soda fiber—				
Tons	169,332	163,522	155,844	130,366
Value	$14,939,293	$7,213,086	$6,572,152	$5,159,615
Sulphite fiber—				
Bleached—				
Tons	288,709	214,627	444,255	376,949
Value	$31,715,215	$10,803,787	$17,955,748	$13,661,464
Unbleached—				
Tons	227,395	192,687		
Value	$17,791,975	$7,284,492		
Sulphate fiber—				
Bleached—				
Tons	4,740	10,052	(1)	(1)
Value	$302,765	$359,957	(1)	(1)
Unbleached—				
Tons	39,552			
Value	$2,743,389			
Screenings—				
Mechanical—				
Tons	2,313	2,553	(1)	(1)
Value	$33,448	$27,910	(1)	(1)
Chemical—				
Tons	22,333	15,098	(1)	(1)
Value	$750,161	$301,566	(1)	(1)
All other products, value	[2] $34,915,241	$8,880,990	$4,738,549	$1,924,195
WOOD PULP.				
Quantity produced (including that used in mills in which manufactured), total, tons	3,517,952	2,893,150	2,495,523	1,921,768
Ground—				
Steamed, tons	281,635	1,293,661	1,179,266	968,976
Not steamed, tons	1,237,194			
Soda fiber—				
Bleached, tons	384,085	347,928	298,626	196,770
Unbleached, tons	27,608			
Sulphite fiber—				
Bleached, tons	509,738	1,017,631	756,022	
Unbleached, tons	910,091	765,978		
Sulphate fiber—				
Bleached, tons	28,003	52,041	(1)	(1)
Unbleached, tons	92,375			
Screenings—				
Mechanical, tons	12,220	11,769	(1)	(1)
Chemical, tons	35,003	35,824	(1)	(1)

[1] Not reported separately.
[2] Includes 27,460 tons of paper bags, valued at $6,469,010, made in paper mills.

Products, by states.—Table 18 presents, by states, the quantity and value of various products of paper and wood-pulp mills in 1919 and the quantity produced in 1914 and 1909. It should be understood that in many instances figures for states of greater importance in production of certain kinds of paper than some of those shown could not be given without disclosing the operations of individual establishments.

New York led at each census in the production of news paper, hanging paper, tissue paper, wood-pulp board, and chip board. Pennsylvania ranked first in quantity and value of heavy wrapping paper, while Wisconsin led in production of manila wrapping paper, but could not be shown separately. Massachusetts led in the manufacture of fine paper and book paper. Michigan ranked second in the quantity of book paper produced, although Pennsylvania, third in quantity, was second in value for this item.

TABLE 18.—PRODUCTS, BY PRINCIPAL STATES: 1919, 1914, AND 1909.

PRODUCT AND STATE.	1919 Value.	1919 Quantity (tons 2,000 lbs.).	1914 Quantity (tons 2,000 lbs.).	1909 Quantity (tons 2,000 lbs.).
News paper, in rolls and sheets, total	$98,559,359	1,323,880	1,313,284	[1] 1,175,554
New York	35,922,875	463,341	489,136	374,808
Maine	28,507,697	424,706	336,020	313,125
Wisconsin	9,738,081	115,987	135,336	169,151
Minnesota	9,580,742	117,386	111,002	43,565
New Hampshire	2,281,032	28,950	79,664	(2)
Vermont	2,017,361	28,052	31,223	16,455
All other states	10,511,571	145,458	130,903	258,450
Hanging papers, total	6,043,390	69,445	96,527	92,158
New York	4,374,840	48,215	69,022	62,179
Wisconsin	1,071,483	15,726	14,870	8,868
All other states	597,067	5,504	12,635	21,111
Poster, novel, tablet, lining, etc., total [3]	7,272,755	80,394	7,883	(4)
Book paper:				
Plain, total	118,270,776	818,820	786,626	575,616
Massachusetts	18,045,565	111,788	106,845	88,744
Pennsylvania	14,921,845	96,731	118,590	73,763
Michigan	13,976,418	97,220	88,840	72,677
New York	13,138,331	96,252	78,917	66,139
Wisconsin	12,463,685	93,207	74,560	57,493
All other states	45,724,932	323,622	318,874	216,800
Coated, total	24,009,614	132,454	117,342	95,213
Michigan	10,810,359	54,733	26,101	(2)
All other states	13,199,255	77,721	91,241	95,213
Plate, lithograph, map, wood-cut, etc., total	1,556,372	9,821	9,332	6,498
Cover paper, total	5,643,191	22,163	21,679	17,578
Massachusetts	2,001,029	6,849	6,475	3,898
All other states	3,642,162	15,314	15,204	13,680
Fine paper, total	87,740,806	325,183	247,728	198,213
Ledger and highest grade, total	12,254,967	30,534		
Massachusetts	7,512,822	13,584		
All other states	4,742,145	17,000		
Pole dried, total	19,868,978	48,564		
Massachusetts	16,452,684	39,510		
All other states	3,416,294	9,054		
Air dried, total	9,514,618	28,786		
Wisconsin	6,070,369	19,363		
Massachusetts	2,465,349	6,170		
All other states	978,900	3,253		
Machine dried, total	14,665,308	59,674	(5)	(5)
Massachusetts	7,629,046	30,856		
All other states	7,036,262	28,818		
Sulphite bond, total	17,484,179	82,467		
New Hampshire	3,315,233	17,438		
New York	657,778	2,721		
All other states	13,511,168	62,308		
All other, total	13,952,756	75,108		
Ohio	6,163,332	31,771		
Pennsylvania	4,178,187	22,684		
New Hampshire	1,249,799	6,903		
All other states	2,361,438	13,750		
Wrapping paper:				
Manila (rope, jute, tag, etc.), total	15,493,141	111,782	77,878	73,731
New York	3,485,162	18,181	16,327	17,347
All other states	12,007,979	93,601	61,551	56,384
Heavy wrapping (mill wrappers, etc.), total	11,315,201	135,501	98,780	108,561
Pennsylvania	3,157,708	31,167	18,369	36,619
Wisconsin	2,324,571	23,952	11,424	(2)
New York	2,272,796	31,007	19,654	18,951
All other states	3,560,126	49,375	49,333	52,991
Straw, total	457,606	5,895	15,606	32,988
Bogus or wood manila, all grades, total	12,047,371	126,175	353,987	367,932
New York	3,248,479	36,757	87,277	79,952
All other states	8,798,892	89,418	266,710	287,980
Kraft paper, total	26,575,194	192,583	109,753	(6)
Wisconsin	5,249,615	36,897	15,808	(6)
Pennsylvania	3,121,783	23,351	(6)	(6)
New York	3,055,354	23,604	(6)	(6)
Vermont	830,375	6,578	(6)	(6)
All other states	14,318,067	102,153	93,945	(6)
All other wrapping paper, total	37,180,784	259,436	225,795	179,855
Wisconsin	7,655,119	58,934	60,320	41,471
Michigan	4,995,975	36,876	44,677	38,224
New York	2,736,519	20,934	23,605	30,474
Massachusetts	1,424,826	6,820	(2)	(2)
Pennsylvania	1,195,591	8,827	20,299	15,507
All other states	19,172,754	127,045	67,894	54,179
Tag stock (rope, jute, and sulphite), total	5,459,980	27,092	29,230	(7)
Boards:				
Wood pulpboard, total	14,887,881	179,747	116,419	71,036
New York	3,449,512	44,927	32,376	23,757
All other states	11,438,369	134,820	84,043	47,279
Boards—Continued.				
Strawboard, total	$12,229,837	228,248	175,424	171,789
Ohio	3,347,752	48,618	39,496	37,710
Illinois	2,630,255	42,246	42,952	29,510
All other states	6,251,830	137,384	92,976	104,569
News board, total	4,604,082	88,839	127,966	74,606
New Jersey	1,392,596	25,989	42,328	33,411
All other states	3,211,486	62,850	85,638	41,195
Binders', trunk, and press boards, total	3,787,860	43,091	61,453	(8)
Connecticut	1,151,642	8,814	12,895	(8)
All other states	2,636,218	34,277	48,558	(8)
Cardboard, bristol board, card middles, tickets, etc., total	11,104,105	84,987	83,010	51,449
Massachusetts	4,830,930	23,910	34,899	26,694
All other states	6,273,175	61,077	48,111	24,755
Leather board, total	2,263,288	28,167	26,589	(8)
New Hampshire	394,950	6,250	3,972	(8)
All other states	1,868,338	21,917	22,717	(8)
Chip board, total	37,749,210	695,963	(8)	(8)
New York	4,208,905	89,999	(8)	(8)
Illinois	3,760,931	75,385	(8)	(8)
New Jersey	2,195,779	41,041	(8)	(8)
Connecticut	1,075,166	22,047	(8)	(8)
All other states	26,508,429	467,491	(8)	(8)
All other boards, total	37,464,380	518,022	700,844	514,208
New York	6,213,069	82,316	135,467	111,487
Connecticut	5,094,998	69,514	62,937	46,957
Illinois	4,153,638	71,391	63,027	51,200
New Jersey	3,931,952	53,236	74,569	37,302
Ohio	3,864,914	47,959	127,814	54,116
Indiana	2,372,332	41,405	55,285	40,556
All other states	11,833,477	152,201	181,745	172,590
Tissue paper	40,695,523	190,561	115,401	77,745
High-grade, total	11,137,550	31,025		
New York	1,535,775	6,038		
All other states	9,601,775	24,987		
White, colored and waxing, total	7,644,952	36,545		
Manila and No. 2 white, total	3,589,279	23,985	(5)	(5)
New York	2,206,958	14,705		
All other states	1,382,321	9,280		
Towel and napkin, total	5,144,895	19,266		
Toilet, total	13,178,847	79,740		
New York	8,005,041	47,197		
All other states	5,173,806	32,543		
Blotting paper, total	3,209,137	13,420	14,157	9,577
Building, roofing, asbestos, and sheathing paper, total	17,737,341	195,244	243,908	225,824
Pennsylvania	5,202,680	63,716	55,273	60,168
All other states	12,534,661	131,528	188,635	165,656
All other paper, total	29,690,905	191,617	93,346	96,577
Pennsylvania	2,865,451	12,373	551	2,390
All other states	26,825,454	179,244	92,795	94,187
Wood pulp made for sale or for use in establishments other than those in which produced, total	80,095,047	1,100,303	912,490	910,846
Ground, total	11,728,801	345,929	313,951	310,747
Maine	5,131,076	148,746	118,813	107,116
New York	3,666,570	110,774	100,631	100,383
Wisconsin	1,418,865	38,163	43,337	37,964
All other states	1,512,290	48,246	51,170	65,284
Soda fiber, total	14,939,293	169,332	163,522	155,844
Sulphite fiber, total	49,507,190	516,104	407,314	444,255
New York	8,041,032	85,672	53,874	146,256
Maine	7,629,408	81,118	50,432	46,073
Wisconsin	6,014,906	81,645	78,878	73,719
All other states	27,821,844	267,669	224,130	178,207
Sulphate fiber, total	3,136,154	44,292	10,052	(7)
Screenings, mechanical, total	33,448	2,313	2,553	(7)
Screenings, chemical, total	750,161	22,333	15,098	(7)
All other products	34,915,241	.....	.....	.....
Wood pulp produced (including that used in mills which manufactured), total	.....	3,517,952	2,893,150	2,495,523
Ground, total	.....	1,518,829	1,293,661	1,179,266
New York	.....	479,817	423,605	405,376
Maine	.....	469,148	357,393	324,264
Wisconsin	.....	225,843	189,221	166,822
Vermont	.....	69,946	54,356	48,390
New Hampshire	.....	41,192	63,883	(2)
All other states	.....	232,883	205,203	234,414
Soda fiber, total	.....	411,693	347,928	298,626
Sulphite fiber, total	.....	1,419,829	1,151,327	1,017,631
Maine	.....	323,718	236,385	217,501
New York	.....	260,891	219,446	234,717
Wisconsin	.....	233,591	188,797	154,391
All other states	.....	601,629	506,699	411,022
Sulphate fiber, total	.....	120,378	52,641	(7)
Wisconsin	.....	44,119	24,633	(7)
All other states	.....	76,259	28,008	(7)
Screenings, mechanical, total	.....	12,220	11,769	(7)
Screenings, chemical, total	.....	35,003	35,824	(7)

[1] Includes "Poster, novel, lining, etc."
[2] Included in "All other states."
[3] Reported as "Poster" in 1914.
[4] Included in "Newspaper, in rolls and sheets."
[5] Figures not available.
[6] Included in "All other wrapping paper."
[7] Not reported separately.
[8] Included in "All other boards."

New York and Maine ranked first and second at each census in the total output of ground wood pulp (including that made and consumed in the same establishment), the former reporting 31.6 per cent and the latter 30.9 per cent of the total for 1919. Maine led in the production of sulphite fiber both in 1919 and 1914, while New York ranked second in 1919 and 1914, but first in 1909.

"All other products" include "All other pulp-mill products" and paper bags amounting to $6,469,010.

Equipment.—Table 19 gives in detail, for 1919, 1914, 1909, and 1904, the number and capacity of the several types of paper machines and pulp equipment used in the industry.

The average capacity of the Fourdriniers in 1904 was only 11.4 tons per 24 hours, as compared with 16.9 tons in 1919; and the average capacity of cylinder machines increased from 7.7 tons to 15.4 tons during the same period. The total yearly capacity increased 98.8 per cent during the fifteen-year period 1904 to 1919.

The yearly capacity of pulp mills increased 1,703,829 tons, or 64.4 per cent, from 1904 to 1919. Sulphate fiber equipment, which was reported for the first time in 1914, shows an increase of 175,175 tons, or 225.1 per cent, in capacity.

TABLE 19.—EQUIPMENT: 1919, 1914, 1909, AND 1904.

KIND.	1919	1914	1909	1904
Paper machines:[1]				
Total number	1,545	1,540	1,480	1,369
Capacity, yearly, tons	7,671,043	6,439,787	5,293,397	3,857,903
Fourdrinier—				
Number	862	859	804	752
Capacity per 24 hours, tons	14,542	13,545	10,508	8,569
Cylinder—				
Number	683	681	676	617
Capacity per 24 hours, tons	10,549	8,024	6,316	4,740
Pulp equipment:[1]				
Grinders, number	1,380	1,497	1,435	1,362
Digesters, total number	739	581	542	517
Sulphite fiber	478	361	348	309
Soda fiber	202	197	194	208
Sulphate fiber	59	23	(2)	(2)
Capacity, yearly, tons, total	4,348,582	3,708,130	3,405,621	2,644,753
Ground	1,975,030	1,789,363	1,809,685	1,515,068
Sulphite	1,656,066	1,341,622	1,250,983	885,092
Soda	464,482	499,325	344,953	244,573
Sulphate	252,995	77,820	(2)	(2)

[1] Capacity in tons of 2,000 pounds. [2] Not reported separately.

GENERAL TABLES.

Comparative summary, by states.—Table 20 gives, 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 for the paper and wood-pulp industry.

Detailed statement, by states, 1919.—Table 21 presents, for 1919, statistics in detail for the industry as a whole and for each state that can be shown separately without the possibility of disclosing the operations of individual establishments.

TABLE 20.—COMPARATIVE SUMMARY, BY STATES: 1919, 1914, AND 1909.

STATE.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
United States	1919	729	113,759	1,853,239	$135,691	$467,483	$788,059
	1914	718	88,457	1,621,154	53,246	213,181	332,147
	1909	777	75,978	1,304,265	40,805	165,442	267,657
Connecticut	1919	44	1,999	26,742	2,194	8,217	12,930
	1914	44	1,898	21,111	1,141	4,007	5,969
	1909	51	1,720	19,509	924	3,303	5,527
Delaware	1919	5	683	5,120	793	3,230	4,573
	1914	7	591	5,954	327	1,753	2,481
	1909	6	516	4,318	310	1,587	2,292
Illinois	1919	19	1,831	22,438	2,130	9,212	14,356
	1914	21	1,704	24,613	1,118	4,265	6,952
	1909	19	1,397	15,169	727	3,099	4,983
Indiana	1919	26	2,214	25,485	2,230	9,514	15,120
	1914	24	1,620	20,719	916	4,314	6,234
	1909	27	1,501	18,382	754	3,497	5,202
Iowa	1919	4	136	1,932	141	293	612
	1914	3	87	1,312	54	183	280
	1909	4	205	1,435	81	281	437
Kansas	1919	3	291	2,007	286	1,121	1,779
	1914	3	239	2,344	122	403	610
	1909	3	97	920	46	120	218
Maine	1919	39	13,058	291,223	16,508	54,671	93,917
	1914	38	10,033	245,121	6,754	25,458	40,180
	1909	45	8,647	223,787	5,267	20,504	33,950
Maryland	1919	10	1,408	18,148	1,949	6,816	9,917
	1914	13	1,586	15,028	926	4,126	6,149
	1909	13	1,249	11,407	639	3,278	4,894
Massachusetts	1919	78	12,960	145,323	14,642	53,764	87,160
	1914	86	13,401	133,860	7,549	26,611	43,353
	1909	88	12,848	115,792	6,542	22,350	40,097
Michigan	1919	39	9,561	95,729	11,177	40,353	60,299
	1914	37	6,051	62,528	3,559	14,545	22,050
	1909	32	4,327	48,700	2,142	9,025	13,922
Minnesota	1919	9	2,523	56,106	$2,994	$11,409	$20,138
	1914	8	1,345	53,259	983	3,245	5,573
	1909	9	607	23,440	361	1,438	2,385
New Hampshire	1919	27	5,000	123,929	6,516	24,834	41,826
	1914	30	3,905	118,123	2,513	12,537	17,708
	1909	34	3,413	79,912	2,106	9,253	13,994
New Jersey	1919	33	3,108	32,048	3,722	11,995	20,361
	1914	33	2,927	26,695	1,709	7,181	10,931
	1909	37	2,223	22,996	1,181	4,769	7,554
New York	1919	156	17,571	415,306	22,114	76,954	129,381
	1914	150	13,570	392,268	8,577	35,930	56,336
	1909	178	12,073	337,548	6,744	31,767	48,860
Ohio	1919	49	6,899	64,420	8,094	35,710	55,098
	1914	48	5,430	50,013	3,378	16,109	23,284
	1909	47	4,673	51,402	2,419	10,898	16,965
Pennsylvania	1919	56	9,843	83,510	12,459	35,643	64,716
	1914	53	7,447	75,305	3,483	16,047	25,439
	1909	62	6,656	66,910	3,303	11,398	19,873
Vermont	1919	20	1,832	42,084	2,144	6,564	10,863
	1914	23	1,264	42,066	811	3,004	4,776
	1909	25	1,030	38,191	594	2,455	3,902
Virginia	1919	10	1,951	15,367	1,958	7,796	13,602
	1914	8	1,260	13,585	692	3,424	5,501
	1909	9	912	9,770	412	2,148	3,657
West Virginia	1919	9	956	12,136	995	3,300	4,888
	1914	8	1,033	11,735	506	1,735	2,804
	1909	9	1,162	11,025	478	1,683	2,652
Wisconsin	1919	57	12,789	239,464	14,010	45,201	80,328
	1914	58	8,968	191,693	5,339	20,568	31,205
	1909	57	7,467	136,903	3,891	16,693	25,962
All other states	1919	36	7,146	133,822	8,596	20,886	40,186
	1914	23	4,098	110,822	2,789	7,736	14,329
	1909	22	3,225	66,749	1,884	5,896	10,331

TABLE 21.—DETAILED STATEMENT, BY STATES: 1919.

STATE.	Number of establishments	Persons engaged in the industry. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	Wage earners Dec. 15, or nearest representative day. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male	Under 16. Female	Capital.	Expenses. Salaries and wages. Officials.	Expenses. Salaries and wages. Clerks, etc.
															Dollars.	*Dollars.*	*Dollars.*
United States	729	124,935	171	3,846	4,500	2,659	113,759	No 120,762	Ap 107,762	122,139	111,121	10,852	88	78	905,794,583	18,735,837	11,216,907
California	7	933	3	46	37	41	806	Au 932	Mh 688	834	801	33	.....	.....	5,930,989	142,929	105,644
Connecticut	44	2,352	5	189	84	75	1,999	De 2,195	Fe 1,837	2,230	1,959	265	4	2	13,346,926	494,399	196,528
Delaware	5	727	1	13	23	7	683	No 718	Je 650	663	602	61	.....	.....	3,802,604	74,682	61,317
Illinois	19	2,002	.....	81	62	28	1,831	Jy 1,941	Mh 1,687	1,973	1,893	79	1	.....	13,928,744	375,247	147,791
Indiana	26	2,382	4	76	53	35	2,214	Oc 2,395	Ap 2,008	2,293	2,191	98	2	2	13,030,002	298,835	144,741
Iowa	4	151	1	6	5	3	136	Fe 191	Se 70	187	161	26	.....	.....	2,515,745	32,400	11,857
Kansas	3	350	7	18	29	5	291	Ja 376	Mh 193	278	247	31	.....	.....	1,451,865	36,807	35,794
Maine	39	14,373	10	329	670	306	13,058	Se 13,650	Ap 12,434	13,462	12,776	684	2	.....	130,702,071	2,168,768	1,548,411
Maryland	10	1,511	7	24	57	15	1,408	Oc 1,807	Mh 623	1,760	1,630	130	.....	.....	10,214,631	206,869	216,014
Massachusetts	78	14,524	22	432	613	497	12,960	De 14,093	Fe 11,971	14,115	10,498	3,571	8	38	88,302,299	2,081,568	1,419,544
Michigan	39	10,225	3	279	241	141	9,561	No 9,996	Mh 9,063	9,825	8,558	1,265	.....	2	53,680,651	1,237,077	652,642
Minnesota	9	2,771	.....	86	95	67	2,523	Ja 2,681	Au 2,305	2,642	2,479	163	.....	.....	24,634,705	410,502	214,269
New Hampshire	27	5,338	12	107	167	52	5,000	No 5,639	Mh 4,477	5,135	4,968	160	4	3	51,603,019	662,820	852,405
New Jersey	33	3,492	7	160	133	84	3,108	Oc 3,406	Ap 2,799	3,326	3,026	242	44	14	20,886,508	869,025	350,393
New York	156	19,222	39	670	599	343	17,571	De 19,219	My 16,412	19,334	18,577	750	5	2	167,111,332	3,185,616	1,290,381
Ohio	49	7,563	1	269	210	184	6,899	No 7,464	Ap 6,306	7,447	6,468	972	4	3	74,498,111	1,320,891	684,671
Pennsylvania	56	11,026	27	325	523	308	9,843	De 10,447	Mh 9,342	10,483	9,721	751	5	6	63,882,518	1,658,890	1,232,376
Vermont	20	2,008	14	67	53	42	1,832	De 1,972	Ap 1,671	1,975	1,853	116	3	3	15,314,137	426,473	140,667
Virginia	10	2,127	.....	71	76	29	1,951	Se 2,046	Fe 1,785	1,985	1,853	132	.....	.....	12,881,963	454,351	170,160
Washington	6	1,762	.....	46	67	39	1,610	De 1,801	Fe 1,442	1,777	1,618	159	.....	.....	12,049,294	232,490	208,786
West Virginia	9	1,036	.....	50	22	8	956	Ja 1,171	Mh 854	1,125	1,066	58	1	.....	4,435,602	164,735	47,687
Wisconsin	57	13,916	4	351	494	278	12,789	De 13,394	Ap 12,133	13,375	12,331	1,036	5	3	92,268,720	1,635,327	1,095,377
All other states [1]	23	5,144	4	151	187	72	4,730	.....	.....	5,915	5,845	70	.....	.....	29,322,147	565,136	389,452

STATE.	Expenses—continued. Salaries and wages—Continued. Wage earners.	For contract work.	Rent and taxes. Rent of factory.	Rent and taxes. Taxes, Federal, state, county, and local.	For materials. Principal materials.	For materials. Fuel and rent of power.	Value of products.	Value added by manufacture.	Power. Primary horsepower. Total.	Owned. Steam engines (not turbines).	Owned. Steam turbines.	Owned. Internal-combustion engines.	Owned. Water power.[2]	Rented.[3]	Electric horsepower generated in establishments reporting.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*							
United States	135,690,642	487,240	1,078,929	33,832,330	412,482,682	54,999,955	788,059,377	320,576,740	1,851,014	559,208	139,775	3,191	910,863	237,977	346,924
California	923,418	.....	800	262,504	2,898,742	508,838	5,805,199	2,397,619	16,275	2,610	900	.....	5,721	7,044	1,096
Connecticut	2,193,938	14,993	996	252,166	7,007,764	1,208,855	12,939,103	4,722,484	26,742	15,820	1,190	5	8,119	1,608	2,845
Delaware	792,665	.....	.....	20,062	2,852,854	376,826	4,573,339	1,343,659	5,120	4,640	.....	.....	480	.....	68
Illinois	2,130,263	.....	17,490	840,480	8,162,201	1,050,252	14,356,529	5,144,076	22,438	18,233	1,461	10	2,550	184	5,629
Indiana	2,238,632	1,020	25,726	623,689	8,106,856	1,407,310	15,120,059	5,605,893	25,485	20,607	2,921	42	350	1,565	4,074
Iowa	141,161	.....	.....	6,514	224,252	68,401	612,132	319,479	1,932	1,025	.....	.....	.....	907	3
Kansas	286,433	.....	1,200	34,993	1,000,760	120,025	1,778,761	657,976	2,007	1,853	.....	4	.....	150	65
Maine	16,507,569	152,056	187,234	6,368,006	46,682,333	7,988,255	93,916,628	39,246,040	291,223	45,655	12,348	.....	202,302	30,918	41,433
Maryland	1,948,658	.....	600	95,199	6,172,827	643,200	9,916,625	3,100,598	18,148	6,355	10,600	12	490	691	12,229
Massachusetts	14,642,413	24,881	59,038	2,607,871	48,847,111	4,916,773	87,159,890	33,396,006	145,323	54,798	15,045	7	50,340	25,133	16,294
Michigan	11,177,009	.....	32,722	3,034,802	36,428,304	3,925,143	66,299,513	25,946,066	95,729	57,347	10,050	.....	23,019	5,313	33,594
Minnesota	2,993,895	.....	.....	748,238	10,027,035	1,381,833	20,138,482	8,729,614	56,106	11,350	565	.....	40,036	4,155	8,794
New Hampshire	6,545,865	9,145	5,239	1,555,267	22,099,947	2,734,049	41,825,551	16,991,555	123,929	14,195	12,917	.....	59,516	37,301	12,991
New Jersey	3,722,101	30,903	6,065	671,622	10,366,830	1,628,525	20,360,692	8,365,337	32,948	22,771	1,007	1,655	2,423	5,092	3,658
New York	22,114,221	85,449	227,475	4,368,760	68,134,358	8,819,385	129,381,032	52,427,289	415,306	81,127	15,510	526	260,917	57,226	48,887
Ohio	8,094,230	12,506	7,644	2,112,475	32,762,877	2,947,471	55,098,196	19,387,848	64,420	47,723	11,579	30	2,105	2,983	25,227
Pennsylvania	12,459,234	3,090	82,406	1,554,938	31,047,629	4,595,489	64,715,767	29,072,649	83,510	64,935	7,287	55	6,000	5,233	35,936
Vermont	2,144,116	4,176	280,851	239,151	5,830,615	733,685	10,862,858	4,298,558	42,084	5,170	.....	50	34,080	2,784	3,445
Virginia	1,958,230	.....	80,388	498,419	7,051,937	743,737	13,602,264	5,806,590	15,367	6,321	6,575	225	1,865	381	8,694
Washington	2,173,628	.....	4,716	538,094	4,286,770	775,660	10,653,361	5,590,931	31,809	6,520	795	.....	1,800	22,694	686
West Virginia	995,250	6,631	.....	174,879	2,906,360	393,155	4,887,568	1,588,053	12,136	6,030	1,000	250	3,600	1,256	3,125
Wisconsin	14,010,430	135,052	40,839	6,647,183	39,567,641	5,633,304	80,328,483	35,127,538	237,239	37,289	18,259	.....	166,514	15,177	53,525
All other states [1]	5,497,283	7,338	17,500	577,018	10,016,679	2,399,784	23,727,345	11,310,882	85,738	26,834	9,766	320	38,636	10,182	24,626

[1] All other states embrace: District of Columbia, 1 establishment; Georgia, 5; Louisiana, 3; Mississippi, 1; North Carolina, 3; Oregon, 4; Rhode Island, 1; South Carolina, 1; Tennessee, 2; and Texas, 2.

[2] Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

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

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DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

WASHINGTON

FOURTEENTH CENSUS OF THE UNITED STATES

MANUFACTURES: 1919

PETROLEUM, REFINING

Prepared under the supervision of EUGENE F. HARTLEY, Chief Statistician for Manufactures

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EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census did not cover establishments which were idle during the entire year or for which products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1919, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city, county, or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city, county, or state in which it was located. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products different from those covered by the class designation, and, on the other hand, may not represent the total product covered by this designation, because some products of this class may be made in establishments in which it is not the product of chief value.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1919 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the manufacturing industries were distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners.

The number of persons engaged in each industry, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where this date did not portray such conditions, an earlier date was requested.

In the case of employees other than wage earners the number thus reported for the representative date has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, by sex, without distinction of age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given in certain tables for each separate industry, is not totaled for all industries combined, because, in view of the variations of date, such a total is not believed to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation.

In order to determine as nearly as possible the age distribution of the average number of wage earners for an industry, the per cent distribution by age of the wage earners for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. The percentages thus obtained have been applied to the average number of wage earners for the year to determine the average numbers 16 years and over, and under 16, employed.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number of wage earners fluctuates from month to month in every industry, and in some cases to a very great extent. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month, and while representing the number according to the pay rolls to whom wages were paid on that date, no doubt represent a larger number than would be required to perform the work in any industry if all were continuously employed during the year.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a few wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital (amount actually invested).—The instructions on the schedule for securing data relating to capital were as follows:

"The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises."

These instructions were identical with those employed at the censusus of 1914 and 1909. The data compiled in respect to capital, however, at both censuses, as well as at all preceding censuses of manufactures, have been so defective as to be of little value except as indicating general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include certain Federal taxes and state, county, and local taxes. Under "Federal taxes" there are included the internal revenue tax on manufactures (tobacco, beverages, etc.), excise taxes when included in values reported for products, corporation capital stock tax, and corporation income tax, but not the income tax for individuals and partners.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of depreciation or interest, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power equipment of the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, fuel oils, gasoline and other volatile oils, and gas, and represent the quantity used during the year. As only the principal kinds of fuel are shown, comparison as to the total cost of all fuel is impracticable.

PETROLEUM, REFINING.

GENERAL STATISTICS.

General character of the industry.—This industry embraces the establishments engaged primarily in the refining of crude petroleum by distillation. It does not include the compounders of refined or partly refined petroleum products, nor the production of gasoline from natural gas at the wells, known as casing-head gasoline. This is to a certain extent a manufacturing operation, but it is closely related to the operations of the wells and the establishments are not classed as manufacturers.

Comparative summary.—Table 1 presents the general statistics for the census years 1879 to 1919, inclusive.

Principal states, ranked by value of products.—Table 2 summarizes the more important statistics for the industry, by states, ranked according to value of products.

Persons engaged in the industry.—The age classification of the average number of wage earners in Table 3 is an estimate obtained by the method described in the "Explanation of terms." Figures for states will be found in Table 18.

Wage earners, by months.—The statistics for wage earners, Table 4, are intended to show the steadiness of employment, or the reverse, in accordance with the industrial conditions existing during the year. Females constituted but 2 per cent of the average number of wage earners in 1919. Figures are given for all states separately reported.

Prevailing hours of labor.—The figures presented in Table 5 emphasize the movement toward fewer hours of labor. In 1909, 37 per cent, and in 1914, 41.8 per cent of the wage earners were employed in establishments where the prevailing hours of labor per week were 60 or over; whereas in 1919 but 4 per cent were in these groups. On the other hand, in 1909 only three-tenths of 1 per cent were in establishments where the prevailing hours per week were fewer than 54; whereas in 1914 this percentage had increased to 8.2 per cent, and in 1919 to 63.5 per cent.

Size of establishments, by average number of wage earners.—In 1919 the average number of wage earners for all plants was 184, as compared with 144 in 1914. Table 6 shows the growth as a whole has been largely in the higher groups. The establishments employing over 500 wage earners represented 9 per cent of the total number and reported 69 per cent of the wage earners in 1919, as compared with 8 per cent of the establishments and 62 per cent of the wage earners in 1914.

Size of establishments, by value of products.—Measured by value of products, the growth, as shown in Table 7, is largely in the higher groups, though this is to a certain extent due to the high level of values in 1919. The average value of products per establishment increased from $1,612,000 in 1909 to $2,252,000 in 1914 and to $5,100,000 in 1919.

Character of ownership.—Table 8 presents the statistics bearing upon the matter of ownership. The industry is almost entirely under corporation control. The corporation group reported approximately 99 per cent of the value of all products.

Number and horsepower of types of prime movers.—Table 9 presents the statistics concerning power. Of the total primary power, 45.5 per cent was utilized in the form of electric power in 1919, as compared with 30.6 per cent in 1914 and 9.8 per cent in 1909. This includes purchased electric power and secondary electric, or that generated by the establishments reporting.

Fuel consumed.—Table 10 presents the statistics for fuels, by kinds and by states. The figures for gas include both natural and manufactured gas, though chiefly natural gas.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, 1899, 1889, AND 1879.

	1919	1914	1909	1904	1899	1889	1879	PER CENT OF INCREASE.[1] 1914–1919	1909–1914	1904–1909	1899–1904	1889–1899	1879–1889
Number of establishments	320	176	147	98	67	94	86	81.8	19.7	.....	.....	.....	.....
Persons engaged	73,473	31,077	16,640	18,768	13,447	(2)	(2)	136.4	86.8	−11.3	39.6	.....	.....
Proprietors and firm members	59	52	42	24	47	(2)	(2)	.....	.....	.....	.....	.....	.....
Salaried employees	14,525	5,659	2,669	1,974	1,201	(2)	(2)	156.7	112.0	35.2	64.4	.....	.....
Wage earners (av. number)	58,889	25,366	13,929	16,770	12,199	11,403	9,869	132.2	82.1	−16.9	37.5	(3)	(3)
Primary horsepower	238,906	128,468	90,268	46,019	36,127	32,536	(2)	86.0	42.3	96.2	27.4	11.0	.....
Capital	$1,170,278,189	$325,646,120	$181,916,205	$136,280,541	$95,327,892	$77,416,296	$27,325,746	259.4	79.0	33.5	43.0	23.1	183.0
Salaries and wages	$116,368,661	$27,289,894	$13,758,945	$12,713,432	$8,528,487	$6,989,478	$4,381,572	326.4	98.3	8.2	49.1	22.0	59.5
Salaries	$26,619,024	$7,892,428	$3,928,867	$2,724,065	$1,811,400	(2)	(2)	237.3	100.9	44.2	50.4	.....	.....
Wages	$89,749,637	$19,397,466	$9,830,078	$9,989,367	$6,717,087	(2)	(2)	362.7	97.3	−1.6	48.7	.....	.....
Paid for contract work	$2,352,306	$502,651	$119,610	$49,248	$15,415	(2)	(2)	368.0	320.2	142.9	219.5	.....	.....
Rent and taxes	$78,408,547	$2,662,552	$932,402	[4] $613,231	[4] $377,723	(2)	(2)	2,844.9	185.6	(3)	(3)	.....	.....
Cost of materials	$1,247,908,355	$325,264,509	$199,273,402	$139,387,213	$102,859,341	$67,918,723	$34,991,101	283.7	63.2	43.0	35.5	51.4	94.1
Value of products	$1,632,532,766	$396,361,406	$236,997,659	$175,005,320	$123,929,384	$85,001,198	$43,705,218	311.9	67.2	35.4	41.2	45.8	94.5
Value added by manufacture[5]	$384,624,411	$71,096,897	$37,724,257	$35,618,107	$21,070,043	$17,082,475	$8,706,117	441.0	88.5	5.9	69.0	2[illegible].3	9[illegible].2
Crude petroleum used (barrels)	365,271,803	191,262,724	120,775,439	66,982,862	52,011,005	30,662,629	17,417,455	91.0	58.4	80.3	28.8	69.6	76.0

[1] A minus sign (−) denotes decrease; percentages are omitted where base is less than 100.
[2] Figures not available.
[3] Figures not strictly comparable.
[4] Exclusive of internal revenue.
[5] Value of products less cost of materials.

TABLE 2.—PRINCIPAL STATES, RANKED BY VALUE OF PRODUCTS: 1919.

STATE.	Number of establishments	WAGE EARNERS. Average number.	Per cent distribution.	Rank.	VALUE OF PRODUCTS. Amount (expressed in thousands).	Per cent distribution.	Rank.	VALUE ADDED BY MANUFACTURE. Amount (expressed in thousands).	Per cent distribution.	Rank.
United States.	320	58,889	100.0	....	$1,032,533	100.0	....	$384,625	100.0	...
New Jersey	9	10,178	17.3	1	280,995	17.2	1	58,108	15.1	2
Texas	39	8,224	14.0	3	241,757	14.8	2	48,879	12.7	3
California	45	5,132	8.7	4	213,292	13.1	3	71,416	18.6	1
Pennsylvania	53	8,235	14.0	2	178,826	11.0	4	43,844	11.4	4
Oklahoma	66	4,612	7.8	5	$150,673	9.2	5	$23,524	6.1	8
Louisiana	10	2,841	4.8	8	75,024	4.6	8	25,420	6.6	6
Illinois	13	2,448	4.2	9	64,549	4.0	9	10,495	2.7	11
Kansas	29	2,221	3.8	11	63,786	3.9	10	12,450	3.2	9
Ohio	11	2,431	4.1	10	43,283	2.6	12	11,325	2.9	10
All other states	45	12,567	21.3	....	320,348	19.6	....	79,164	20.7	...

TABLE 3.—PERSONS ENGAGED IN THE INDUSTRY: 1919, 1914, AND 1909.

CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL. Male.	Female.
All classes	1919	73,473	69,511	3,962	94.8	5.2
	1914	31,077	30,622	455	98.5	1.5
	1909	16,640	16,251	389	97.7	2.3
Proprietors and officials	1919	2,807	2,778	29	99.0	1.0
	1914	839	833	6	99.3	0.7
	1909	671	661	10	98.5	1.5
Proprietors and firm members	1919	59	55	4	93.2	6.8
	1914	52	47	5	90.4	9.6
	1909	42	37	5	88.1	11.9
Salaried officers of corporations	1919	510	494	16	96.9	3.1
	1914	251	250	1	99.6	0.4
	1909	211	207	4	98.1	1.9
Superintendents and managers	1919	2,238	2,229	9	99.6	0.4
	1914	536	536	.....	100.0	.....
	1909	418	417	1	99.8	0.2
Clerks and other subordinate salaried employees.	1919	11,777	9,031	2,746	76.7	23.3
	1914	4,872	4,582	290	94.0	6.0
	1909	2,040	1,820	220	89.2	10.8
Wage earners (average number)	1919	58,889	57,702	1,187	98.0	2.0
	1914	25,366	25,207	159	99.4	0.6
	1909	13,929	13,770	159	98.9	1.1
16 years of age and over	1919	58,849	57,662	1,187	98.0	2.0
	1914	25,326	25,167	159	99.4	0.6
	1909	13,886	13,727	159	98.9	1.1
Under 16 years of age	1919	40	40	.....	100.0	.....
	1914	40	40	.....	100.0	.....
	1909	43	43	.....	100.0	.....

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR STATES: 1919.

[The 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. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Per cent minimum is of maximum.
United States:														
1919	58,889	*54,542*	54,883	54,822	55,935	57,705	59,018	61,079	60,550	61,489	62,507	61,739	**62,599**	86.8
Males	57,702	*52,750*	53,499	53,620	54,823	56,603	57,913	59,916	59,413	60,323	61,465	60,621	**61,478**	85.8
Females	1,187	**1,592**	1,384	1,202	1,112	1,102	1,105	1,163	1,137	1,166	*1,042*	1,118	1,121	65.5
1914	25,366	25,068	25,053	25,833	25,565	25,138	25,572	**25,849**	24,946	25,516	25,773	25,211	*24,868*	96.2
1909	13,929	13,319	13,079	*12,952*	13,076	13,206	13,617	14,156	14,221	14,434	15,032	**15,249**	14,805	84.9
California	5,132	5,066	4,894	4,753	*4,737*	4,785	5,024	5,222	5,386	5,399	5,295	5,417	**5,606**	84.5
Illinois	2,448	*2,354*	2,377	2,477	2,424	2,380	2,416	2,488	2,439	2,374	2,524	**2,589**	2,534	90.9
Kansas	2,221	2,273	2,276	2,222	2,190	**2,362**	2,160	2,220	2,152	2,242	*2,092*	2,189	2,274	88.6
Louisiana	2,841	*2,062*	2,474	2,600	2,733	2,859	2,899	2,955	2,933	2,964	3,075	3,182	**3,356**	61.4
New Jersey	10,178	9,330	9,218	*9,025*	9,198	9,901	10,322	10,620	10,772	10,708	**11,301**	10,992	10,749	79.9
Ohio	2,431	2,416	2,431	2,351	*2,331*	2,356	2,389	2,524	**2,556**	2,495	2,477	2,449	2,397	91.2
Oklahoma	4,612	4,482	*4,380*	4,421	4,464	4,560	4,573	4,677	**4,823**	4,770	4,699	4,714	4,781	90.8
Pennsylvania	8,235	8,134	8,220	*8,017*	8,157	8,158	8,404	**8,512**	8,405	8,353	8,254	8,168	8,038	94.2
Texas	8,224	*6,724*	7,323	7,648	7,553	8,100	7,867	8,511	8,870	8,854	8,940	9,018	**9,280**	72.5

TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR 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.[1]	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
United States	1919	58,889	205	701	31,059	5,444	4,907	14,251	572	1,750
	1914	25,366	(2)	(2)	1,241	848	12,621	56	2,502	8,098
	1909	13,929	(2)	(2)	43	.....	8,670	61	1,894	3,261
California	1919	5,132	8	.....	3,417	118	27	1,562	.....	.....
	1914	1,930	(2)	(2)	1,239	20	261	41	2	367
Illinois	1919	2,448	.....	.....	312	1,568	.....	541	15	12
	1914	1,072	.....	.....	.....	.....	249	.....	302	521
Kansas	1919	2,221	.....	.....	1,200	.....	.....	954	36	31
	1914	890	.....	.....	.....	.....	.....	.....	278	612
Louisiana	1919	2,841	.....	.....	2,455	.....	.....	348	.....	38
New Jersey	1919	10,178	81	701	9,213	183	.....	.....	.....	.....
	1914	5,178	.....	.....	.....	.....	4,992	.....	186	.....
Ohio	1919	2,431	.....	.....	604	1,029	186	279	121	212
	1914	1,519	.....	.....	.....	828	406	.....	123	162
Oklahoma	1919	4,612	.....	.....	2,006	.....	112	1,766	314	414
	1914	516	.....	.....	1	.....	76	14	64	361
Pennsylvania	1919	8,235	116	.....	73	93	4,502	2,738	35	678
	1914	4,902	.....	.....	.....	.....	3,067	1	575	1,259
Texas	1919	8,224	.....	.....	6,388	1,289	4	396	40	107
	1914	2,909	.....	.....	.....	.....	1,960	.....	8	941

[1] Includes 48 and under for 1914 and 1909.

[2] Corresponding figures not available.

TABLE 6.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR 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	320	58,889	2	46	152	90	1,051	59	2,019	44	3,258	32	5,347	19	6,517	13	9,003	15	31,542
1914	176	25,366	.....	25	80	57	695	42	1,410	13	831	12	1,990	13	4,693	8	5,729	6	9,938
California	45	5,132	1	11	36	14	157	9	266	4	319	1	109	3	1,194	1	657	1	2,394
Illinois	13	2,448	.....	1	5	4	56	.....	.....	3	237	2	302	1	280	2	1,568	.....	.....
Kansas	29	2,221	.....	4	15	12	146	5	173	2	136	2	252	3	863	1	636	.....	.....
Louisiana	10	2,841	.....	.....	.....	6	71	1	42	1	93	1	196	.....	.....	.....	.....	1	2,439
New Jersey	9	10,178	.....	.....	.....	.....	.....	.....	.....	3	264	.....	.....	.....	.....	2	1,234	4	8,680
Ohio	11	2,431	1	.....	.....	2	13	2	93	.....	.....	4	698	.....	.....	1	598	1	1,029
Oklahoma	66	4,612	.....	7	22	24	275	18	651	5	394	10	1,776	1	291	.....	.....	1	1,203
Pennsylvania	53	8,235	.....	5	14	10	120	16	526	14	936	3	484	3	1,307	1	715	1	4,133
Texas	39	8,224	.....	11	36	8	80	5	167	8	599	2	271	1	264	1	520	3	6,287

TABLE 7.—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	320	176	147	58,889	25,366	13,929	$1,632,532,766	$396,361,406	$236,997,659	$384,624,411	$71,096,897	$37,724,257
Less than $5,000	4	.....	.....	2	.....	.....	10,996	.....	.....	1,843	.....	.....
$5,000 to $20,000[1]	6	10	16	20	17	57	64,720	87,594	206,158	16,269	28,038	62,811
$20,000 to $100,000	21	27	25	107	205	221	1,383,278	61,669,133	1,524,305	259,137	426,474	299,158
$100,000 to $500,000	65	59	71	680	2,166	2,015	17,462,094	11,107,841	26,595,548	2,122,261	6,446,389	6,088,243
$500,000 to $1,000,000	56	26		1,640			39,503,729	17,175,014		8,386,356		
$1,000,000 and over	168	54	35	56,440	22,978	11,636	1,574,107,949	361,321,824	208,671,648	373,838,545	64,195,996	31,274,045
	PER CENT DISTRIBUTION.											
All classes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.1	100.1	100.1
Less than $5,000	1.3	.....	.....	(2)	.....	.....	(2)	.....	.....	(2)	.....	.....
$5,000 to $20,000[1]	1.9	5.7	10.9	(2)	0.1	0.4	(2)	(2)	0.1	(2)	(3)	0.2
$20,000 to $100,000	6.6	15.3	17.0	0.2	0.8	1.6	0.1	0.4	0.6	0.1	0.6	0.8
$100,000 to $500,000	20.3	33.5	48.3	1.2	8.5	14.5	1.1	4.1	11.2	0.6	9.1	16.1
$500,000 to $1,000,000	17.5	14.8		2.8			2.4	4.3		2.2		
$1,000,000 and over	52.5	30.7	23.8	95.8	90.6	83.5	96.4	91.2	88.0	97.2	90.3	82.9

[1] Includes the group "Less than $5,000" for 1914 and 1909.

[2] Less than one-tenth of 1 per cent.

TABLE 8.—CHARACTER OF OWNERSHIP, BY STATES: 1919 AND 1914.

STATE.	Census year.	NUMBER OF ESTABLISHMENTS 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.		
		Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
United States	1919	8	297	15	58,889	196	58,521	172	0.3	99.4	0.3	$1,632,532,766	$9,466,587	$1,617,693,917	$5,372,262	0.6	99.1	0.3
	1914	6	155	15	25,366	137	24,944	15	0.6	98.3	1.1	396,361,406	2,442,105	389,378,595	4,540,706	0.6	98.2	1.2
	1909	4	131	12	13,929	99	13,678	12	0.7	98.2	1.1	236,997,659	1,992,431	232,539,969	2,535,259	0.8	98.1	1.1
California	1919	1	44	.....	5,132	.....	[1] 5,132	.....	.....	.....	.....	213,292,194	.....	[1] 213,292,194	.....	.....	100.0	.....
	1914	2	32	4	1,930	.....	1,907	[1] 23	.....	98.8	1.2	55,527,651	.....	54,917,623	[1] 610,028	.....	98.9	[1] 1.1
Illinois [2]	1919	.....	12	1	2,448	.....	[3] 2,448	.....	.....	.....	.....	64,548,642	.....	[3] 64,548,642	.....	.....	100.0	.....
Kansas [2]	1919	.....	28	1	2,221	.....	[3] 2,221	.....	.....	.....	.....	63,785,520	.....	[3] 63,785,520	.....	.....	100.0	.....
Louisiana [2]	1919	.....	10	.....	2,841	.....	2,841	.....	.....	100.0	.....	75,023,726	.....	75,023,726	.....	.....	100.0	.....
New Jersey [2]	1919	.....	9	.....	10,178	.....	10,178	.....	.....	100.0	.....	280,994,553	.....	280,994,553	.....	.....	100.0	.....
Ohio	1919	.....	11	.....	2,431	.....	2,431	.....	.....	100.0	.....	43,282,801	.....	43,282,801	.....	.....	100.0	.....
	1914	.....	7	.....	1,519	.....	1,519	.....	.....	100.0	.....	11,169,189	.....	11,169,189	.....	.....	100.0	.....
Oklahoma	1919	1	65	.....	4,612	.....	[1] 4,612	.....	.....	.....	.....	150,673,458	.....	[1] 150,673,458	.....	.....	100.0	.....
	1914	.....	23	.....	516	.....	516	.....	.....	100.0	.....	13,014,372	.....	13,014,372	.....	.....	100.0	.....
Pennsylvania	1919	6	41	6	8,235	164	7,993	78	2.0	97.1	0.9	178,825,632	5,796,115	169,785,472	3,244,045	3.2	95.0	1.8
	1914	4	34	10	4,902	123	4,528	251	2.5	92.4	5.1	52,875,101	2,204,024	46,654,960	4,016,117	4.2	88.2	7.6
Texas [2]	1919	.....	35	4	8,224	.....	8,168	56	.....	99.3	0.7	241,757,313	.....	240,830,554	926,759	.....	99.6	0.4

[1] Includes the group "Individuals." [2] Figures for 1914 not available. [3] Includes the group "All others."

TABLE 9.—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	6,703	2,499	2,142	238,906	128,468	90,268	100.0	100.0	100.0
Owned	3,127	2,130	2,138	187,521	113,837	89,955	78.5	88.6	99.7
Steam [1]	2,460	1,818	2,039	144,743	94,052	84,085	60.6	73.2	93.2
Engines	2,256	(2)	(2)	95,020	(2)	(2)	39.8	(2)	(2)
Turbines	204			49,723			20.8		
Internal-combustion engines	647	300	99	42,647	18,298	5,870	17.9	14.2	6.5
Water wheels, turbines, and motors	20	12	.....	131	1,487	.....	(3)	1.2	.....
Rented	3,576	369	4	51,385	14,631	313	21.5	11.4	0.3
Electric	3,576	369	4	51,385	14,353	28	21.5	11.2	(3)
Other	.....	.....	.....	.....	278	285	.....	0.2	.....
Electric	6,665	1,464	511	108,625	38,614	8,808	100.0	100.0	100.0
Rented	3,576	369	4	51,385	14,353	28	47.3	37.2	0.3
Generated by establishments reporting	3,089	1,095	507	57,240	24,261	8,780	52.7	62.8	99.7

[1] Figures for horsepower include for 1909 the amount reported under the head of "Other" owned power.
[2] Figures not shown separately in 1914 and 1909.
[3] Less than one-tenth of 1 per cent.

TABLE 10.—FUEL CONSUMED, BY STATES: 1919 AND 1914.

STATE.	Census year.	COAL. Anthracite (tons, 2,240 pounds).	COAL. Bituminous (tons, 2,000 pounds).	Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
United States	1919	1,105,503	3,619,534	319,563	23,649,032	67,489	26,919,052
	1914	1,367,429	2,045,485	157,621	7,455,918	(1)	10,993,746
California	1919	.....	.....	.....	3,113,980	305	3,378,968
	1914	.....	.....	22,030	2,471,640	(1)	896,940
Illinois	1919	.....	533,215	3,192	809,885	11	.....
	1914	890	290,899	3,630	259,939	(1)	419,966
Kansas	1919	.....	58,352	.....	1,555,484	.....	3,102,277
	1914	.....	2,330	66	436,949	(1)	1,398,469
Louisiana [2]	1919	.....	.....	58,440	278,346	.....	1,910,816
New Jersey	1919	632,960	174,163	127,258	3,680,753	7,275	17,198
	1914	953,106	69,587	36,701	78,641	(1)	267,781
Ohio	1919	39,198	418,777	1,969	52,248	31	137,170
	1914	.....	244,739	3,433	15,989	(1)	188,311
Oklahoma	1919	.....	91,798	482	2,632,184	573	11,847,807
	1914	.....	2,762	.....	143,282	(1)	2,976,649
Pennsylvania	1919	254,896	711,580	32,008	1,662,660	344	2,602,740
	1914	302,994	587,025	23,696	83,561	(1)	3,484,065
Texas	1919	.....	.....	14,203	6,203,637	1,902	954,618
	1914	.....	11,632	10,701	2,437,135	(1)	.....
All other states	1919	178,449	1,631,649	82,011	3,659,855	57,048	2,967,458
	1914	110,439	836,511	57,364	1,528,782	(1)	1,361,565

[1] Included in figures for fuel oils.

[2] Included with "All other states" in 1914.

SPECIAL STATISTICS.

Materials.—Table 11 presents detailed statistics of materials for 1919 in comparison with 1914, 1909, and 1904; and Table 12 gives the statistics for crude petroleum consumption, by fields, for 1919 and 1914.

Table 13 assembles the statistics for the marketed production of crude petroleum and the consumption by the refineries in 1919 and 1914, distributed by fields.

Products.—Table 14 gives, with as much detail as the returns permit, the statistics for products, quantities, and values for the four census years. The aggregate value of all products of the refineries in 1919 was an increase of 312 per cent over the total for 1914. In addition to the gasoline product of the refineries, there was a large production of casing-head gasoline, the output as reported by the Geological Survey for 1919 being 340,647,000 gallons, valued at $63,608,900, as compared with 42,652,632 gallons in 1914, valued at $3,105,900. The annual growth in casing-head gasoline has been heavy since it was first reported in 1911, 426,000 gallons.

Equipment.—Table 15 presents the statistics for the equipment of the refineries in stills, agitators, chilling houses, filter houses, and presses, and also storage tanks, for 1919 and 1914.

Distribution of establishments.—Table 16 shows the distribution of the establishments, by states, grouped by geographic divisions, and also the number of establishments reporting the several classes of products.

TABLE 11.—DETAILED STATISTICS OF QUANTITY AND COST OF MATERIALS: 1919, 1914, 1909, AND 1904.

	1919	1914	1909	1904
Total cost	$1,247,908,355	$325,264,509	$199,273,402	$139,387,213
Crude petroleum used:				
Barrels (42 gallons)	365,271,803	191,262,724	120,775,439	66,982,862
Cost	$867,646,475	$249,727,856	$152,307,040	$107,487,091
Average unit cost, barrel	$2.38	$1.31	$1.26	$1.60
Distillates purchased and rerun:				
Barrels	43,074,982	9,455,300	(1)	(1)
Cost	$151,824,598	$24,395,541		
Casing-head gasoline, purchased:				
Barrels	6,952,215	(1)	(1)	(1)
Cost	$59,857,628			
Casing-head gas (wet natural gas):				
Thousand cubic feet	16,671,322	(1)	(1)	(1)
Cost	$1,256,834			

	1919	1914	1909	1904
Sulphur:				
Tons (2,000 pounds)	5,241			
Cost	$136,828			
Pyrites:		$206,053		
Tons	26,275			
Cost	$224,700			
Sulphuric acid (purchased):[2]			$4,003,198	$2,304,635
Tons	503,920	290,455		
Cost	$10,327,060	$3,519,552		
Caustic soda:				
Pounds	45,270,896	22,216,000		
Cost	$1,736,670	$361,421		
Other chemicals, cost	$603,660	(1)	(1)	(1)
Fuller's earth, cost	$2,375,729	(1)	(1)	(1)
Containers, and materials therefor:				
Wooden, cost	$34,801,732	$12,944,471	$8,937,421	$17,870,348
Metal, cost	$26,193,075	$7,292,207	$8,037,467	
Fuel and rent of power, cost	$53,505,109	$13,567,284	$8,376,383	$5,139,934
All other materials, cost	$37,358,257	$13,250,124	$17,611,893	$6,585,205

[1] Figures not available.

[2] In addition, there was made and consumed in 1919, 18,140 tons, and in 1914, 38,440 tons.

TABLE 12.—CRUDE PETROLEUM, CONSUMPTION, BY FIELDS: 1919 AND 1914.

FIELD.	1919			1914			AVERAGE COST PER BARREL.	
	Quantity.		Cost.	Quantity.		Cost.		
	Barrels (42 gallons).	Per cent of total.		Barrels (42 gallons).	Per cent of total.		1919	1914
Total	365,271,803	100.0	$869,745,304	191,262,724	100.0	$249,727,856	$2.38	$1.31
Mid-Continent	181,039,564	49.6	496,405,420	92,462,637	48.3	121,188,411	2.74	1.31
California	74,200,751	20.3	109,655,774	41,901,651	21.9	30,157,013	1.48	0.72
Appalachian (Pennsylvania grade)	29,828,701	8.2	126,127,716	21,196,964	11.1	50,019,939	4.23	2.36
Illinois	10,888,115	2.9	33,127,519	17,672,279	9.2	30,137,986	3.04	1.71
Gulf	16,396,712	4.5	28,906,551	5,787,313	3.0	6,080,907	1.76	1.05
Lima-Indiana	1,737,865	0.5	5,031,639	2,564,742	1.3	4,286,588	2.90	1.67
Colorado and Wyoming	12,772,958	3.5	21,530,593	3,441,893	1.8	2,088,700	1.69	0.61
Other United States	63,626	.....	135,452	.....	.....	.....	2.13	.....
Foreign:								
Mexican	38,295,267	10.5	48,738,033	6,235,245	3.3	5,768,282	1.27	0.93
Other	48,244	.....	86,607	.....	.....	.....	.....	.....

TABLE 13.—CRUDE PETROLEUM, DOMESTIC PRODUCTION AND REFINERY CONSUMPTION BY FIELDS: 1919 AND 1914.

FIELD.	Census year.	Marketed production (barrels).	Consumption by refineries (barrels).	Per cent consumption is of production.
United States	1919	377,719,000	326,928,292	86.0
	1914	265,762,535	185,027,479	69.6
Mid-Continent	1919	196,891,000	181,039,564	91.9
	1914	97,995,400	92,462,637	94.4
California	1919	101,564,000	74,200,751	73.1
	1914	99,775,327	41,901,651	42.0
Pennsylvania grade (Appalachian)	1919	29,232,000	29,828,701	(1)
	1914	24,101,048	21,196,964	88.0
Illinois	1919	12,436,000	10,888,115	87.6
	1914	21,919,749	17,672,279	80.6
Gulf	1919	20,568,000	16,396,712	79.7
	1914	13,117,528	5,787,313	44.1
Lima-Indiana	1919	3,444,000	1,737,865	50.5
	1914	5,062,543	2,564,742	50.7
Other fields—Colorado, Wyoming, etc.	1919	13,584,000	12,836,584	94.8
	1914	3,790,940	3,441,893	90.8

[1] Consumption in excess of production.

TABLE 14.—DETAILED STATISTICS OF QUANTITY AND VALUE OF PRODUCTS: 1919, 1914, 1909, AND 1904.

	1919	1914	1909	1904
Total value	$1,632,532,766	$396,361,406	$236,997,659	$175,005,320
Naphthas and lighter products:				
Gasoline—				
Gallons	3,648,590,635	1,195,422,100		
Value	$679,867,064	$106,140,170		
Naphtha—				
Gallons	392,282,320			
Value	$65,077,854		540,327,800	290,546,450
Benzine—			$39,771,959	$21,314,837
Gallons	67,491,006	5,292,522		
Value	$10,015,853	$15,779,137		
Other—				
Gallons	97,262,837			
Value	$11,045,284			
Illuminating oils:				
Gallons	2,305,489,735	1,935,274,800	1,674,789,900	1,356,754,700
Value	$235,663,055	$96,806,452	$94,547,010	$91,366,434
Fuel oils:				
Gallons	7,767,900,556	3,704,092,050	1,701,728,850	360,471,400
Value	$318,124,339	$84,017,916	$36,462,883	$9,205,391
Distillates—				
Gallons	646,052,618	457,491,650	(1)	(1)
Value	$36,548,107	$15,999,342	(1)	(1)
Gas oils—				
Gallons	1,393,623,486	755,558,400	(1)	(1)
Value	$76,383,453	$22,805,340	(1)	(1)
Residual fuel oil—				
Gallons	5,727,624,452	2,521,042,000	(1)	(1)
Value	$205,192,779	$45,213,234	(1)	(1)
Partly refined oils, sold for rerunning:				
Gallons	428,346,637	(1)	(1)	(1)
Above fuel oil	79,895,749			
Fuel oil	109,503,858			
Below fuel oil	238,747,030			
Value	$29,268,849			
Lubricating oils:				
Gallons	821,580,400	517,838,800	537,294,250	314,922,550
Value	$196,242,430	$55,812,120	$38,884,236	$23,533,091
Pale or paraffin; viscosity 100° Universal; or flash under 400° F.; closed cup—				
Gallons	124,372,754	93,422,100	161,961,500	82,220,000
Value	$28,238,302	$8,084,650	$9,473,975	$6,210,279
Red or neutral; viscosity 100° Universal or higher; or flash 400° F. or over; closed cup (not including cylinder oils)—				
Gallons	212,357,564	116,352,500	30,744,200	25,202,100
Value	$44,583,095	$12,426,023	$2,255,924	$1,942,153
Lubricating oils—Continued.				
Cylinder oils—				
Gallons	235,345,952	102,949,100	79,378,950	68,333,050
Value	$59,036,506	$13,703,772	$9,482,568	$9,332,299
All other lubricating oils, including compounded (except cylinder) oils.—				
Gallons	249,504,130	205,115,100	265,209,600	139,157,400
Value	$64,384,536	$21,597,675	$17,671,769	$6,068,360
Liquid asphaltic road oils:				
Gallons	98,036,511			
Value	$4,491,388	134,884,350	89,350,400	159,396,050
Residuum or tar:		$4,017,858	$2,215,623	$3,138,361
Gallons	29,163,394			
Value	$1,522,797			
Greases:				
Gallons	28,147,534	14,006,400	6,915,100	10,121,950
Value	$11,896,655	$3,536,491	$1,567,647	$1,394,130
Petrolatum—				
Gallons	10,230,287	6,078,050	(1)	(1)
Value	$3,750,028	$1,243,388	(1)	(1)
Lubricating greases—				
Gallons	12,599,628	4,980,150	(1)	(1)
Value	$6,043,741	$1,624,949	(1)	(1)
Axle grease—				
Gallons	5,317,619	2,948,200	(1)	(1)
Value	$2,102,886	$668,154	(1)	(1)
Paraffin wax:				
Gallons	67,976,676	57,538,800	47,341,500	39,703,400
Value	$28,348,437	$8,897,106	$9,388,812	$10,007,274
Acid oil:				
Gallons	45,600,039	(1)	(1)	(1)
Value	$992,907	(1)	(1)	(1)
Asphalt, other than liquid asphalt:				
Tons	927,151	465,157	233,328	(1)
Value	$12,500,157	$4,867,213	$2,724,752	(1)
Coke:				
Tons	798,180	213,777	(1)	(1)
Value	$3,928,345	$818,889	$507,695	$149,653
Reclaimed or separated acid sold:				
Tons	136,320	89,792	133,215	165,104
Value	$687,302	$491,380	$402,295	$400,480
Candles, value	$2,939,519	$1,402,945		
Other special products, value	$6,813,647	$8,507,993	$10,524,747	$14,475,669
All other products, value	$13,106,875	$5,265,736		

[1] Figures not available.

TABLE 15.—EQUIPMENT: 1919 AND 1914.

KIND.	1919	1914
Stills, number	6,935	3,639
Capacity (gallons)	174,295,000	(1)
Steam—		
Number	1,061	612
Capacity (gallons	27,550,000	17,892,000
Fire—		
Number	4,394	3,027
Capacity (gallons)	130,115,000	88,882,000
Pressure—		
Number	1,480	(1)
Capacity (gallons)	16,630,000	(1)
Agitators:		
Number	1,083	770
Capacity (gallons)	52,427,181	(1)
Chilling houses for paraffin:		
Number	105	76
Capacity (gallons)	4,712,000	(1)
Filter houses:		
Number	357	(1)
Capacity (gallons)	11,381,452	(1)
Hydraulic or other presses:		
Number	645	459
Capacity (gallons)	6,258,924	(1)
Storage tanks for:		
Crude petroleum—		
Number	2,183	1,014
Capacity (gallons)	1,511,889,000	580,202,000
Refined petroleum products—		
Number	11,380	6,967
Capacity (gallons)	2,152,820,000	1,042,836,000
Fuel oil—		
Number	1,822	807
Capacity (gallons)	1,069,813,000	343,132,000
Other—		
Number	5,546	4,111
Capacity (gallons)	655,346,000	646,608,000

[1] Figures not available.

TABLE 16.—ESTABLISHMENTS, DISTRIBUTED BY PRODUCTS, FOR STATES, GROUPED BY GEOGRAPHIC DIVISIONS: 1919.

	United States.	New England.	Middle Atlantic.			East North Central.			West North Central.		
		Rhode Island.	New York.	New Jersey.	Pennsylvania.	Ohio.	Indiana.	Illinois.	Minnesota.	Missouri.	Kansas.
Number of petroleum refineries	320	1	6	9	53	11	3	13	1	4	29
Naphthas and lighter products:											
Gasoline	279	.....	4	7	49	11	3	11	1	4	29
Naphtha	97	.....	1	3	21	5	.....	3	.....	1	10
Benzine	39	.....	1	2	9	1	1	3	.....	.....	1
All other	22	.....	1	3	1	1	.....	1	.....	.....	.....
Illuminating oils	241	.....	4	6	46	8	3	10	1	4	29
Fuel oils:											
Distillates	137	.....	1	3	25	4	1	3	1	1	11
Gas oils	161	.....	4	5	16	5	2	9	1	3	16
Residual fuel oil	245	1	2	5	19	6	3	10	1	4	28
Partly refined oils sold for rerunning	43	1	.....	1	17	1	.....	1	.....	.....	.....
Lubricating oils:											
Pale or paraffin	56	.....	2	3	17	7	1	3	.....	.....	4
Red or neutral	66	.....	2	4	21	4	2	3	.....	1	5
Cylinder	88	.....	4	5	36	2	1	3	1	.....	7
All other	66	.....	2	4	20	7	1	2	.....	1	4
Liquid asphaltic road oils	42	1	1	3	2	1	2	3	.....	1	5
Greases:											
Petrolatum	21	.....	1	3	16	.....	1	.....	.....	.....	.....
Lubricating greases	24	.....	1	2	2	3	1	1	1	.....	1
Axle grease	18	.....	1	1	1	2	1	1	1	.....	1

	South Atlantic.				East South Central.		West South Central.				Mountain.				Pacific.
	Delaware.	Maryland.	Virginia.	West Virginia.	Kentucky.	Tennessee.	Arkansas.	Louisiana.	Oklahoma.	Texas.	Idaho.	Wyoming.	Colorado.	Utah.	California.
Number of petroleum refineries	1	4	1	5	3	1	1	10	66	39	1	7	5	1	45
Naphthas and lighter products:															
Gasoline	.....	3	.....	5	3	1	1	8	63	34	1	6	3	1	31
Naphtha	.....	.....	.....	3	.....	.....	1	1	28	9	.....	.....	.....	.....	11
Benzine	.....	.....	.....	1	.....	.....	.....	1	8	7	.....	.....	.....	.....	4
All other	.....	1	.....	.....	.....	.....	.....	.....	2	.....	.....	1	1	.....	10
Illuminating oils	.....	2	.....	4	2	1	1	8	57	30	.....	5	3	1	16
Fuel oils:															
Distillates	.....	3	.....	2	1	.....	1	2	25	16	1	2	2	1	31
Gas oils	1	2	.....	2	.....	.....	1	5	47	16	1	2	3	1	19
Residual fuel oil	1	3	1	.....	2	1	1	9	62	36	1	6	2	1	40
Partly refined oils sold for rerunning	1	2	1	3	.....	.....	.....	.....	6	5	.....	2	.....	.....	2
Lubricating oils:															
Pale or paraffin	.....	1	.....	2	.....	.....	.....	1	4	5	.....	.....	.....	.....	6
Red or neutral	.....	2	.....	2	.....	.....	.....	2	5	5	.....	.....	2	1	5
Cylinder	.....	1	.....	5	.....	.....	1	1	11	6	.....	.....	1	.....	3
All other	.....	2	.....	1	.....	.....	.....	2	7	5	.....	.....	1	.....	7
Liquid asphaltic road oils	1	3	1	.....	.....	.....	.....	3	4	4	.....	1	.....	.....	6
Greases:															
Petrolatum	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lubricating greases	.....	1	.....	.....	.....	.....	.....	1	3	2	.....	.....	1	1	3
Axle grease	.....	1	.....	.....	.....	.....	.....	1	.....	3	.....	.....	.....	1	3

GENERAL TABLES.

Table 17 gives comparative statistics for the principal items, number of establishments, average number of wage earners, primary horsepower, wages, cost of material, and value of products for the census years 1919, 1914, and 1909.

Table 18 is a detailed statement, by states, for the census of 1919.

TABLE 17.—COMPARATIVE SUMMARY, BY STATES: 1919, 1914, AND 1909.

State.	Census year.	Number of establishments	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
United States	1919	320	58,889	238,906	$80,750	$1,247,908	$1,632,533
	1914	176	25,366	128,468	19,397	325,265	396,361
	1909	147	13,929	90,268	9,830	199,273	236,998
California	1919	45	5,132	60,307	8,179	141,877	213,292
	1914	38	1,930	22,309	1,716	38,170	55,528
	1909	29	930	5,630	801	13,898	17,878
Illinois	1919	13	2,448	5,106	3,484	54,053	64,549
	1914	9	1,072	2,607	899	12,408	16,893
Kansas	1919	29	2,221	10,950	3,065	51,336	63,786
	1914	13	890	4,423	752	7,185	8,923
	1909	18	324	1,150	186	2,817	4,077
New Jersey	1919	9	10,178	36,040	18,024	222,886	280,994
	1914	8	5,178	26,498	4,001	79,392	90,877
Ohio	1919	11	2,431	7,383	$3,246	$31,958	$43,283
	1914	7	1,519	4,920	1,025	9,924	11,169
	1909	10	1,659	4,324	1,028	8,145	10,754
Oklahoma	1919	66	4,612	24,477	5,910	127,150	150,673
	1914	23	516	3,304	432	9,591	13,014
	1909	9	75	231	54	575	1,055
Pennsylvania	1919	53	8,235	22,606	11,960	134,981	178,826
	1914	48	4,902	37,522	3,219	44,384	52,875
	1909	41	2,900	35,212	1,861	47,440	53,088
All other states	1919	94	23,632	72,037	35,882	483,667	637,130
	1914	30	9,359	26,885	7,353	124,211	147,082
	1909	40	8,041	43,721	5,900	126,398	150,145

TABLE 18.—DETAILED STATEMENT FOR THE INDUSTRY, BY STATES: 1919.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male	Capital.	EXPENSES. Salaries and wages. Officials.	EXPENSES. Salaries and wages. Clerks, etc.
United States	320	73,473	59	2,748	9,031	2,746	58,889	De 62,599	Ja 54,342	62,660	61,492	1,126	42	$1,170,278,189	$11,315,491	$15,303,533
California	45	6,530	1	400	782	215	5,132	De 5,606	Ap 4,737	5,564	5,451	113	.....	84,015,443	1,436,958	1,428,619
Illinois	13	2,932	2	84	313	85	2,448	No 2,589	Ja 2,354	2,558	2,507	51	.....	36,342,555	396,509	677,877
Kansas	29	2,654	2	150	190	91	2,221	My 2,362	Oc 2,092	2,402	2,401	.....	1	51,629,201	615,527	399,015
Louisiana	10	3,143	.....	37	231	34	2,841	De 3,356	Ja 2,062	3,356	3,342	14	.....	49,851,989	249,884	543,493
New Jersey	9	11,991	.....	458	1,070	285	10,178	Oc 11,301	Mh 9,025	10,757	10,575	153	29	203,292,144	1,816,366	1,929,267
Ohio	11	4,890	.....	70	2,044	345	2,431	Au 2,556	Ap 2,331	2,400	2,372	28	.....	46,545,550	359,868	2,441,744
Oklahoma	66	6,213	1	313	957	330	4,612	Au 4,823	Fe 4,380	4,797	4,787	2	8	152,529,830	1,629,943	2,023,780
Pennsylvania	53	10,621	34	423	1,249	680	8,235	Jy 8,512	Mh 8,017	8,023	7,860	161	2	140,154,231	1,763,412	2,331,111
Texas	39	9,767	10	252	1,017	264	8,224	De 9,280	Ja 6,724	9,204	8,963	241	.....	153,227,300	809,679	1,295,996
All other states[1]	45	14,742	19	561	1,178	417	12,567	.....	.....	13,599	13,234	363	2	252,689,946	2,237,345	2,232,631

STATE.	EXPENSES—continued. Salaries and wages—Con. Wage earners.	For contract work.	Rent and taxes. Rent of factory.	Taxes, Federal, state, county, and local.	For materials. Principal materials.	Fuel and rent of power.	Value of products.	Value added by manufacture.	POWER. Primary horsepower. Total.	Owned. Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power.[2]	Rented; electric.	Electric horsepower generated in establishments reporting.
United States	$89,749,637	$2,352,306	$125,909	$78,282,638	$1,194,403,246	$53,505,109	$1,632,532,766	$384,624,411	238,906	95,020	49,723	42,647	131	51,385	57,240
California	8,179,397	644,530	17,667	9,338,806	136,823,769	5,052,876	213,292,194	71,415,549	60,307	26,221	381	12,939	130	20,636	1,973
Illinois	3,483,872	5,583	5,260	2,786,198	50,550,881	3,502,477	64,548,642	10,495,284	5,106	3,457	228	75	.....	1,346	5,167
Kansas	3,065,412	.....	23,200	1,533,082	48,118,618	3,217,151	63,785,520	12,449,751	10,950	4,515	1,863	2,225	1	2,346	1,901
Louisiana	4,388,047	122,020	3,996	6,108,906	48,638,652	964,731	75,023,726	25,420,343	7,138	1,651	1,600	3,820	.....	67	5,702
New Jersey	18,023,734	500	700	17,898,614	214,618,316	8,268,059	280,994,553	58,108,178	36,040	12,843	14,391	8,806	.....	.....	3,868
Ohio	3,245,959	.....	330	3,819,640	29,997,014	1,961,063	43,282,801	11,324,724	7,383	4,175	1,170	155	.....	1,883	192
Oklahoma	5,909,664	27,784	22,960	1,188,857	122,435,363	4,714,359	150,673,458	23,523,736	24,477	9,328	5,524	3,523	.....	6,102	1,718
Pennsylvania	11,960,122	619,612	16,090	15,380,629	130,071,762	4,909,443	178,825,632	43,844,427	22,606	9,962	5,495	4,540	.....	2,609	8,986
Texas	11,757,668	251,928	2,045	1,711,403	184,617,478	8,260,485	241,757,313	48,879,350	27,543	2,767	10,375	2,700	.....	11,701	15,400
All other states[1]	19,735,762	680,349	33,652	18,516,503	228,531,393	12,654,465	320,348,927	79,163,069	37,356	20,101	8,696	3,864	.....	4,695	12,333

[1] All other states embrace: Arkansas, 1 establishment; Colorado, 5; Delaware, 1; Idaho, 1; Indiana, 3; Kentucky, 3; Maryland, 4; Minnesota, 1; Missouri, 4; New York, 6; Rhode Island, 1; Tennessee, 1; Utah, 1; Virginia, 1; West Virginia, 5; and Wyoming, 7.

[2] Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

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FOURTEENTH CENSUS OF THE UNITED STATES
MANUFACTURES: 1919

POWER LAUNDRIES AND DYEING AND CLEANING

Prepared under the supervision of EUGENE F. HARTLEY, Chief Statistician for Manufactures

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EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census did not cover establishments which were idle during the entire year or for which products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1919, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city, county, or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city, county, or state in which it was located. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products different from those covered by the class designation, and, on the other hand, may not represent the total product covered by this designation, because some products of this class may be made in establishments in which it is not the product of chief value.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1919 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the manufacturing industries were distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners.

The number of persons engaged in each industry, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where this date did not portray such conditions, an earlier date was requested.

In the case of employees other than wage earners the number thus reported for the representative date has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, by sex, without distinction of age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given in certain tables for each separate industry, is not totaled for all industries combined, because, in view of the variations of date, such a total is not believed to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation.

In order to determine as nearly as possible the age distribution of the average number of wage earners for an industry, the per cent distribution by age of the wage earners for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. The percentages thus obtained have been applied to the average number of wage earners for the year to determine the average numbers 16 years and over, and under 16, employed.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number of wage earners fluctuates from month to month in every industry, and in some cases to a very great extent. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month, and while representing the number according to the pay rolls to whom wages were paid on that date, no doubt represent a larger number than would be required to perform the work in any industry if all were continuously employed during the year.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a few wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital (amount actually invested).—The instructions on the schedule for securing data relating to capital were as follows:

"The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises."

These instructions were identical with those employed at the censuses of 1914 and 1909. The data compiled in respect to capital, however, at both censuses, as well as at all preceding censuses of manufactures, have been so defective as to be of little value except as indicating general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include certain Federal taxes and state, county, and local taxes. Under "Federal taxes" there are included the internal revenue tax on manufactures (tobacco, beverages, etc.), excise taxes when included in values reported for products, corporation capital stock tax, and corporation income tax, but not the income tax for individuals and partners.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of depreciation or interest, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power equipment of the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, fuel oils, gasoline and other volatile oils, and gas, and represent the quantity used during the year. As only the principal kinds of fuel are shown, comparison as to the total cost of all fuel is impracticable.

POWER LAUNDRIES.

General character of the industry.—Laundries are not classed as manufacturing establishments, but many laundries are conducted according to factory methods, and the industry has reached such proportions during recent years that it is an industrial factor. It was therefore decided to make a canvass of the industry at the census of 1909, and the canvass was continued at the censuses of 1914 and 1919. This report is confined to power laundries. Hand laundries, so called, or laundries operated without power, are not included. At the census of 1909 the industry was designated as "Steam laundries."

Comparison with earlier censuses.—The large increase in salaries and wages, 1914 to 1919, as shown in Table 1, is due chiefly to changes in industrial conditions and to higher wages. As a measure of industrial growth the number of wage earners is probably the best index, the increase from 1914 to 1919 being a little less than 1 per cent, as compared with 19.3 per cent for the period 1909–1914. In 1909 the average wage, as deduced from the statistics, was $409 per wage earner. In 1914 it had increased to $455 and in 1919 the average was $704. Labor is the chief expense factor, and in 1919 the expense for salaries and wages was equal to 48.9 per cent of the amount received for work done as compared with 50.4 per cent in 1914 and 50.6 per cent in 1909. This ratio has been fairly constant. The expense for materials is relatively small as compared with labor, and the figure for "value added by manufacture," which is the value of products less cost of materials, has no significance. In 1919 fuel and rent of power constituted 25.8 per cent of the cost of materials, and in 1914, 25.9 per cent.

Summary, by states.—Comparative statistics are presented in Table 2 for the chief factors, i. e., number of establishments, number of persons engaged in the industry, and the amount received for work done, by geographic divisions and states, together with the urban population for the census years 1919, 1914, and 1909. The industry is largely confined to cities and towns, and hence it is thought that the urban population of the country, the same being taken for places of 8,000 inhabitants or more, is a better basis for population comparison than the total population of the states, and is therefore used in this presentation. The table shows the number of places of 8,000 inhabitants or more in the respective states, and the rank of the states with respect to the several items. The states are grouped by geographic divisions so as to bring together those operating under similar industrial conditions, and this arrangement has been followed with most of the tables. Every state is represented by a sufficient number of establishments to permit of the statistics being given therefor. In 1909 the average amount received for work done per unit of urban population was $2.77. In 1914 this average was $3.60 and in 1919 it was $5.02, the increase being of course due largely to enhanced costs and values. The highest ratio of amount received for work done to unit of urban population was in the Mountain division, $13.19, followed by the Pacific division with $11.29, and the West South Central with $7.55. A number of states show decreases in number of persons employed, notably Delaware, New Hampshire, Vermont, and Pennsylvania.

Persons engaged in the industry.—The age classification of the average number of wage earners in Table 3 is an estimate obtained by the method described in the "Explanation of terms." The classification by sex for 1919 was reported separately, but for 1914 and 1909 it was obtained in the same manner as the distribution by age. Figures for states will be found in Table 12.

Wage earners, by months.—The statistics for wage earners in Table 4 are intended to show the steadiness of employment, or the reverse, in accordance with the industrial conditions existing during the several census years. For the country as a whole, females constituted 70.7 per cent of the average number of wage earners employed during the year and males 29.3 per cent. The leading states with respect to the employment of female labor, irrespective of age limitations, are Vermont with 78.4 per cent; Wyoming, 77.3 per cent; Alabama and Oklahoma each with 75.6 per cent.

Prevailing hours of labor.—The statistics presented in Table 5 show progress towards a reduction in hours of labor. In 1909 but 8.4 per cent of the wage earners were in the group of 48 hours per week or less, and 34.4 per cent were in the groups of 60 hours per week and over. In 1914 these percentages had shifted to 22.6 per cent of all wage earners for groups 48 hours per week or less and 10.8 per cent for 60 hours per week and over; and in 1919, 46.4 per cent for 48 hours per week or less and only 4.3 per cent for 60 hours per week and over.

Size of establishments, by average number of wage earners.—The group "6 to 20 wage earners" of Table 6, which classifies the establishments by size groups, has the largest number of establishments, 37 per cent of the total in 1919, 40 per cent in 1914, and 42 per cent in 1909. The distribution of the establishments by size groups based upon average number of wage earners has not varied greatly.

Size of establishments, by amount received for work done.—A classification of the establishments by income, or amount received for work done, is given in Table 7. The inflation of values on account of the World War has necessarily resulted in a shift to higher groups of establishments, which otherwise have not materially changed in status.

Character of ownership.—Table 8 shows that in most states the bulk of the business, whether measured by wage earners or by income, is under corporate ownership, though in the New England states, with the exception of Massachusetts, in the majority of the West North Central states, and in a few states in the South Atlantic, South Central and the Mountain divisions, individual and "All other" forms of ownership (the latter comprising chiefly firms) report the majority of the business.

Statistics for cities.—Table 9 gives comparative statistics for 1919 and 1914 for cities of 10,000 inhabitants or more, census of 1920, reporting three or more establishments.

Number and horsepower of types of prime movers.—Table 10 gives the total horsepower reported for the industry in 1919, as compared with 1914. This shows an increase of 12.5 per cent due almost entirely to purchased electric power, the rating of owned primary movers increasing but 444 horsepower, while the increase in rented power was 21,468 horsepower, of which 19,232 horsepower was electric. The percentage ratio of total electric power (which includes that owned as well as that purchased) to total primary power was 38.3 in 1919 as compared with 25.2 in 1914 and 19.4 in 1909.

Fuel consumed.—Table 11 shows the consumption of fuel, by kinds, for 1919, 1914, and 1909, and by states for 1919 and 1914. The figures for gas include both manufactured and natural gas. In certain states, notably Ohio, Kansas, West Virginia, Kentucky, Arkansas, Louisiana, Oklahoma and Texas it is chiefly or entirely natural gas.

Table 12 presents for 1919 the statistics in detail for all states, grouped by geographic divisions.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, AND 1909.

	1919	1914	1909	PER CENT OF INCREASE.[1]	
				1914-1919	1909-1914
Number of establishments	5,078	6,097	5,186	−6.9	17.6
Persons engaged	152,569	149,100	124,214	2.3	20.0
Proprietors and firm members	5,514	6,397	5,560	−13.8	15.1
Salaried employees	15,176	12,062	9,170	25.8	31.5
Wage earners (average number)	131,879	130,641	109,484	0.9	19.3
Primary horsepower	196,793	174,881	123,477	12.5	41.6
Capital	$153,805,268	$98,055,001	$68,935,226	56.9	42.2
Salaries and wages	115,597,022	71,764,059	53,007,747	61.1	35.4
Salaries	22,698,185	12,292,815	8,180,769	84.6	50.3
Wages	92,898,837	59,471,244	44,826,978	56.2	32.7
Paid for contract work	1,554,764	374,448	239,090	315.2	56.6
Rent and taxes	6,730,569	4,104,933	2,776,871	64.0	47.8
Cost of materials	53,502,177	26,919,200	17,696,360	98.8	52.1
Amount received for work done	[2] 236,382,369	142,503,253	104,680,080	65.9	36.1

[1] A minus sign (−) denotes decrease.
[2] In addition, laundry work to the amount of $319,268 was reported by manufacturing establishments—manufacturers of clothing shirts, ice, etc.

TABLE 2.—COMPARATIVE STATISTICS; URBAN POPULATION AND LAUNDRIES, BY DIVISIONS AND STATES, WITH STATE RANK: 1919, 1914, AND 1909.

DIVISION AND STATE.	Census year.	POPULATION.			POWER LAUNDRIES.							
		Places of 8,000 or more, number.	Urban.[1]		Establishments.		Persons engaged in the industry.			Amount received for work done.		
			Number.	State rank.	Number.	State rank.	Number.	Per cent of increase.[2]	State rank.	Amount.	Per cent of increase.[2]	State rank.
UNITED STATES	1919	950	47,119,807	.....	5,678	.....	152,569	2.3	.....	$236,382,369	65.9	.....
	1914	775	39,534,265	.....	6,097	.....	149,100	20.0	.....	142,503,253	36.1	.....
	1909	779	37,847,807	.....	5,186	.....	124,214	.....	.....	104,680,086	.....	.....
NEW ENGLAND	1919	154	5,447,404	.....	708	.....	13,782	−7.2	.....	21,462,585	52.6	.....
	1914	134	4,792,762	.....	791	.....	14,849	29.0	.....	14,060,578	45.1	.....
	1909	135	4,483,645	.....	599	.....	11,508	.....	.....	9,688,878	.....	.....
Maine	1919	13	252,109	33	81	19	1,144	4.3	34	1,514,854	53.2	35
	1914	11	214,830	32	92	20	1,097	14.7	33	939,021	34.3	35
	1909	11	201,848	30	78	20	956	.....	31	736,367	.....	35
New Hampshire	1919	10	214,104	34	61	24	708	−18.1	41	968,856	33.0	40
	1914	9	191,829	34	74	23	864	22.4	38	728,733	40.5	38
	1909	9	183,486	33	61	24	706	.....	37	518,660	.....	38
Vermont	1919	6	75,095	40	28	34	364	−17.5	46	399,668	10.4	48
	1914	5	63,663	42	41	35	441	28.9	44	362,041	48.5	45
	1909	5	61,711	42	32	35	342	.....	44	243,753	.....	45
Massachusetts	1919	75	3,247,063	5	340	5	7,960	−10.2	6	12,864,279	48.5	5
	1914	70	2,935,269	4	391	5	8,861	33.1	5	8,661,830	50.5	5
	1909	71	2,759,958	4	280	5	6,655	.....	6	5,754,572	.....	5
Rhode Island	1919	13	532,408	20	70	21	1,272	−9.3	31	2,154,652	70.9	39
	1914	12	489,037	18	66	27	1,402	15.8	28	1,260,942	23.7	30
	1909	12	466,863	18	53	27	1,211	.....	28	1,019,404	.....	24
Connecticut	1919	37	1,126,625	12	128	16	2,334	6.9	22	3,560,276	68.9	20
	1914	27	898,134	11	127	17	2,184	33.3	17	2,108,011	48.9	19
	1909	27	809,779	11	95	18	1,638	.....	21	1,416,122	.....	29
MIDDLE ATLANTIC	1919	220	15,151,031	.....	1,017	.....	27,774	−11.4	.....	46,070,130	63.8	.....
	1914	176	13,293,334	.....	1,152	.....	31,344	10.7	.....	28,120,707	24.7	.....
	1909	176	12,347,253	.....	1,005	.....	28,312	.....	.....	22,557,774	.....	.....
New York	1919	65	8,230,190	1	535	2	13,757	−11.2	1	24,627,441	72.2	1
	1914	56	7,360,302	1	614	1	15,489	10.1	1	14,304,964	25.0	1
	1909	56	6,854,327	1	508	1	14,063	.....	1	11,446,663	.....	1
New Jersey	1919	48	2,172,199	6	131	14	4,061	0.9	11	7,091,621	97.5	11
	1914	37	1,833,872	6	142	16	4,024	20.7	11	3,590,739	29.2	13
	1909	37	1,692,610	6	112	16	3,334	.....	12	2,779,277	.....	12
Pennsylvania	1919	107	4,748,642	2	351	4	9,956	−15.8	4	14,351,068	40.4	4
	1914	83	4,099,160	2	396	4	11,831	8.4	4	10,225,004	22.7	4
	1909	83	3,800,316	2	385	3	10,915	.....	3	8,331,834	.....	4
EAST NORTH CENTRAL	1919	223	11,600,805	.....	1,247	.....	33,108	−1.1	.....	51,789,615	62.7	.....
	1914	186	9,390,546	.....	1,315	.....	33,493	21.1	.....	31,834,504	38.5	.....
	1909	186	8,179,660	.....	1,230	.....	27,657	.....	.....	22,988,922	.....	.....
Ohio	1919	64	3,326,337	4	277	6	8,316	−1.4	5	12,528,314	60.2	6
	1914	52	2,676,454	5	296	6	8,434	24.5	6	7,822,491	45.2	6
	1909	52	2,290,806	5	253	6	6,773	.....	5	5,388,954	.....	6
Indiana	1919	39	1,273,203	10	158	11	4,328	0.5	10	5,588,748	51.2	13
	1914	35	1,030,128	10	174	13	4,307	30.2	10	3,697,112	51.0	12
	1909	35	894,434	10	163	11	3,308	.....	13	2,448,355	.....	13
Illinois	1919	55	3,944,757	3	470	3	12,189	−2.3	3	20,606,032	60.4	3
	1914	43	3,376,082	3	461	3	12,470	14.2	2	12,846,432	27.8	3
	1909	43	3,064,154	3	448	2	10,916	.....	2	10,049,445	.....	2
Michigan	1919	40	2,050,776	7	197	7	5,746	1.9	9	9,416,373	84.1	8
	1914	33	1,424,852	8	234	7	5,637	30.2	8	5,115,286	56.8	9
	1909	33	1,130,305	9	219	7	4,328	.....	8	3,261,841	.....	9
Wisconsin	1919	25	1,005,732	13	145	12	2,529	−4.4	17	3,650,118	55.1	16
	1914	23	883,030	12	150	14	2,645	13.4	16	2,353,183	27.9	15
	1909	23	799,961	12	147	13	2,332	.....	16	1,840,327	.....	16
WEST NORTH CENTRAL	1919	90	3,788,495	.....	713	.....	18,133	1.1	.....	27,396,421	55.8	.....
	1914	73	3,250,839	.....	821	.....	17,939	12.6	.....	17,582,715	30.5	.....
	1909	74	3,021,777	.....	786	.....	15,934	.....	.....	13,478,046	.....	.....
Minnesota	1919	16	876,532	14	156	12	3,818	−5.1	13	6,087,088	48.4	12
	1914	12	751,159	14	188	9	4,024	20.6	11	4,100,464	43.6	11
	1909	12	694,378	13	158	12	3,338	.....	11	2,855,738	.....	11
Iowa	1919	21	636,695	17	129	15	2,466	−14.5	20	3,904,658	35.5	14
	1914	19	539,425	17	176	12	2,883	16.8	15	2,882,005	39.7	14
	1909	19	487,596	17	181	8	2,468	.....	14	2,063,451	.....	14
Missouri	1919	17	1,398,187	9	165	10	6,839	1.2	7	9,438,493	49.4	7
	1914	15	1,273,276	9	177	11	6,757	10.5	7	6,316,206	28.8	7
	1909	15	1,202,834	8	171	10	6,113	.....	7	4,904,249	.....	7
North Dakota	1919	3	47,124	44	29	33	488	2.1	44	844,433	42.4	43
	1914	2	30,899	46	30	39	478	−5.0	42	592,843	8.1	39
	1909	2	27,011	45	34	34	503	.....	40	548,175	.....	37

[1] Population of incorporated places (municipalities) for 1919 as of July 1, 1920; for 1914, July 1, 1914; and for 1909 as of July 1, 1910.
[2] A minus sign (−) denotes decrease.

TABLE 2.—COMPARATIVE STATISTICS: URBAN POPULATION AND LAUNDRIES, BY DIVISIONS AND STATES, WITH STATE RANK: 1919, 1914, AND 1909—Continued.

DIVISION AND STATE.	Census year.	POPULATION.			POWER LAUNDRIES.							
		Places of 8,000 or more, number.	Urban.[1]		Establishments.		Persons engaged in the industry.			Amount received for work done.		
			Number.	State rank.	Number.	State rank.	Number.	Per cent of increase.[2]	State rank.	Amount.	Per cent of increase.[2]	State rank.
WEST NORTH CENTRAL—Contd.												
South Dakota	1919	5	67,031	42	29	33	542	19.4	42	$940,179	96.9	42
	1914	2	31,415	45	26	42	454	1.6	43	477,474	12.9	42
	1909	3	33,507	43	28	37	447	.....	41	423,092	.....	41
Nebraska	1919	8	313,624	29	69	22	1,710	14.8	28	2,823,234	86.0	25
	1914	7	255,396	29	74	23	1,490	13.4	27	1,517,924	26.8	24
	1909	7	232,831	29	76	21	1,314	.....	25	1,197,374	.....	23
Kansas	1919	20	449,302	24	136	13	2,270	22.5	23	3,358,336	98.0	21
	1914	16	369,269	25	150	14	1,853	5.8	24	1,695,799	14.1	20
	1909	16	343,620	24	138	14	1,751	.....	18	1,485,967	.....	19
SOUTH ATLANTIC	1919	81	3,590,017	.....	351	.....	13,746	20.0	.....	18,211,883	104.1	.....
	1914	61	2,771,797	.....	369	.....	11,457	31.4	.....	8,925,073	52.0	.....
	1909	61	2,471,330	.....	310	.....	8,719	.....	.....	5,871,732	.....	.....
Delaware	1919	1	111,248	39	6	41	300	−18.7	48	444,095	82.8	46
	1914	1	96,501	41	12	48	369	30.4	46	242,897	29.9	47
	1909	1	87,641	41	15	45	283	.....	46	187,038	.....	47
Maryland	1919	5	820,430	15	46	28	1,888	−1.7	25	2,640,686	89.7	26
	1914	5	663,792	15	54	29	1,921	28.3	23	1,391,902	40.1	26
	1909	5	617,083	15	41	32	1,497	.....	24	993,766	.....	27
District of Columbia	1919	1	443,056	25	21	38	1,805	33.6	27	2,559,210	150.1	27
	1914	1	377,236	24	18	44	1,351	23.3	30	1,023,475	28.6	33
	1909	1	332,175	25	17	44	1,096	.....	30	795,999	.....	31
Virginia	1919	12	565,451	18	63	23	2,674	36.1	15	3,009,759	107.0	23
	1914	10	440,485	22	71	25	1,965	29.0	22	1,453,912	44.9	25
	1909	10	383,314	22	57	26	1,523	.....	23	1,003,191	.....	26
West Virginia	1919	11	273,834	31	44	29	1,057	13.8	36	1,775,349	125.9	34
	1914	10	201,336	33	44	32	929	17.2	36	785,782	35.0	37
	1909	10	173,940	34	43	29	793	.....	35	581,865	.....	35
North Carolina	1919	18	352,770	27	56	26	1,631	22.2	30	2,252,100	119.4	29
	1914	12	230,002	30	59	28	1,335	44.5	31	1,026,358	83.3	32
	1909	12	200,481	31	43	29	924	.....	32	559,949	.....	36
South Carolina	1919	9	201,740	34	28	34	723	23.0	38	833,801	97.5	44
	1914	6	154,349	36	23	43	588	33.6	40	422,212	56.9	44
	1909	6	136,680	36	24	41	440	.....	42	269,112	.....	44
Georgia	1919	15	553,656	19	52	26	2,522	25.6	18	3,216,832	97.1	22
	1914	11	441,324	21	43	33	2,008	31.7	20	1,632,221	62.1	23
	1909	11	391,986	21	42	31	1,525	.....	22	1,006,724	.....	25
Florida	1919	9	267,832	32	35	32	1,146	15.6	33	1,480,051	56.4	30
	1914	5	166,772	35	45	31	991	55.3	35	946,314	99.6	34
	1909	5	148,030	35	28	37	638	.....	38	474,088	.....	39
EAST SOUTH CENTRAL	1919	42	1,489,738	.....	182	.....	8,028	10.9	.....	9,687,736	65.2	.....
	1914	35	1,277,101	.....	210	.....	7,241	20.3	.....	5,863,673	39.5	.....
	1909	35	1,195,182	.....	204	.....	6,018	.....	.....	4,201,927	.....	.....
Kentucky	1919	13	482,428	22	63	23	2,591	24.2	16	2,905,346	74.4	24
	1914	11	443,733	20	75	22	2,086	19.3	18	1,665,979	37.8	22
	1909	11	432,851	19	73	22	1,749	.....	19	1,208,811	.....	21
Tennessee	1919	8	467,168	23	59	25	3,041	4.9	14	3,639,602	58.5	17
	1914	7	389,902	23	67	26	2,898	21.2	14	2,296,797	39.8	16
	1909	7	356,516	23	63	23	2,392	.....	15	1,643,407	.....	17
Alabama	1919	11	394,859	25	37	31	1,684	7.3	29	2,196,118	61.4	30
	1914	8	315,304	27	41	35	1,569	23.2	26	1,360,688	49.7	28
	1909	8	281,037	27	38	33	1,274	.....	27	909,130	.....	29
Mississippi	1919	10	145,283	37	23	37	712	3.5	39	946,670	75.2	41
	1914	9	128,162	39	27	41	688	14.1	39	540,209	22.6	41
	1909	9	124,778	38	30	36	603	.....	39	440,579	.....	40
WEST SOUTH CENTRAL	1919	64	2,193,317	.....	343	.....	11,558	24.7	.....	16,553,772	79.6	.....
	1914	49	1,639,755	.....	367	.....	9,266	36.6	.....	9,218,167	54.8	.....
	1909	49	1,406,065	.....	290	.....	6,782	.....	.....	5,954,350	.....	.....
Arkansas	1919	8	167,482	36	49	27	1,045	3.4	37	1,393,024	66.5	37
	1914	6	133,140	38	53	30	1,011	18.9	34	836,457	22.3	36
	1909	6	120,233	39	45	28	850	.....	33	684,036	.....	34
Louisiana	1919	7	508,541	21	24	36	1,837	34.2	26	2,349,774	97.4	28
	1914	6	450,264	19	28	40	1,369	22.6	29	1,190,148	39.7	31
	1909	6	416,593	20	25	40	1,117	.....	29	852,021	.....	30
Oklahoma	1919	15	351,774	28	99	17	2,355	44.3	21	3,561,059	113.3	19
	1914	10	216,613	31	101	18	1,632	25.4	25	1,669,721	39.4	21
	1909	10	188,530	32	93	19	1,301	.....	26	1,197,978	.....	22
Texas	1919	34	1,165,520	11	171	9	6,321	20.3	8	9,249,915	67.5	9
	1914	27	839,738	13	185	10	5,254	49.5	9	5,521,841	71.5	8
	1909	27	680,709	14	127	15	3,514	.....	9	3,220,315	.....	10

[1] Population of incorporated places (municipalities) for 1919 as of July 1, 1920; for 1914, July 1, 1914; and for 1909 as of July 1, 1910.
[2] A minus sign (−) denotes decrease.

TABLE 2.—COMPARATIVE STATISTICS: URBAN POPULATION AND LAUNDRIES, BY DIVISIONS AND STATES, WITH STATE RANK: 1919, 1914 AND 1909—Continued.

DIVISION AND STATE.	Census year.	POPULATION. Places of 8,000 or more, number.	Urban.[1] Number.	Urban.[1] State rank.	POWER LAUNDRIES. Establishments. Number.	Establishments. State rank.	Persons engaged in the industry. Number.	Persons engaged in the industry. Per cent of increase.[2]	Persons engaged in the industry. State rank.	Amount received for work done. Amount.	Amount received for work done. Per cent of increase.[2]	Amount received for work done. State rank.
MOUNTAIN	1919	31	878,858	.....	281	.....	6,932	21.2	.....	$11,330,923	32.5	.....
	1914	25	716,090	.....	270	.....	5,721	18.7	.....	6,550,610	70.6	.....
	1909	26	656,736	.....	211	.....	4,819	.....	.....	5,011,855	.....	.....
Montana	1919	6	118,183	38	49	27	1,092	18.7	35	1,894,356	49.6	33
	1914	6	100,603	40	42	34	920	27.2	37	1,206,552	35.4	29
	1909	6	99,105	40	26	39	723	.....	36	935,260	.....	28
Idaho	1919	4	53,569	43	40	30	652	27.8	42	1,179,846	99.0	38
	1914	2	32,402	44	36	37	510	24.4	41	592,749	50.4	40
	1909	2	26,816	46	21	41	410	.....	43	394,226	.....	42
Wyoming	1919	3	35,062	45	23	37	442	94.3	45	763,953	220.9	45
	1914	2	21,180	47	18	44	212	4.4	48	238,048	9.8	48
	1909	3	28,114	44	14	46	203	.....	47	216,847	.....	46
Colorado	1919	8	382,528	26	92	18	2,470	18.8	19	3,759,849	73.8	15
	1914	7	345,151	26	94	19	2,079	0.1	19	2,163,263	9.2	17
	1909	7	325,439	26	99	17	2,076	.....	17	1,980,693	.....	15
New Mexico	1919	1	15,370	46	16	39	326	19.0	47	432,279	54.2	47
	1914	1	12,813	48	15	47	274	63.1	47	280,373	79.2	46
	1909	1	11,120	48	8	48	168	.....	48	156,419	.....	49
Arizona	1919	4	69,714	41	21	38	598	57.8	43	987,438	131.8	39
	1914	3	44,804	43	17	46	379	22.7	45	425,999	15.4	43
	1909	3	26,763	47	13	47	309	.....	45	369,282	.....	43
Utah	1919	4	172,357	35	27	35	1,213	1.3	32	1,973,166	44.3	32
	1914	3	141,701	37	36	37	1,197	47.6	32	1,367,433	72.2	27
	1909	3	128,321	37	22	43	811	.....	34	794,091	.....	32
Nevada	1919	1	12,075	47	13	40	169	12.7	49	340,036	57.3	49
	1914	1	11,364	49	12	48	150	26.1	49	216,193	31.0	49
	1909	1	11,001	49	5	49	119	.....	49	165,037	.....	49
PACIFIC	1919	45	3,000,142	.....	836	.....	19,508	9.7	.....	33,879,304	66.5	.....
	1914	36	2,402,041	.....	802	.....	17,790	23.0	.....	20,347,226	36.3	.....
	1909	37	2,086,159	.....	551	.....	14,465	.....	.....	14,926,602	.....	.....
Washington	1919	11	656,681	16	177	8	4,032	7.7	12	7,336,715	72.6	10
	1914	10	584,323	16	192	8	3,744	0.3	13	4,251,620	11.4	10
	1909	10	516,708	16	172	9	3,731	.....	10	3,814,825	.....	8
Oregon	1919	4	303,248	30	73	20	2,253	14.4	24	3,620,083	69.1	18
	1914	4	265,205	28	78	21	1,969	17.6	21	2,146,868	36.7	18
	1909	5	252,015	28	58	25	1,674	.....	20	1,569,082	.....	18
California	1919	30	2,040,213	8	586	1	13,223	9.5	2	22,912,606	64.3	2
	1914	22	1,552,513	7	532	2	12,077	33.3	3	13,948,738	46.2	2
	1909	22	1,287,436	7	321	4	9,060	.....	4	9,541,705	.....	3

[1] Population of incorporated places (municipalities) for 1919 as of July 1, 1920; for 1914, July 1, 1914; and for 1909 as of July 1, 1910.
[2] A minus sign (—) denotes decrease.

TABLE 3.—PERSONS ENGAGED IN THE INDUSTRY: 1919, 1914, AND 1909.

CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL. Male.	PER CENT OF TOTAL. Female.
All classes	1919	152,569	53,150	99,419	34.8	65.2
	1914	149,100	54,373	94,727	36.5	63.5
	1909	124,214	42,382	81,832	34.1	65.9
Proprietors and officials	1919	10,467	9,688	779	92.6	7.4
	1914	10,577	9,869	708	93.3	6.7
	1909	8,579	8,065	514	94.0	6.0
Proprietors and firm members	1919	5,514	5,100	414	92.5	7.5
	1914	6,397	5,916	481	92.5	7.5
	1909	5,560	5,212	348	93.7	6.3
Salaried officers of corporations	1919	2,071	1,940	131	93.7	6.3
	1914	1,666	1,547	119	92.9	7.1
	1909	1,069	1,016	53	95.0	5.0
Superintendents and managers	1919	2,882	2,648	234	91.9	8.1
	1914	2,514	2,406	108	95.7	4.3
	1909	1,950	1,837	113	94.2	5.8
Clerks and other subordinate salaried employees	1919	10,223	4,809	5,414	47.0	53.0
	1914	7,882	3,604	4,278	45.7	54.3
	1909	6,151	2,837	3,314	46.1	53.9
Wage earners (average number)	1919	131,879	38,653	93,226	29.3	70.7
	1914	130,641	40,900	89,741	31.3	68.7
	1909	109,484	31,480	78,004	28.8	71.2
16 years of age and over	1919	131,219	38,393	92,826	29.3	70.7
	1914	130,053	40,747	89,306	31.3	68.7
	1909	108,543	31,214	77,329	28.8	71.2
Under 16 years of age	1919	660	260	400	39.4	60.6
	1914	588	153	435	26.0	74.0
	1909	941	266	675	28.4	71.6

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR STATES: 1919.

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

DIVISION AND 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	131,879	128,821	*128,029*	129,305	129,569	130,449	132,032	**134,919**	134,747	133,503	133,041	133,380	**134,153**	95.5
Males	38,653	*37,317*	37,480	37,845	38,055	38,205	38,585	39,161	39,245	39,240	39,275	39,569	**39,859**	93.6
Females	93,226	91,504	*91,149*	91,460	91,514	92,244	93,447	**95,758**	95,502	94,263	93,766	93,811	**94,294**	95.2
1914	130,641	128,479	*127,847*	128,525	129,716	131,393	133,865	**134,969**	134,078	132,512	129,992	128,320	**128,004**	94.7
1909	109,484	*103,746*	103,937	104,970	106,422	108,149	111,313	114,211	**114,539**	113,738	111,500	110,479	**110,805**	90.6
NEW ENGLAND:														
Maine	993	*814*	833	934	914	970	1,025	1,154	**1,199**	1,094	1,012	975	**992**	67.9
New Hampshire	616	*566*	577	578	581	593	638	683	**688**	668	633	596	**591**	82.3
Vermont	324	*302*	308	308	313	317	328	357	**360**	338	321	318	**318**	83.9
Massachusetts	6,821	*6,650*	6,660	6,738	6,781	6,851	6,925	**6,951**	6,903	6,848	6,833	6,869	**6,843**	95.7
Rhode Island	1,035	*980*	991	994	998	1,029	1,053	**1,078**	1,057	1,058	1,059	1,063	**1,060**	90.9
Connecticut	2,024	*1,946*	1,956	1,950	1,962	2,010	2,052	2,084	2,069	**2,092**	2,074	2,051	**2,042**	93.1
MIDDLE ATLANTIC:														
New York	11,998	11,724	*11,671*	11,772	11,801	11,952	12,092	12,298	**12,333**	12,114	11,750	12,276	**12,193**	94.6
New Jersey	3,581	3,456	*3,434*	3,478	3,528	3,526	3,589	3,769	**3,783**	3,701	3,595	3,543	**3,570**	90.8
Pennsylvania	8,584	*8,497*	8,506	8,521	8,528	8,575	8,609	8,637	**8,575**	8,524	8,677	**8,718**	**8,641**	97.5
EAST NORTH CENTRAL:														
Ohio	7,040	6,956	*6,923*	6,928	6,929	6,961	7,037	7,192	7,054	7,004	7,128	7,135	**7,233**	95.7
Indiana	3,568	3,609	3,566	3,577	3,617	3,618	3,540	3,513	*3,437*	3,468	3,535	3,655	**3,681**	93.4
Illinois	10,579	10,472	10,538	10,636	10,605	10,588	10,619	10,702	10,669	*10,451*	10,541	10,499	**10,628**	97.7
Michigan	4,913	4,637	*4,577*	4,692	4,843	4,922	5,093	5,238	5,211	5,052	4,985	4,835	**4,871**	87.4
Wisconsin	2,123	2,101	2,110	2,104	*2,079*	2,105	2,119	2,150	2,159	2,148	2,132	2,137	**2,132**	96.3
WEST NORTH CENTRAL:														
Minnesota	3,277	3,225	3,245	3,266	3,260	3,266	3,303	3,340	3,294	*3,210*	3,269	3,296	**3,350**	95.8
Iowa	2,074	2,075	2,056	2,079	2,103	*2,012*	2,056	2,140	2,043	2,106	2,076	2,075	**2,067**	94.0
Missouri	5,997	5,980	*5,937*	5,962	*5,937*	5,940	6,000	6,048	6,004	6,016	6,020	6,035	**6,085**	97.6
North Dakota	426	*377*	379	391	420	429	437	454	**459**	449	438	433	**446**	82.1
South Dakota	469	*438*	440	451	450	452	473	489	**500**	495	487	462	**491**	87.6
Nebraska	1,471	*1,397*	1,408	1,414	1,432	1,448	1,456	1,502	1,504	1,513	1,530	1,516	**1,532**	91.2
Kansas	1,959	*1,881*	1,882	1,905	1,924	1,947	1,966	2,024	1,999	2,007	1,989	1,980	**2,004**	92.9
SOUTH ATLANTIC:														
Delaware	284	283	284	*276*	283	280	283	281	285	289	283	285	**286**	94.2
Maryland	1,619	1,609	1,621	*1,603*	1,605	1,623	1,625	1,636	1,632	1,605	1,616	1,614	**1,639**	97.8
District of Columbia	1,655	1,699	1,650	1,662	*1,603*	1,631	1,623	1,709	1,636	1,618	1,708	1,666	**1,655**	93.8
Virginia	2,367	*2,260*	2,282	2,316	2,281	2,331	2,377	2,428	**2,475**	2,438	2,419	2,380	**2,417**	91.3
West Virginia	920	*882*	886	891	886	882	886	934	966	953	965	**967**	**962**	89.1
North Carolina	1,433	*1,370*	1,392	1,377	1,417	1,411	1,444	1,469	**1,497**	1,464	1,440	1,450	**1,465**	91.5
South Carolina	625	610	613	614	608	*595*	615	628	629	626	626	**672**	**664**	88.5
Georgia	2,194	2,078	*2,067*	2,137	2,103	2,100	2,166	2,215	2,315	2,243	2,276	**2,353**	**2,275**	87.8
Florida	983	1,031	1,081	1,054	955	*878*	899	917	925	967	959	1,013	**1,117**	78.6
EAST SOUTH CENTRAL:														
Kentucky	2,294	*2,240*	2,246	2,315	2,272	2,297	2,283	2,301	2,333	2,301	2,272	**2,345**	**2,323**	95.5
Tennessee	2,693	2,695	2,682	2,657	*2,645*	2,673	2,728	2,783	2,740	2,697	2,671	2,675	**2,670**	95.0
Alabama	1,462	1,487	1,450	1,440	1,447	1,451	*1,284*	1,301	1,484	1,499	1,566	**1,573**	**1,562**	81.6
Mississippi	634	*611*	617	612	622	616	634	661	656	647	644	652	**636**	92.4
WEST SOUTH CENTRAL:														
Arkansas	937	951	943	916	*910*	914	921	932	960	**973**	962	931	931	93.5
Louisiana	1,605	*1,529*	1,545	1,570	1,578	1,597	1,612	1,621	**1,652**	1,644	1,637	1,633	**1,637**	92.6
Oklahoma	1,994	*1,887*	1,903	1,929	1,945	1,972	2,001	2,059	2,051	**2,085**	2,056	2,029	**2,011**	90.5
Texas	5,468	5,110	*5,072*	5,126	5,212	5,281	5,351	5,677	5,739	5,750	5,771	5,719	**5,808**	87.3
MOUNTAIN:														
Montana	971	995	969	952	936	937	972	1,020	1,007	1,008	959	*933*	**964**	91.5
Idaho	571	545	*539*	551	555	573	585	602	591	585	580	574	**572**	89.5
Wyoming	357	327	*325*	327	341	347	369	383	395	391	362	358	**359**	82.3
Colorado	2,086	1,969	1,962	*1,956*	1,977	2,006	2,108	2,266	**2,286**	2,193	2,104	2,085	**2,120**	85.6
New Mexico	292	256	*253*	*253*	261	269	304	307	**328**	323	315	319	**316**	77.1
Arizona	539	519	*508*	513	534	550	549	562	548	538	549	546	**552**	90.4
Utah	1,040	1,013	1,052	1,020	1,034	*1,006*	1,041	1,059	**1,085**	1,039	1,043	1,043	**1,045**	92.7
Nevada	148	151	148	144	145	155	151	150	154	145	*142*	143	**148**	91.6
PACIFIC:														
Washington	3,539	3,494	3,448	*3,400*	3,431	3,481	3,480	3,587	3,573	3,658	3,630	3,620	**3,666**	92.7
Oregon	2,033	*1,938*	1,976	1,987	1,969	2,019	2,069	2,098	**2,127**	2,104	2,021	2,033	**2,055**	91.1
California	11,264	11,219	11,118	11,029	*11,009*	11,063	11,252	**11,530**	11,378	11,364	11,381	11,297	**11,528**	95.5

TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, BY DIVISIONS AND STATES: 1919 AND 1914.

DIVISION AND STATE.	Census year.	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.	Over 60.
UNITED STATES	1919	131,879	11,221	8,533	41,413	31,765	28,271	5,001	5,354	321
	1914	130,641	(2)	(2)	29,515	24,385	49,700	12,879	13,953	209
	1909	109,484	(2)	(2)	9,216	17,285	20,790	24,564	36,884	745
NEW ENGLAND	1919	11,813	1,917	599	5,639	1,802	1,201	601	52	2
Maine	1919	993	94	34	83	238	520	14	10	.....
	1914	930	(2)	(2)	61	159	317	104	287	2
New Hampshire	1919	616	68	5	138	228	151	15	11	.....
	1914	760	(2)	(2)	228	116	161	226	29	.....
Vermont [3]	1919	324	37	6	76	6	90	82	25	2
Massachusetts	1919	6,821	1,252	413	4,714	279	160	.....	3	.....
	1914	7,771	(2)	(2)	1,376	1,674	4,373	318	30	.....
Rhode Island	1919	1,035	244	31	276	436	48	.....	.....	.....
	1914	1,192	(2)	(2)	171	154	836	11	20	.....
Connecticut	1919	2,024	222	110	352	615	232	490	3	.....
	1914	1,913	(2)	(2)	427	390	406	611	76	3
MIDDLE ATLANTIC	1919	24,163	3,568	2,188	5,415	8,341	4,241	213	192	5
New York	1919	11,998	1,991	990	3,743	3,378	1,796	66	31	3
	1914	13,751	(2)	(2)	2,061	1,518	9,011	812	349	.....
New Jersey	1919	3,581	755	500	611	1,140	463	54	58	.....
	1914	3,642	(2)	(2)	669	1,057	604	643	669	.....
Pennsylvania	1919	8,584	822	698	1,061	3,823	1,982	93	103	2
	1914	10,410	(2)	(2)	1,750	3,019	5,205	405	25	6
EAST NORTH CENTRAL	1919	28,223	2,029	2,037	4,180	11,795	5,840	1,462	849	22
Ohio	1919	7,040	338	653	1,134	4,239	589	44	43	.....
	1914	7,265	(2)	(2)	995	1,741	4,383	64	82	.....
Indiana	1919	3,508	311	233	372	1,133	1,155	292	69	3
	1914	3,750	(2)	(2)	459	978	1,071	1,040	130	66
Illinois	1919	10,570	848	938	1,529	4,180	1,780	689	598	8
	1914	11,604	(2)	(2)	898	2,111	1,982	2,947	3,052	14
Michigan	1919	4,013	211	87	868	1,503	2,055	67	122	.....
	1914	4,902	(2)	(2)	711	1,106	2,951	49	82	3
Wisconsin	1919	2,123	321	126	286	731	261	370	17	11
	1914	2,265	(2)	(2)	209	576	505	689	226	.....
WEST NORTH CENTRAL	1919	13,673	1,063	940	3,151	4,025	5,847	340	298	.....
Minnesota	1919	3,277	442	158	1,583	738	322	16	18	.....
	1914	3,494	(2)	(2)	785	933	1,516	54	206	.....
Iowa	1919	2,074	138	256	392	475	619	170	24	.....
	1914	2,518	(2)	(2)	134	306	1,182	287	609	.....
Missouri	1919	5,997	143	418	404	1,424	3,411	.....	197	.....
	1914	5,899	(2)	(2)	1,693	1,186	2,061	8	39	12
North Dakota [3]	1919	426	103	19	248	32	18	.....	6	.....
South Dakota [3]	1919	469	50	.....	117	219	40	.....	43	.....
Nebraska	1919	1,471	48	57	151	757	323	132	3	.....
	1914	1,303	(2)	(2)	173	297	700	32	11	.....
Kansas	1919	1,959	139	41	256	380	1,114	22	7	.....
	1914	1,607	(2)	(2)	313	286	623	131	254	.....
SOUTH ATLANTIC	1919	12,080	363	387	2,780	2,370	2,857	1,106	2,049	168
Delaware [3]	1919	284	.....	4	9	110	117	44	.....	.....
Maryland	1919	1,619	66	72	176	517	443	236	109	.....
	1914	1,715	(2)	(2)	92	446	105	525	547	.....
District of Columbia	1919	1,655	168	91	1,253	18	125	.....	.....	.....
	1914	1,217	(2)	(2)	1,217	.....	.....	.....	.....	.....
Virginia	1919	2,367	112	.....	653	384	536	137	377	168
	1914	1,694	(2)	(2)	124	163	202	420	785	.....
West Virginia	1919	920	3	85	207	317	194	34	80	.....
	1914	827	(2)	(2)	80	97	265	183	199	3
North Carolina	1919	1,433	12	17	159	323	388	117	417	.....
	1914	1,165	(2)	(2)	23	110	201	149	682	.....
South Carolina [3]	1919	625	.....	.....	80	85	256	120	84	.....
Georgia	1919	2,194	.....	54	85	487	542	418	608	.....
	1914	1,776	(2)	(2)	30	142	239	40	1,325	.....
Florida	1919	983	2	64	158	129	256	.....	374	.....
	1914	864	(2)	(2)	154	105	151	35	341	78

[1] Includes 48 and under for 1914 and 1909.

[2] Corresponding figures not available.

[3] Not published in 1914.

TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, BY DIVISIONS AND STATES: 1919 AND 1914—Continued.

DIVISION AND STATE.	Census year.	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.	Over 60.
EAST SOUTH CENTRAL	1919	7,083	236	178	806	1,440	1,966	1,227	1,230	.....
Kentucky	1919	2,294	117	21	146	653	652	335	370	.....
	1914	1,873	(2)	(2)	255	331	457	473	357	.....
Tennessee	1919	2,693	103	73	337	475	793	840	72	.....
	1914	2,580	(2)	(2)	358	259	572	1,223	164	4
Alabama	1919	1,462	.....	64	320	189	299	48	542	.....
	1914	1,388	(2)	(2)	95	176	243	427	447	.....
Mississippi	1919	634	16	20	3	123	222	4	246	.....
	1914	607	(2)	(2)	99	82	177	24	220	5
WEST SOUTH CENTRAL	1919	10,004	262	458	2,093	1,573	5,196	.....	416	6
Arkansas	1919	937	19	24	291	30	501	.....	72	.....
	1914	832	(2)	(2)	148	104	268	49	263	.....
Louisiana	1919	1,605	107	27	62	796	311	.....	302	.....
	1914	1,243	(2)	(2)	168	37	238	.....	800	.....
Oklahoma	1919	1,994	26	107	244	244	1,362	.....	5	6
	1914	1,416	(2)	(2)	223	217	810	56	110	.....
Texas	1919	5,468	110	300	1,496	503	3,022	.....	37	.....
	1914	4,605	(2)	(2)	978	967	2,232	96	332	.....
MOUNTAIN	1919	6,004	523	351	4,163	321	552	22	68	4
Montana	1919	971	75	.....	890	.....	3	.....	3	.....
	1914	819	(2)	(2)	288	85	434	12	.....	.....
Idaho [3]	1919	571	16	10	162	36	325	22	.....	.....
Wyoming [3]	1919	357	52	18	219	64	4	.....	.....	.....
Colorado	1919	2,086	244	198	1,382	151	61	.....	46	4
	1914	1,759	(2)	(2)	1,663	18	71	4	3	.....
New Mexico [3]	1919	292	9	30	153	.....	90	.....	10	.....
Arizona [3]	1919	539	15	31	401	23	69	.....	.....	.....
Utah	1919	1,040	99	64	839	38	.....	.....	.....	.....
	1914	1,070	(2)	(2)	99	430	521	.....	20	.....
Nevada [3]	1919	148	13	.....	117	9	.....	.....	9	.....
PACIFIC	1919	16,836	1,260	1,386	13,177	98	571	30	200	114
Washington	1919	3,539	546	324	2,488	.....	127	.....	6	48
	1914	3,298	(2)	(2)	2,912	108	165	.....	113	.....
Oregon	1919	2,033	368	413	1,187	14	42	.....	.....	9
	1914	1,745	(2)	(2)	235	727	768	.....	15	.....
California	1919	11,264	346	649	9,502	84	402	30	194	57
	1914	10,416	(2)	(2)	6,510	1,736	1,708	66	389	7

[1] Includes 48 and under for 1914 and 1909. [2] Corresponding figures not available. [3] Not published in 1914.

TABLE 6.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, BY DIVISIONS AND STATES: 1919.

DIVISION AND 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.		Over 250 wage earners.	
			Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
UNITED STATES....1919..	5,678	131,879	167	1,538	4,472	2,111	25,110	1,201	39,263	478	33,947	171	24,516	12	4,571
1914..	6,097	130,641	165	1,663	5,129	2,460	27,570	1,175	37,844	441	30,522	180	25,405	13	4,171
NEW ENGLAND	708	11,813	10	228	651	304	3,562	118	3,808	41	2,980	7	812	.....	.....
Maine	81	993	1	40	129	30	350	4	109	6	405	.....	.....	.....	.....
New Hampshire	61	616	1	19	49	35	380	5	133	1	54	.....	.....	.....	.....
Vermont	28	324	.....	12	32	13	189	2	47	1	56	.....	.....	.....	.....
Massachusetts	340	6,821	6	82	246	154	1,806	69	2,274	22	1,683	7	812	.....	.....
Rhode Island	70	1,045	.....	30	97	26	253	10	361	4	324	.....	.....	.....	.....
Connecticut	128	2,024	2	45	98	46	584	28	884	7	458	.....	.....	.....	.....
MIDDLE ATLANTIC	1,017	24,163	35	306	877	338	3,995	224	7,385	76	5,333	34	5,076	4	1,497
New York	535	11,998	26	176	499	178	2,094	99	3,320	37	2,524	15	2,064	4	1,497
New Jersey	131	3,581	3	33	99	42	495	34	1,097	13	891	6	999	.....	.....
Pennsylvania	351	8,584	6	97	279	118	1,406	91	2,968	26	1,918	13	2,013	.....	.....
EAST NORTH CENTRAL	1,247	28,223	35	343	924	475	5,617	256	8,605	102	7,268	35	5,231	1	578
Ohio	277	7,040	5	66	192	119	1,360	50	1,769	28	1,937	8	1,204	1	578
Indiana	158	3,568	2	39	115	64	747	38	1,315	11	772	4	619	.....	.....
Illinois	470	10,579	12	127	318	179	2,160	95	3,113	44	3,147	13	1,841	.....	.....
Michigan	197	4,913	6	64	177	61	677	41	1,395	15	1,097	10	1,567	.....	.....
Wisconsin	145	2,123	10	47	122	52	673	32	1,013	4	315	.....	.....	.....	.....
WEST NORTH CENTRAL	713	15,673	24	187	576	265	3,251	160	5,135	62	4,384	15	2,327	.....	.....
Minnesota	156	3,277	5	53	163	48	578	29	852	17	1,143	4	541	.....	.....
Iowa	129	2,074	4	41	127	48	567	29	938	7	442	.....	.....	.....	.....
Missouri	165	5,997	5	19	48	57	727	47	1,594	28	2,104	9	1,524	.....	.....
North Dakota	29	426	.....	8	24	15	184	6	218	.....	.....	.....	.....	.....	.....
South Dakota	29	469	.....	10	28	10	128	8	226	1	87	.....	.....	.....	.....
Nebraska	69	1,471	3	17	56	26	345	19	669	2	139	2	262	.....	.....
Kansas	136	1,959	7	39	130	61	722	22	638	7	469	.....	.....	.....	.....
SOUTH ATLANTIC	351	12,080	3	48	158	125	1,535	110	3,614	41	2,893	23	3,310	1	570
Delaware	6	284	.....	1	4	2	19	1	44	.....	.....	2	217	.....	.....
Maryland	46	1,619	1	6	20	17	204	13	422	5	346	4	627	.....	.....
District of Columbia	21	1,655	.....	.....	.....	3	46	6	221	5	387	7	1,001	.....	.....
Virginia	63	2,367	1	4	12	28	379	19	573	9	665	1	168	1	570
West Virginia	44	920	1	10	28	15	151	14	443	4	298	.....	.....	.....	.....
North Carolina	56	1,433	.....	7	29	25	287	15	479	8	508	1	130	.....	.....
South Carolina	28	625	.....	4	13	10	111	13	449	1	52	.....	.....	.....	.....
Georgia	52	2,194	.....	8	19	15	194	17	578	5	362	7	1,041	.....	.....
Florida	35	983	.....	8	33	10	144	12	405	4	275	1	126	.....	.....
EAST SOUTH CENTRAL	182	7,083	.....	13	43	59	771	68	2,156	32	2,140	7	975	3	998
Kentucky	63	2,294	.....	.....	.....	23	304	23	664	14	862	3	464	.....	.....
Tennessee	59	2,693	.....	5	17	21	246	17	564	11	812	3	403	2	651
Alabama	37	1,462	.....	4	12	11	147	14	447	6	401	1	108	1	347
Mississippi	23	634	.....	4	14	4	74	14	481	1	65	.....	.....	.....	.....
WEST SOUTH CENTRAL	343	10,004	.....	66	242	138	1,741	82	2,596	42	3,145	14	1,917	1	363
Arkansas	49	937	.....	10	37	25	306	11	383	3	211	.....	.....	.....	.....
Louisiana	24	1,605	.....	4	19	3	41	4	131	7	495	5	556	1	363
Oklahoma	99	1,994	.....	25	87	44	566	23	667	7	674	.....	.....	.....	.....
Texas	171	5,468	.....	27	99	66	828	44	1,415	25	1,765	9	1,361	.....	.....
MOUNTAIN	281	6,004	5	69	222	118	1,383	58	1,783	24	1,632	7	984	.....	.....
Montana	49	971	2	15	48	13	142	15	471	4	310	.....	.....	.....	.....
Idaho	40	571	.....	10	39	20	248	10	284	.....	.....	.....	.....	.....	.....
Wyoming	23	357	1	2	6	16	190	3	106	1	55	.....	.....	.....	.....
Colorado	92	2,086	1	28	85	35	386	15	472	9	616	4	527	.....	.....
New Mexico	16	292	.....	2	5	11	150	2	71	1	66	.....	.....	.....	.....
Arizona	21	539	.....	2	11	8	103	8	244	3	181	.....	.....	.....	.....
Utah	27	1,040	1	5	13	9	110	4	113	5	347	3	457	.....	.....
Nevada	13	148	.....	5	15	6	54	1	22	1	57	.....	.....	.....	.....
PACIFIC	836	16,836	55	278	779	289	3,255	125	4,181	58	4,172	29	3,884	2	565
Washington	177	3,539	15	46	130	65	784	32	1,047	17	1,280	2	298	.....	.....
Oregon	73	2,033	1	14	34	31	356	13	390	10	756	4	497	.....	.....
California	586	11,264	39	218	615	193	2,115	80	2,744	31	2,136	23	3,089	2	565

TABLE 7.—SIZE OF ESTABLISHMENTS, BY AMOUNT RECEIVED FOR WORK DONE: 1919, 1914, AND 1909.

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			AMOUNT RECEIVED FOR WORK DONE.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes	5,678	6,097	5,186	131,879	130,641	109,484	$236,382,369	$142,503,253	$104,680,086
Less than $5,000	797	1,458	1,341	1,390	3,976	4,268	2,566,542	4,130,136	3,779,904
$5,000 to $20,000	2,061	2,756	2,359	14,429	28,064	27,522	23,517,926	29,074,763	25,027,052
$20,000 to $100,000	2,236	1,630	1,346	59,490	63,915	56,605	101,788,300	69,077,362	54,383,604
$100,000 and over	584	253	140	56,570	34,686	21,089	108,509,601	40,220,992	21,489,526
	PER CENT DISTRIBUTION.								
All classes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than $5,000	14.0	23.9	25.9	1.1	3.0	3.9	1.1	2.9	3.6
$5,000 to $20,000	36.3	45.2	45.5	10.9	21.5	25.1	9.9	20.4	23.9
$20,000 to $100,000	39.4	26.7	26.0	45.1	48.9	51.7	43.1	48.5	52.0
$100,000 and over	10.3	4.2	2.7	42.9	26.6	19.3	45.9	28.2	20.5

TABLE 8.—CHARACTER OF OWNERSHIP, BY DIVISIONS AND STATES: 1919 AND 1914.

DIVISION AND STATE.	Census year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.							AMOUNT RECEIVED FOR WORK DONE.						
					Total.	In establishments owned by—			Per cent of total.			Total.	In establishments owned by—			Per cent of total.		
		Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
UNITED STATES	1919	2,807	1,698	1,173	131,879	33,973	77,815	20,091	25.8	59.0	15.2	$236,382,369	$57,781,029	$143,048,526	$35,552,814	24.5	60.5	15.0
	1914	3,125	1,541	1,431	130,641	34,344	73,135	23,162	26.3	56.0	17.7	142,503,253	35,809,083	82,653,996	24,040,174	25.1	58.0	16.9
	1909	2,770	1,158	1,258	109,484	32,754	55,485	21,245	29.9	50.7	19.4	104,680,086	30,320,840	54,111,978	20,247,268	29.0	51.7	19.3
NEW ENGLAND	1919	426	143	139	11,813	4,514	5,299	2,000	38.2	44.9	16.9	21,462,585	8,003,892	9,844,057	3,614,636	37.3	45.9	16.8
	1914	489	139	163	12,944	5,191	5,537	2,216	40.1	42.8	17.1	14,060,578	5,521,248	6,183,346	2,355,984	39.3	44.0	16.6
Maine	1919	61	11	9	993	597	218	178	60.1	22.0	17.9	1,514,854	988,820	323,106	202,928	65.3	21.3	13.4
	1914	62	13	17	930	569	211	150	61.2	22.7	16.1	939,021	575,208	204,195	159,618	61.3	21.7	17.0
New Hampshire	1919	50	1	10	616	483	.....	[1] 133	78.4	.....	.....	968,856	756,401	.....	[1] 212,455	78.1	.....	.....
	1914	57	4	13	760	542	59	159	71.3	7.8	20.9	728,733	496,906	69,101	162,726	68.2	9.5	22.3
Vermont	1919	22	1	5	324	233	.....	[1] 91	71.9	.....	.....	399,668	300,290	.....	[1] 99,378	75.1	.....	.....
	1914	34	.....	7	378	294	.....	84	77.8	.....	22.2	362,041	291,345	.....	70,696	80.5	.....	19.5
Massachusetts	1919	180	92	68	6,821	2,105	3,671	1,045	30.9	53.8	15.3	12,864,279	3,977,875	6,952,371	1,934,033	30.9	54.0	15.0
	1914	219	87	85	7,771	2,591	3,911	1,269	33.4	50.3	16.3	8,661,830	2,884,039	4,426,291	1,351,500	33.3	51.1	15.6
Rhode Island	1919	45	8	17	1,035	402	395	238	38.8	38.2	23.0	2,154,652	724,200	862,845	567,607	33.6	40.0	26.3
	1914	41	7	18	1,192	411	499	282	34.5	41.9	23.6	1,260,942	441,046	535,686	284,210	35.0	42.5	22.5
Connecticut	1919	68	30	30	2,024	694	984	346	34.3	48.6	17.1	3,560,276	1,256,306	1,665,863	638,107	35.3	46.8	17.9
	1914	76	28	23	1,913	784	857	272	41.0	44 8	14.2	2,108,011	832,704	948,073	327,234	39.5	45.0	15.5
MIDDLE ATLANTIC	1919	521	297	199	24,163	6,311	14,710	3,142	26.1	60.9	13.0	46,070,130	10,761,504	29,799,030	5,509,596	23.4	64.7	12.0
	1914	627	267	258	27,803	7,711	15,272	4,820	27.7	54.9	17.3	28,120,707	7,509,429	15,931,148	4,680,130	26.7	56.7	16.6
New York	1919	281	158	96	11,998	2,940	7,677	1,381	24.5	64.0	11.5	24,627,441	5,119,734	17,034,878	2,472,829	20.8	69.2	10.0
	1914	345	138	131	13,751	3,639	8,227	1,885	26.5	59.8	13.7	14,304,964	3,662,556	8,668,304	1,974,104	25.6	60.6	13.8
New Jersey	1919	57	52	22	3,581	699	2,465	417	19.5	68.8	11.6	7,091,621	1,264,134	5,002,657	824,830	17.8	70.5	11.6
	1914	68	50	24	3,642	846	2,268	528	23.2	62.3	14.5	3,590,739	777,587	2,301,689	511,463	21.7	64.1	14.2
Pennsylvania	1919	183	87	81	8,584	2,672	4,568	1,344	31.1	53.2	15.7	14,351,068	4,377,636	7,761,495	2,211,937	30.5	54.1	15.4
	1914	214	79	103	10,410	3,226	4,777	2,407	31.0	45.9	23.1	10,225,004	3,069,286	4,961,155	2,194,563	30.0	48.5	21.5
EAST NORTH CENTRAL	1919	626	372	249	28,223	6,277	17,410	4,536	22.2	61.7	16.1	51,789,615	10,677,229	32,717,780	8,394,606	20.6	63.2	16.2
	1914	656	349	310	29,186	7,001	16,513	5,672	24.0	56.6	19.4	31,834,504	7,234,388	18,612,310	5,987,806	22.7	58.5	18.8
Ohio	1919	129	84	64	7,040	1,263	4,504	1,273	17.9	64.0	18.1	12,528,344	2,070,103	8,113,330	2,344,911	16.5	64.8	18.7
	1914	133	83	80	7,265	1,450	4,477	1,338	20.0	61.6	18.4	7,822,491	1,420,076	4,908,232	1,494,183	18.2	62.7	19.1
Indiana	1919	80	45	33	3,568	909	2,133	526	25.5	59.8	14.7	5,588,748	1,582,289	3,284,642	721,817	28.3	58.8	12.9
	1914	85	53	36	3,750	1,025	2,136	589	27.3	57.0	15.7	3,697,112	1,011,264	2,157,063	528,785	27.4	58.3	14.3
Illinois	1919	235	159	76	10,579	2,476	6,696	1,407	23.4	63.3	13.3	20,606,032	4,448,575	13,645,538	2,511,919	21.6	66.2	12.2
	1914	239	130	92	11,004	2,938	6,248	1,818	26.7	56.8	16.5	12,846,432	3,282,293	7,504,351	2,059,788	25.6	58.4	16.0
Michigan	1919	103	45	49	4,913	1,067	2,808	1,038	21.7	57.2	21.1	9,416,373	1,612,654	5,482,263	2,321,456	17.1	58.2	24.7
	1914	129	43	62	4,902	1,097	2,293	1,512	22.4	46.8	30.8	5,115,286	1,019,899	2,616,599	1,478,788	19.9	51.2	28.9
Wisconsin	1919	79	39	27	2,123	562	1,269	292	26.5	59.8	13.8	3,650,118	963,608	2,192,007	494,503	26.4	60.1	13.5
	1914	70	40	40	2,265	491	1,359	415	21.7	60.0	18.3	2,353,183	500,856	1,426,065	426,262	21.3	60.6	18.1

[1] Includes the group "Corporations."

TABLE 8.—CHARACTER OF OWNERSHIP, BY DIVISIONS AND STATES: 1919 AND 1914—Continued.

Division and state.	Census year.	Number of establishments owned by—			Average number of wage earners.							Amount received for work done.						
					Total.	In establishments owned by—			Per cent of total.			Total.	In establishments owned by—			Per cent of total.		
		Individuals.	Corporations.	All others		Individuals.	Corporations.	All others	Individuals.	Corporations.	All others		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
West North Central	1919	362	195	156	15,673	4,235	9,113	2,325	27.0	58.1	14.8	$27,396,421	$7,233,183	$15,939,723	$4,223,515	26.4	58.2	15.4
	1914	447	187	187	15,630	4,381	8,494	2,755	28.0	54.3	17.6	17,582,715	4,823,987	9,831,431	2,927,297	27.4	55.9	16.6
Minnesota	1919	75	40	41	3,277	617	1,999	661	18.8	61.0	20.2	6,087,088	1,060,477	3,772,432	1,254,179	17.4	62.0	20.6
	1914	104	39	45	3,494	990	1,726	778	28.3	49.4	22.3	4,100,464	1,142,350	2,105,482	852,632	27.9	51.3	20.8
Iowa	1919	77	25	27	2,074	807	940	327	38.9	45.3	15.8	3,904,658	1,547,213	1,762,312	595,133	39.6	45.1	15.2
	1914	104	34	38	2,518	798	1,187	533	31.7	47.1	21.2	2,882,005	936,340	1,461,197	484,468	32.5	50.7	16.8
Missouri	1919	53	88	24	5,997	993	4,684	320	16.6	78.1	5.3	9,438,493	1,439,636	7,475,153	523,704	15.3	79.2	5.5
	1914	66	79	32	5,899	1,056	4,365	478	17.9	74.0	8.1	6,316,206	1,066,279	4,787,218	462,709	16.9	75.8	7.3
North Dakota	1919	14	9	6	426	148	205	73	34.7	48.1	17.1	844,433	275,426	420,754	148,253	32.6	49.8	17.6
	1914	15	7	8	409	150	152	107	36.7	37.2	26.1	592,843	186,808	229,293	176,742	31.5	38.7	29.8
South Dakota	1919	17	6	6	469	209	169	91	44.6	36.0	19.4	940,179	419,007	330,315	190,857	44.6	35.1	20.3
	1914	18	3	5	400	181	77	142	45.2	19.3	35.5	477,474	245,105	75,494	156,875	51.3	15.8	32.9
Nebraska	1919	34	17	18	1,471	500	718	253	34.0	48.8	17.2	2,823,234	945,565	1,410,068	467,601	33.5	49.9	16.6
	1914	35	17	22	1,303	375	672	256	28.8	51.6	19.6	1,517,924	401,206	832,808	283,910	26.4	54.9	18.7
Kansas	1919	92	10	34	1,959	961	398	600	49.1	20.3	30.6	3,358,336	1,545,859	768,689	1,043,788	46.0	22.9	31.1
	1914	105	8	37	1,607	831	315	461	51.7	19.6	28.7	695,799	845,899	339,939	509,961	49.9	20.0	30.1
South Atlantic	1919	151	132	68	12,080	3,025	.....	.....	25.0	.....	.....	18,211,883	4,785,179	.....	.....	26.3	.....	.....
	1914	159	124	86	10,102	2,823	5,436	1,843	27.9	53.8	18.2	8,925,073	2,420,700	4,968,735	1,535,638	27.1	55.7	17.2
Delaware	1919	2	1	3	284	13	.....	[1] 271	4.6	.....	.....	444,095	18,632	.....	[1] 425,463	4.2	.....	.....
	1914	6	2	4	326	42	.....	[1] 284	12.9	.....	.....	242,897	27,687	.....	[1] 215,210	11.4	.....	.....
Maryland	1919	20	16	10	1,619	619	778	222	38.2	48.1	13.7	2,640,686	898,742	1,359,079	382,865	34.0	51.5	14.5
	1914	27	11	16	1,715	597	794	324	34.8	46.3	18.9	1,391,902	511,576	589,003	291,323	36.8	42.3	20.9
Dist. of Columbia	1919	4	14	3	1,655	240	1,267	148	14.5	76.6	8.9	2,559,210	409,826	1,882,805	266,579	16.0	73.6	10.4
	1914	4	11	3	1,217	142	856	219	11.7	70.3	18.0	1,023,475	143,345	718,824	161,306	14.0	70.2	15.8
Virginia	1919	31	22	10	2,367	691	1,439	237	29.2	60.8	10.0	3,009,759	889,637	1,700,002	420,120	29.6	56.5	14.0
	1914	29	21	21	1,695	627	719	349	37.0	42.4	20.6	1,453,912	459,584	663,464	300,864	33.7	45.6	20.7
West Virginia	1919	19	14	11	920	202	589	129	22.0	64.0	14.0	1,775,349	665,951	907,238	202,160	37.5	51.1	11.4
	1914	16	21	7	827	200	571	56	24.2	69.0	6.8	785,782	169,769	591,343	24,670	21.6	75.3	3.1
North Carolina	1919	26	20	10	1,433	466	648	319	32.5	45.2	22.3	2,252,100	879,316	921,032	451,752	39.0	40.9	20.1
	1914	31	16	12	1,165	520	464	181	44.6	39.8	15.6	1,026,358	430,263	439,007	157,088	41.9	42.8	15.3
South Carolina	1919	15	7	6	625	266	208	151	42.6	33.3	24.2	833,801	316,541	268,285	248,975	38.0	32.2	29.9
	1914	7	9	7	517	114	287	116	22.1	55.5	22.4	422,212	97,614	229,748	94,850	23.1	54.4	22.5
Georgia	1919	21	22	9	2,194	294	1,447	453	13.4	66.0	20.6	3,216,832	422,592	2,328,893	465,347	13.1	72.4	14.5
	1914	17	18	8	1,776	292	1,306	178	16.5	73.5	10.0	1,632,221	258,254	1,227,152	146,815	15.8	75.2	9.0
Florida	1919	13	16	6	983	234	670	79	23.8	68.2	8.0	1,480,051	283,942	1,097,077	99,032	19.2	74.1	6.7
	1914	22	15	8	864	289	439	136	33.5	50.8	15.7	946,314	292,608	510,194	143,512	30.9	53.9	15.2
East South Central	1919	78	67	37	7,083	2,470	3,360	1,253	34.9	47.4	17.7	9,687,736	3,239,428	4,731,581	1,716,727	33.4	48.8	17.7
	1914	78	89	43	6,447	1,202	3,991	1,254	18.6	61.9	19.5	5,863,673	1,037,814	3,761,811	1,064,048	17.7	64.2	18.1
Kentucky	1919	28	19	16	2,294	1,425	372	497	62.1	16.2	21.7	2,905,346	1,752,021	542,528	610,797	60.3	18.7	21.0
	1914	32	33	10	1,873	429	1,176	268	22.9	62.8	14.3	1,665,979	352,007	1,098,090	215,882	21.1	65.9	13.0
Tennessee	1919	24	24	11	2,693	524	1,673	496	19.5	62.1	18.4	3,639,602	688,042	2,190,108	761,452	18.9	60.2	20.9
	1914	17	31	19	2,580	230	1,573	777	8.9	61.0	30.0	2,296,797	201,873	1,406,568	688,356	8.8	61.2	30.0
Alabama	1919	13	17	7	1,462	190	1,093	179	13.0	74.8	12.2	2,196,118	253,487	1,701,792	240,839	11.5	77.5	11.0
	1914	15	19	7	1,388	260	1,012	116	18.7	72.9	8.4	1,360,688	222,683	1,055,061	82,944	16.4	77.5	6.1
Mississippi	1919	13	7	3	634	331	222	81	52.2	35.0	12.8	946,670	545,878	297,153	103,639	57.7	31.4	10.9
	1914	14	6	7	606	283	230	93	46.7	38.0	15.3	540,209	261,251	202,092	76,866	48.4	37.4	14.2
West South Central	1919	160	96	87	10,004	2,478	5,679	1,847	24.8	56.8	18.5	16,553,772	3,863,827	9,599,532	3,090,413	23.3	58.0	18.7
	1914	162	95	110	8,096	2,300	4,012	1,784	28.4	49.6	22.0	9,218,167	2,450,721	4,977,686	1,789,760	26.6	54.0	19.4
Arkansas	1919	30	10	9	937	452	347	138	48.2	37.0	14.7	1,393,024	651,261	567,410	174,353	46.8	40.7	12.5
	1914	23	11	19	832	316	261	255	38.0	31.4	30.6	836,457	305,446	273,434	257,577	36.5	32.7	30.8
Louisiana	1919	7	11	6	1,605	362	1,100	143	22.6	68.5	8.9	2,349,774	444,322	1,711,779	193,673	18.9	72.8	8.2
	1914	10	11	7	1,243	331	722	190	26.6	58.1	15.3	1,190,148	302,185	728,302	159,661	25.4	61.2	13.4
Oklahoma	1919	50	21	28	1,994	588	860	546	29.5	43.1	27.4	3,561,059	962,787	1,613,466	984,806	27.0	45.3	27.7
	1914	49	25	27	1,416	457	593	366	32.3	41.9	25.8	1,669,721	529,190	767,398	373,133	31.7	46.0	22.3
Texas	1919	73	54	44	5,468	1,076	3,372	1,020	19.7	61.7	18.7	9,249,915	1,805,457	5,706,877	1,737,581	19.5	61.7	18.8
	1914	80	48	57	4,605	1,196	2,436	973	26.0	52.9	21.1	5,521,841	1,313,900	3,208,552	999,389	23.8	58.1	18.1

[1] Includes the group "Corporations."

TABLE 8.—CHARACTER OF OWNERSHIP, BY DIVISIONS AND STATES: 1919 AND 1914—Continued.

DIVISION AND STATE.	Census year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.							AMOUNT RECEIVED FOR WORK DONE.					
					Total.	In establishments owned by—			Per cent of total.			Total.	In establishments owned by—			Per cent of total.	
		Individuals.	Corporations.	All others		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
MOUNTAIN	1919	130	103	48	6,004	1,286	4,205	513	21.4	70.0	8.5	$11,330,923	$2,434,727	$7,924,321	$971,875	21.5	69.9	8.6
	1914	125	84	61	4,974	1,104	.....	.....	22.2	.....	.....	6,550,610	1,416,129	.....	.....	21.6	.....	.....
Montana	1919	23	22	4	971	155	765	51	16.0	78.8	5.3	1,894,356	293,185	1,504,109	97,062	15.5	79.4	5.1
	1914	17	19	6	819	151	607	61	18.4	74.1	7.5	1,266,552	227,321	948,209	91,022	17.9	74.9	7.2
Idaho	1919	23	9	8	571	297	180	94	52.0	31.5	16.5	1,179,846	576,878	403,548	199,420	48.9	34.2	16.9
	1914	22	6	8	442	249	124	69	56.3	28.1	15.6	592,749	303,959	185,412	103,378	51.3	31.3	17.4
Wyoming	1919	13	7	3	357	156	158	43	43.7	44.3	12.0	763,953	320,570	375,922	67,461	42.0	49.2	8.8
	1914	11	2	5	185	94	.....	[1] 91	50.8	.....	49.2	238,048	128,156	.....	[1] 109 892	53.8	.....	46.2
Colorado	1919	39	31	22	2,086	350	1,508	228	16.8	72.3	10.9	3,759,849	607,213	2,725,798	426,838	16.1	72.5	11.4
	1914	36	31	27	1,759	258	1,239	262	14.7	70.4	14.9	2,163,263	296,090	1,534,574	332,599	13.7	70.9	1.54
New Mexico	1919	10	4	2	292	109	154	29	37.3	52.7	9.9	432,279	176,303	205,711	50,265	40.8	47.6	11.6
	1914	7	5	3	240	66	132	42	27.5	55.0	17.5	280,373	76,824	157,069	46,480	27.4	56.0	16.6
Arizona	1919	5	12	4	539	80	413	46	14.8	76.6	8.5	987,438	157,737	746,645	83,056	16.0	75.6	8.4
	1914	7	6	4	335	142	159	34	42.4	47.5	10.1	425,999	191,914	186,671	47,414	45.1	43.8	11.1
Utah	1919	9	15	3	1,040	74	951	15	7.1	91.4	1.4	1,973,166	154,225	1,789,384	29,557	7.8	90.7	1.5
	1914	20	12	4	1,070	109	937	24	10.2	87.6	2.2	1,367,433	125,750	1,215,243	26,440	9.2	88.9	1.9
Nevada	1919	8	3	2	148	65	76	7	43.9	51.4	4.7	340,036	148,616	173,204	18,216	43.7	50.9	5.4
	1914	5	3	4	124	35	67	22	28.2	54.0	17.8	216,193	66,115	112,157	37,921	30.6	51.9	17.5
PACIFIC	1919	353	293	190	16,836	3,377	10,949	2,510	20.1	65.0	14.9	33,879,304	6,782,060	21,958,668	5,138,576	20.0	64.8	15.2
	1914	382	207	213	15,459	2,631	10,516	2,312	17.0	68.0	15.0	20,347,226	3,394,667	13,949,834	3,002,725	16.7	68.6	14.8
Washington	1919	90	46	41	3,539	686	2,282	571	19.4	64.5	16.1	7,336,715	1,450,880	4,766,660	1,119,175	19.8	65.0	15.3
	1914	92	52	48	3,298	628	2,251	419	19.0	68.3	12.7	4,251,620	799,288	2,894,255	558,077	18.8	68.1	13.1
Oregon	1919	33	28	12	2,033	332	1,503	198	16.3	73.9	9.7	3,629,983	533,155	2,734,786	362,042	14.7	75.3	10.0
	1914	34	27	17	1,745	246	1,305	194	14.1	74.8	11.1	2,146,868	295,837	1,620,579	230,452	13.8	75.5	10.7
California	1919	230	219	137	11,264	2,359	7,164	1,741	20.9	63.6	15.5	22,912,606	4,798,025	14,457,222	3,657,359	20.9	63.1	16.0
	1914	256	128	148	10,416	1,757	6,960	1,699	16.9	66.8	16.3	13,948,738	2,299,542	9,435,000	2,214,196	16.5	67.6	15.9

[1] Includes the group "Corporations."

TABLE 9.—STATISTICS FOR CITIES OF 10,000 INHABITANTS OR MORE (CENSUS OF 1920) WITH 3 OR MORE ESTABLISHMENTS: 1919 AND 1914.

STATE AND CITY.	Census year.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY				Capital.	Salaries.	Wages.	Cost of materials.	Amount received for work done.	Primary horsepower.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).						
ALABAMA	1919	37	1,684	31	191	1,462	$1,250,596	$355,277	$771,293	$463,521	$2,196,118	1,675
	1914	41	1,569	31	150	1,388	784,541	147,929	480,569	256,459	1,360,688	1,362
Birmingham	1919	7	873	.....	109	764	674,623	219,184	430,617	228,684	1,228,172	771
	1914	10	781	3	80	698	456,048	86,609	254,513	129,832	755,530	681
Mobile	1919	6	224	5	39	180	117,496	53,761	117,471	47,162	287,090	50
	1914	4	228	1	20	207	80,024	20,686	84,141	29,859	197,991	157
Montgomery	1919	4	195	6	38	151	127,333	46,392	55,644	50,602	196,351	128
	1914	3	149	4	13	132	81,905	15,231	42,523	27,414	121,328	111
ARIZONA	1919	21	598	13	46	539	444,981	72,838	430,605	253,740	987,438	685
	1914	17	379	19	25	335	266,812	30,998	194,678	76,779	425,999	326
Phoenix	1919	3	160	.....	18	142	93,807	27,554	131,925	60,470	280,110	37
	1914	3	130	4	9	117	68,000	10,256	67,581	24,019	133,147	80
ARKANSAS	1919	49	1,045	46	62	937	696,445	87,446	549,125	339,619	1,393,024	1,058
	1914	53	1,011	76	103	832	577,314	98,628	338,838	147,826	836,457	1,092
Fort Smith	1919	3	69	5	3	61	30,312	4,100	45,475	24,955	87,993	40
	1914	4	108	14	10	84	66,020	12,684	35,910	11,568	93,438	88
Hot Springs	1919	4	138	2	7	129	125,835	9,500	70,505	40,388	182,069	51
	1914	3	103	4	14	85	100,400	10,549	38,670	27,128	87,280	125
Little Rock	1919	11	373	4	32	337	230,412	43,974	214,666	124,928	603,577	199
	1914	6	301	5	30	266	138,540	34,257	118,172	41,015	277,736	187
CALIFORNIA	1919	586	13,223	633	1,326	11,264	18,373,479	2,120,534	9,301,912	4,582,096	22,912,606	15,537
	1914	532	12,077	624	1,037	10,416	9,618,271	1,084,550	6,212,685	2,2 2,195	13,948,738	13,503
Alameda	1919	12	107	13	9	85	87,760	11,870	70,396	62,744	204,824	.....
	1914	9	114	18	4	92	79,866	4,420	56,273	23,668	119,157	96
Bakersfield	1919	3	208	4	111	93	91,510	5,050	93,590	77,191	191,997	.....
	1914	5	101	5	5	91	115,873	4,788	55,666	26,474	134,505	105
Berkeley	1919	13	164	8	8	148	130,725	21,857	126,112	46,919	304,233	.....
	1914	14	167	16	9	142	139,217	10,348	84,317	22,992	181,183	131
Eureka	1919	5	80	6	4	70	63,150	2,525	49,317	29,936	96,950	.....
	1914	5	67	9	4	54	90,804	3,764	26,536	10,472	63,446	92
Fresno	1919	14	224	17	22	185	276,215	25,939	200,559	117,091	486,685	.....
	1914	8	168	11	9	148	166,970	9,359	99,543	31,433	227,972	207
Long Beach	1919	5	220	1	19	200	240,571	26,109	114,315	50,887	302,404	.....
	1914	4	145	4	20	121	151,113	17,770	81,840	33,180	175,299	220
Los Angeles	1919	46	3,365	32	515	2,818	4,585,894	755,691	1,988,938	957,249	5,676,164	3,031
	1914	42	3,170	33	394	2,752	2,697,607	316,224	1,561,456	565,167	3,553,871	3,053
Oakland	1919	57	2,991	54	119	2,818	1,276,328	181,896	865,042	374,544	2,153,878	.....
	1914	66	1,125	76	98	951	855,138	119,506	590,816	201,020	1,350,680	1,143
Pasadena	1919	12	340	18	37	285	524,013	62,451	292,073	107,205	689,201	.....
	1914	7	307	8	28	271	263,918	29,295	169,697	52,603	381,950	263
Sacramento	1919	18	465	22	40	403	481,076	61,306	342,686	150,580	785,713	.....
	1914	12	373	15	30	328	337,707	44,354	211,749	77,804	463,322	350
San Bernadino [1]	1919	5	88	3	11	74	93,025	9,486	44,851	23,385	95,931	.....
San Diego	1919	17	430	13	59	358	493,129	80,675	235,267	123,485	600,398	.....
	1914	13	461	12	27	422	349,796	30,133	221,478	85,459	465,802	442
San Francisco	1919	110	2,852	120	224	2,508	2,876,239	381,603	2,405,460	1,024,850	5,341,139	.....
	1914	110	2,799	128	225	2,446	2,192,830	298,433	1,576,651	530,282	3,430,092	3,425
San Jose	1919	14	280	20	20	240	251,605	207,630	240,197	96,158	511,784	.....
	1914	16	233	27	17	189	113,283	18,845	117,257	36,065	269,594	306
Santa Ana [1]	1919	4	125	1	8	116	132,723	7,430	80,993	50,929	192,733	.....
Santa Barbara	1919	6	133	5	13	115	63,223	10,134	100,922	56,366	222,741	.....
	1914	4	79	3	1	75	61,710	1,200	49,763	13,130	94,092	80
Stockton	1919	14	252	14	19	219	287,574	19,052	185,797	77,936	449,753	.....
	1914	11	227	13	9	205	164,050	10,018	134,863	34,639	279,814	209
Vallejo	1919	3	124	6	8	110	115,425	8,456	107,460	56,591	211,103	.....
	1914	6	84	4	6	74	67,029	10,100	49,125	18,741	99,231	89
COLORADO	1919	92	2,470	86	298	2,086	2,255,955	442,133	1,437,628	688,537	3,759,849	2,925
	1914	94	2,079	97	223	1,759	1,440,896	249,777	849,010	364,301	2,163,263	2,723
Boulder City [1]	1919	3	50	4	5	41	39,203	5,030	26,202	12,448	59,480	74
Colorado Springs [1]	1919	5	196	6	27	163	170,565	29,447	119,077	28,211	282,017	85
Denver	1919	38	1,529	22	201	1,306	1,366,340	312,007	917,545	422,919	2,407,244	1,457
	1914	38	1,235	27	149	1,059	869,665	168,268	511,294	200,546	1,296,055	1,383
Greeley [1]	1919	3	43	2	5	36	38,104	6,280	24,766	12,522	69,840	40
Pueblo	1919	3	172	1	24	147	223,632	34,796	83,091	45,450	256,970	180
	1914	3	139	1	14	124	150,167	19,013	63,726	50,150	158,485	337
CONNECTICUT	1919	128	2,334	131	179	2,024	2,421,654	285,874	1,531,432	799,699	3,560,276	3,646
	1914	127	2,184	125	146	1,913	1,454,961	161,660	894,291	408,401	2,108,011	3,178
Bridgeport	1919	13	283	15	27	241	310,577	44,803	170,898	86,016	425,734	602
	1914	8	270	9	27	234	196,596	24,792	116,087	48,220	266,474	435
Hartford	1919	16	438	18	48	372	532,897	74,143	312,716	198,256	768,865	615
	1914	17	386	19	19	348	277,436	22,514	172,664	86,424	410,678	435
Meriden	1919	3	78	2	9	67	43,716	12,031	36,048	10,473	73,785	70
	1914	4	91	4	13	74	65,083	9,352	31,883	8,834	78,893	100

[1] Not reported in 1914.

TABLE 9.—STATISTICS FOR CITIES OF 10,000 INHABITANTS OR MORE (CENSUS OF 1920) WITH 3 OR MORE ESTABLISHMENTS: 1919 AND 1914—Continued.

STATE AND CITY.	Census year.	Number of establishments.	Persons engaged in the industry. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Capital.	Salaries.	Wages.	Cost of materials.	Amount received for work done.	Primary horsepower.
CONNECTICUT—Continued.												
New Britain	1919	4	85	6	5	74	$113,461	$12,250	$94,638	$22,268	$177,368	129
	1914	4	77	2	5	70	102,037	10,732	87,646	16,620	96,770	137
New Haven	1919	16	520	12	33	475	483,130	56,024	321,361	153,460	718,970	560
	1914	18	430	12	29	389	281,860	35,145	175,356	70,201	395,540	596
New London	1919	4	67	3	3	61	55,372	2,370	39,265	18,857	90,497	93
	1914	4	66	3	2	61	54,156	1,650	23,566	7,766	52,851	106
Norwich	1919	4	52	6	1	45	78,225	600	43,500	21,066	98,898	95
	1914	3	55	4	3	48	25,215	5,564	18,790	10,293	50,300	65
Stamford	1919	3	75	3	8	64	46,068	21,420	37,834	13,786	111,215	50
	1914	3	64	3	4	57	25,021	10,847	25,411	9,003	60,499	80
Waterbury	1919	5	116	2	8	106	59,846	8,842	77,036	48,562	167,582	165
	1914	7	127	3	7	117	56,108	9,865	58,831	28,156	126,116	210
DELAWARE	1919	6	300	10	6	284	375,386	13,035	220,984	95,822	444,095	334
	1914	12	369	16	27	326	253,264	26,296	92,178	42,524	242,897	335
Wilmington	1919	4	281	7	4	270	360,276	213,084	12,635	91,327	425,120	.....
	1914	9	346	11	27	308	236,664	26,296	86,610	39,869	226,832	301
DISTRICT OF COLUMBIA	1919	21	1,805	10	140	1,655	1,374,200	314,468	1,049,580	481,036	2,559,210	1,633
	1914	18	1,351	10	124	1,217	971,336	121,408	440,990	181,876	1,023,475	1,071
FLORIDA	1919	35	1,146	23	140	983	881,099	192,147	488,157	365,461	1,480,051	1,437
	1914	45	991	41	86	864	612,525	91,998	350,124	182,317	946,314	1,120
Jacksonville	1919	6	367	5	40	322	250,674	75,037	160,537	95,655	495,315	325
	1914	6	234	2	28	204	139,157	39,000	77,195	39,073	275,155	373
Pensacola	1919	3	117	.....	28	89	66,313	28,332	34,679	40,459	133,811	45
	1914	3	97	4	16	77	33,430	18,053	22,186	17,607	79,354	69
Tampa	1919	3	178	.....	27	151	147,941	38,482	54,781	56,739	234,266	195
	1914	3	191	4	14	173	110,919	10,114	95,748	51,249	210,557	158
GEORGIA	1919	52	2,522	40	288	2,194	1,919,132	426,179	1,205,256	872,895	3,216,832	2,566
	1914	43	2,008	35	197	1,776	1,044,728	207,229	571,737	335,841	1,632,221	1,773
Atlanta	1919	12	1,317	5	184	1,128	1,022,249	286,026	679,903	481,579	1,834,362	1,070
	1914	13	1,039	4	119	916	505,786	130,495	306,561	192,244	912,952	901
Augusta	1919	3	119	4	8	107	166,838	6,002	55,975	47,101	147,394	95
	1914	3	80	4	9	67	61,173	7,094	22,452	15,248	60,448	105
Macon	1919	6	229	1	31	197	166,468	44,458	119,304	66,570	285,771	250
	1914	3	175	.....	17	158	83,725	16,872	49,491	22,948	131,486	84
Savannah	1919	5	290	2	28	260	216,095	42,644	162,104	90,080	394,109	.....
	1914	4	300	1	24	275	150,960	24,854	78,257	53,543	222,415	236
Waycross [1]	1919	3	23	2	4	17	10,550	3,303	7,915	26,272	14,515	25
IDAHO	1919	40	652	38	43	571	877,560	59,420	487,635	322,581	1,179,846	756
	1914	36	510	42	26	442	486,600	28,844	246,094	140,586	592,749	1,033
Boise	1919	3	98	1	7	90	118,859	13,157	76,555	35,447	176,242	142
	1914	3	85	2	7	76	98,952	7,545	55,036	15,987	117,267	70
ILLINOIS	1919	470	12,180	405	1,205	10,579	12,627,971	2,087,158	7,895,080	4,942,918	20,606,032	14,833
	1914	461	12,470	437	1,029	11,004	8,401,095	1,150,466	5,474,339	2,638,683	12,846,432	13,472
Alton	1919	4	65	3	7	55	98,094	13,554	33,195	21,273	93,375	30
	1914	3	52	2	2	48	44,275	2,300	23,742	13,891	66,406	55
Aurora	1919	3	118	3	7	108	78,853	10,389	58,055	51,767	161,979	60
	1914	3	98	2	10	86	38,404	8,272	37,700	16,430	81,541	105
Bloomington	1919	3	99	4	8	87	62,122	11,440	64,597	37,325	159,756	50
	1914	4	149	4	14	131	77,144	14,850	61,526	23,306	164,270	135
Centralia [1]	1919	3	31	4	2	25	15,184	1,612	12,635	6,946	27,133	40
Champaign	1919	5	96	9	4	83	41,441	3,052	59,953	20,965	144,639	42
	1914	3	62	6	14	42	30,325	10,008	16,800	8,201	50,652	57
Chicago	1919	250	8,137	171	823	7,143	8,627,351	1,560,989	5,719,267	3,453,567	14,836,208	7,544
	1914	222	8,398	190	807	7,401	5,395,721	847,328	3,918,958	1,863,017	8,949,896	8,010
Danville	1919	5	124	6	21	97	162,870	28,761	56,377	36,329	177,140	183
	1914	4	132	4	25	103	118,345	25,629	30,366	21,691	133,614	163
Decatur	1919	4	234	1	25	208	156,111	32,240	132,469	42,000	295,040	132
	1914	5	192	6	10	176	115,900	10,730	73,447	35,849	158,794	305
East St. Louis	1919	6	134	4	19	111	156,973	36,349	67,791	46,952	203,785	125
	1914	4	110	.....	12	98	142,724	19,002	41,197	34,468	119,435	206
Evanston	1919	6	214	5	20	189	213,543	32,868	160,109	93,690	432,226	245
	1914	6	194	4	22	168	133,914	21,522	96,634	29,107	215,005	124
Galesburg	1919	4	54	3	6	45	40,269	6,816	27,199	30,366	71,513	81
	1914	5	77	3	11	63	48,699	8,344	28,590	15,544	74,212	86
Granite [1]	1919	3	20	4	1	15	26,598	416	9,412	5,823	20,367	.....
Joliet	1919	4	108	1	19	88	126,947	25,395	35,370	32,941	126,090	88
	1914	6	115	1	13	101	104,137	17,496	40,591	30,743	133,622	141
La Salle [1]	1919	3	58	4	4	50	58,256	4,556	30,812	16,356	85,567	33
Moline	1919	6	103	10	5	88	132,379	5,470	64,335	45,208	166,622	.....
	1914	5	89	7	8	74	154,077	5,533	34,427	14,549	84,629	76

[1] Not reported in 1914.

TABLE 9.—STATISTICS FOR CITIES OF 10,000 INHABITANTS OR MORE (CENSUS OF 1920) WITH 3 OR MORE ESTABLISHMENTS: 1919 AND 1914—Continued.

STATE AND CITY.	Census year.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Capital.	Salaries.	Wages.	Cost of materials.	Amount received for work done.	Primary horsepower.
ILLINOIS—Continued.												
Peoria	1919	8	335	12	47	276	$442,099	$55,423	$166,243	$117,471	$504,199	420
	1914	11	335	18	22	295	281,928	14,874	126,857	65,248	316,696	449
Quincy	1919	3	160	.....	19	141	160,092	24,778	76,393	88,018	207,905	163
	1914	3	206	.....	19	187	167,362	21,160	66,187	27,967	179,713	157
Rock Island	1919	5	77	12	5	60	75,665	7,423	38,692	27,216	102,031	.....
	1914	7	102	8	8	86	87,451	6,456	33,687	16,813	85,394	108
Rockford	1919	7	166	4	13	149	86,726	12,245	97,967	48,931	218,442	110
	1914	8	178	9	20	149	62,025	19,124	66,387	25,271	150,418	176
Springfield	1919	8	351	8	30	313	344,393	52,687	186,025	115,658	478,529	386
	1914	8	324	6	21	297	161,650	18,912	126,785	57,255	290,274	315
INDIANA	1919	158	4,328	153	607	3,568	3,629,011	536,857	2,107,064	1,556,505	5,588,748	5,260
	1914	174	4,307	170	387	3,750	2,295,353	382,896	1,520,680	709,337	3,697,112	4,739
Crawfordsville [1]	1919	5	41	6	5	30	30,302	2,300	12,460	10,756	44,706	25
Elkhart	1919	3	52	2	7	43	49,954	7,340	19,267	16,003	71,306	65
	1914	3	67	1	12	54	51,600	10,780	22,200	18,985	53,249	48
Evansville	1919	8	377	3	31	343	284,233	40,002	154,669	77,597	362,386	342
	1814	6	370	2	31	337	240,983	30,459	109,419	51,741	271,955	285
Fort Wayne	1919	7	202	4	16	182	211,441	18,984	124,132	215,893	426,383	9
	1914	3	194	3	18	173	70,987	13,769	65,568	20,171	134,838	205
Gary [1]	1919	5	97	3	9	85	80,702	14,220	77,322	41,116	163,511	175
Indianapolis	1919	16	1,409	5	206	1,198	1,075,085	284,672	705,702	479,080	1,947,684	970
	1914	26	1,406	12	151	1,243	678,750	171,807	546,013	241,150	1,283,137	1,452
Kokomo	1919	3	77	3	1	73	62,195	785	49,370	27,334	118,913	115
	1914	3	62	3	1	58	20,375	390	16,938	6,623	49,500	45
Logansport	1919	3	116	4	10	102	91,113	12,033	61,409	47,021	154,120	60
	1914	3	109	4	4	101	69,523	2,704	45,231	14,156	97,420	146
Marion	1919	4	95	5	11	79	84,666	12,335	44,233	24,960	129,412	.....
	1914	4	91	5	6	80	62,537	4,210	35,216	11,428	74,204	76
Muncie	1919	3	108	2	12	94	82,268	12,428	76,444	38,601	166,851	142
	1914	3	89	2	7	80	59,875	5,740	34,915	9,725	83,655	71
Richmond [1]	1919	4	48	3	4	41	21,593	4,160	22,656	25,916	64,621	40
South Bend	1919	4	146	1	8	137	159,829	14,231	88,477	53,292	224,814	100
	1914	8	139	4	20	115	101,517	16,781	67,405	43,777	169,118	351
Terre Haute	1919	5	140	3	23	114	240,766	30,393	82,048	60,363	196,625	394
	1914	4	253	1	41	211	165,521	45,924	72,690	48,207	257,982	248
Vincennes	1919	3	79	4	3	72	74,500	2,973	29,068	14,485	78,200	170
	1914	3	74	4	2	68	39,334	936	22,787	8,801	65,003	57
IOWA	1919	120	2,466	137	255	2,074	2,569,074	357,951	1,372,508	901,410	3,904,658	3,168
	1914	176	2,883	186	179	2,518	1,784,871	180,634	1,150,519	587,627	2,882,005	3,873
Burlington	1919	3	64	6	6	52	57,453	7,006	31,347	23,674	88,435	97
	1914	4	90	7	7	76	29,549	7,090	32,408	11,006	74,407	76
Cedar Rapids	1919	5	171	2	19	150	143,302	25,001	108,671	54,732	308,510	165
	1914	7	210	7	18	185	123,662	17,616	94,568	45,452	237,771	292
Davenport	1919	6	175	6	15	154	160,386	24,294	105,491	74,875	291,038	105
	1914	7	171	3	13	155	55,960	17,766	62,343	18,849	162,384	159
Des Moines	1919	11	418	11	49	358	407,134	70,120	236,846	152,720	692,639	380
	1914	12	392	10	19	363	191,790	24,436	197,049	86,187	433,783	486
Dubuque	1919	3	73	5	10	58	102,536	16,920	32,397	35,448	104,171	68
	1914	6	79	5	4	70	63,478	2,756	33,319	20,559	70,873	110
Sioux City	1919	6	284	2	52	230	361,838	89,993	192,189	86,810	573,694	295
	1914	8	276	6	24	246	197,650	27,633	124,289	43,932	293,530	318
KANSAS	1919	136	2,270	165	146	1,959	1,982,927	191,778	1,280,845	912,059	3,358,336	2,785
	1914	150	1,853	180	66	1,607	1,181,164	59,707	683,703	325,076	1,695,799	2,664
Fort Scott [1]	1919	3	25	2	.....	23	32,417	.....	20,107	8,545	50,813	24
Hutchinson	1919	6	130	9	9	121	145,507	10,480	77,590	38,436	203,106	49
	1914	5	123	7	4	112	98,985	3,760	40,989	19,771	110,262	206
Kansas City	1919	6	146	11	14	121	134,139	16,122	56,416	92,212	236,404	50
	1914	7	97	8	2	87	47,400	396	42,331	18,376	87,337	151
Leavenworth [1]	1919	3	107	5	6	96	101,450	5,930	60,380	36,221	120,000	105
Parsons	1919	4	57	5	2	50	54,800	1,560	36,351	13,283	73,833	162
	1914	3	46	4	4	38	40,567	2,080	13,106	6,744	37,993	48
Pittsburg	1919	4	36	6	.....	30	16,351	.....	20,620	11,257	45,382	10
	1914	3	35	5	.....	30	15,400	.....	14,100	4,877	37,500	66
Salina	1919	4	63	6	.....	57	77,413	.....	39,193	37,470	105,285	22
	1914	3	46	4	1	41	22,780	416	20,221	15,442	51,100	54
Topeka	1919	6	232	4	34	194	136,732	43,798	109,440	56,405	319,790	175
	1914	10	206	10	11	185	96,260	9,938	78,049	39,629	184,517	226
Wichita	1919	7	409	9	33	367	293,089	63,520	287,426	149,292	692,973	180
	1914	8	295	9	21	265	211,465	22,679	132,420	52,089	315,498	291
KENTUCKY	1919	63	2,591	53	244	2,294	1,088,280	236,126	1,183,377	789,000	2,905,346	6,762
	1914	75	2,086	54	159	1,873	1,116,867	145,637	698,533	300,532	1,665,979	2,655
Lexington	1919	3	288	.....	37	251	277,181	40,123	156,426	90,139	347,011	313
	1914	6	277	6	19	252	125,282	16,150	97,593	44,793	199,672	376
Louisville	1919	20	1,245	13	107	1,125	734,733	152,075	560,210	380,590	1,353,369	1,224
	1914	20	808	9	83	806	469,915	83,167	325,388	138,767	775,986	967
Owensboro	1919	3	61	.....	7	54	62,706	7,653	25,242	17,308	62,743	118
	1914	3	56	1	3	52	59,889	3,800	15,685	5,937	35,857	108

1. Not reported in 1914.

TABLE 9.—STATISTICS FOR CITIES OF 10,000 INHABITANTS OR MORE (CENSUS OF 1920) WITH 3 OR MORE ESTABLISHMENTS: 1919 AND 1914—Continued.

STATE AND CITY.	Census year.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Capital.	Salaries.	Wages.	Cost of materials.	Amount received for work done.	Primary horsepower.
LOUISIANA	1919	24	1,837	17	215	1,605	$1,449,125	$329,437	$788,575	$485,213	$2,349,774	1,778
	1914	28	1,369	24	102	1,2[illegible]3	1,102,216	114,323	437,252	231,637	1,190,148	1,197
New Orleans	1919	9	1,246	1	149	1,096	800,365	216,771	506,219	309,238	1,441,427	1,125
	1914	9	849	8	42	799	582,875	53,438	265,833	136,085	689,747	721
MAINE	1919	81	1,144	81	70	993	1,121,566	80,482	607,083	412,828	1,514,854	1,577
	1914	92	1,097	101	66	930	685,304	53,956	380,663	182,477	939,021	1,741
Auburn	1919	4	31	3	3	25	36,004	2,100	17,511	9,241	35,178	50
	1914	6	68	10	4	54	36,053	2,912	23,884	11,433	59,014	89
Augusta	1919	4	29	6	1	22	16,767	1,560	15,517	12,917	45,725	15
	1914	3	36	3	1	32	20,483	1,590	15,872	9,630	36,028	53
Bangor	1919	4	133	2	16	115	93,161	16,624	63,410	76,962	177,057	73
	1914	5	102	2	16	84	61,585	13,827	29,855	32,670	86,172	166
Lewiston	1919	4	39	4	.....	35	49,930	.....	30,476	26,598	80,116	105
	1914	4	41	5	.....	36	13,600	.....	18,567	6,565	33,611	98
Portland	1919	10	413	10	34	369	455,418	42,152	199,491	101,869	523,398	219
	1914	11	335	11	17	307	246,084	14,527	131,388	38,773	323,559	436
MARYLAND	1919	46	1,888	39	230	1,619	1,519,051	286,507	968,450	690,733	2,640,686	2,341
	1914	54	1,921	62	144	1,715	1,161,371	104,175	593,792	259,456	1,391,902	2,211
Baltimore	1919	30	1,540	22	204	1,314	1,158,852	258,309	806,581	565,363	2,220,206	1,751
	1914	25	1,420	25	120	1,275	827,250	84,923	437,699	176,179	1,019,230	1,561
Cumberland	1919	4	152	2	13	137	206,093	16,406	87,381	59,789	208,220	130
	1914	4	145	2	8	135	157,574	7,862	46,810	21,194	117,331	121
MASSACHUSETTS	1919	340	7,960	330	809	6,821	7,266,319	1,166,026	5,285,153	2,484,350	12,864,279	11,502
	1914	391	8,861	404	686	7,771	4,695,798	713,460	3,721,409	1,391,900	8,661,830	11,382
Arlington[1]	1919	3	42	2	3	37	35,166	2,584	24,850	13,239	71,464	50
Attleboro	1919	3	17	3	1	13	15,085	600	11,114	4,564	27,911	.....
	1914	4	48	5	3	40	28,361	1,544	18,904	5,0[illegible]1	36,904	93
Beverly	1919	3	59	1	14	44	50,858	19,[illegible]82	30,563	8,059	95,304	.....
	1914	4	80	3	11	66	27,943	10,660	30,175	10,033	10,840	60
Boston	1919	59	1,929	51	230	1,698	1,847,187	397,961	1,309,385	651,767	3,495,010	2,454
	1914	55	2,358	42	189	2,127	1,108,103	243,501	941,278	363,223	2,297,350	2,789
Brockton	1919	3	160	3	25	132	126,384	30,827	87,600	37,513	225,811	125
	1914	6	165	10	15	110	120,999	14,268	81,475	18,825	160,609	195
Brookline[1]	1919	4	137	5	14	118	168,304	18,868	84,224	25,943	210,714	65
Cambridge	1919	8	483	5	74	404	536,590	105,774	310,274	129,248	772,688	617
	1914	9	542	6	88	448	36,717	90,811	22[illegible],900	66,962	563,183	585
Chicopee	1919	4	28	5	.....	23	25,850	.....	25,080	11,566	49,087	60
	1914	3	30	4	.....	26	16,916	.....	10,715	5,8[illegible]3	28,175	65
Clinton	1919	3	11	3	.....	8	9,980	.....	5,956	5,[illegible]00	20,897	28
Everett	1919	3	73	1	7	65	36,512	17,917	49,3[illegible]0	22,235	123,313	95
	1914	3	87	2	9	76	31,782	12,122	27,603	15,009	82,352	72
Fall River	1919	13	271	15	16	240	353,018	18,144	207,857	129,446	492,060	561
	1914	13	278	16	12	250	263,308	10,251	137,099	63,111	302,077	531
Fitchburg	1919	4	79	7	4	68	51,500	2,730	51,404	27,734	108,225	85
	1914	5	93	7	3	83	37,198	1,024	36,529	12,851	68,252	111
Haverhill	1919	16	183	23	2	158	113,387	735	117,464	45,312	248,255	215
	1914	16	205	25	9	171	65,050	7,[illegible]5	82,007	32,192	180,000	315
Lawrence	1919	9	135	11	3	121	104,402	3,520	105,914	49,342	208,598	97
	1914	11	144	13	8	123	64,900	6,620	58,504	23,535	132,377	203
Lowell	1919	9	208	13	5	190	203,089	5,452	149,309	75,1[illegible]2	31[illegible],322	140
	1914	9	233	10	6	217	66,955	4,766	94,742	33,810	199,347	328
Lynn	1919	13	375	13	42	320	320,231	31,222	228,080	108,039	531,101	321
	1914	16	399	16	35	348	257,228	26,782	151,526	44,967	353,038	443
Malden	1919	3	136	1	14	121	147,027	16,957	101,575	30,854	216,977	105
	1914	4	139	3	14	122	42,519	13,174	54,600	26,299	119,937	170
Methuen	1919	3	48	1	3	44	41,550	4,306	31,941	14,457	69,910	55
	1914	3	56	1	4	51	14,613	2,832	22,834	4,167	36,651	56
New Bedford	1919	14	310	14	20	276	311,053	50,814	229,030	114,629	542,893	378
	1914	13	257	14	14	229	142,976	11,819	126,809	47,846	294,490	559
Newburyport	1919	3	58	1	6	51	88,814	4,337	40,397	14,616	79,469	5
	1914	5	47	5	4	38	17,310	2,662	17,390	8,285	41,980	91
North Adams	1919	3	68	3	2	63	47,373	1,081	44,325	29,666	91,949	51
	1914	4	75	5	5	65	41,103	4,836	29,340	11,210	62,366	105
Northampton	1919	3	60	1	9	50	34,158	11,003	35,307	15,931	72,940	.....
	1914	4	57	4	.....	53	16,018	.....	23,390	7,320	50,734	172
Salem	1919	4	155	4	26	125	178,830	40,044	98,228	35,426	262,305	125
	1914	5	166	4	10	152	62,298	13,345	82,714	22,535	176,825	148
Somerville	1919	8	184	6	22	156	114,972	25,453	145,804	53,733	301,745	185
	1914	5	75	5	4	66	19,916	7,252	40,894	19,908	96,781	122
Southbridge[1]	1919	3	28	3	.....	25	32,500	.....	19,944	10,485	43,318	15
Springfield	1919	12	354	7	46	301	344,855	75,011	236,241	99,305	575,754	360
	1914	13	414	9	47	358	278,335	48,043	182,159	57,299	421,202	313
Taunton	1919	3	61	2	6	53	77,267	7,588	46,481	23,491	99,840	90
	1914	5	108	8	5	95	58,325	3,701	47,319	27,962	103,066	169
Watertown	1919	3	190	2	9	179	117,756	13,704	142,244	53,459	295,758	216
	1914	4	283	2	9	272	87,091	7,890	147,265	44,829	270,686	127
Worcester	1919	11	401	8	56	337	441,813	72,091	242,279	120,894	620,680	428
	1914	13	387	10	20	357	174,255	21,478	144,116	59,656	316,215	378

[1] Not reported in 1914.

TABLE 9.—STATISTICS FOR CITIES OF 10,000 INHABITANTS OR MORE (CENSUS OF 1920) WITH 3 OR MORE ESTABLISHMENTS: 1919 AND 1914—Continued.

STATE AND CITY.	Census year.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Capital.	Salaries.	Wages.	Cost of materials.	Amount received for work done.	Primary horsepower.
MICHIGAN	1919	197	5,746	218	615	4,913	$5,421,984	$935,955	$3,789,179	$2,192,476	$9,416,373	7,150
	1914	234	5,637	270	465	4,902	3,172,343	458,146	2,161,118	928,502	5,115,286	6,457
Ann Arbor	1919	3	91	7	.....	84	109,925	.....	46,508	40,239	127,780	75
	1914	5	84	9	5	70	65,273	2,056	26,651	23,922	70,380	137
Battle Creek	1919	4	113	4	11	98	117,504	11,813	62,177	47,634	139,463	47
	1914	4	137	5	5	127	69,637	7,020	49,337	21,477	101,949	78
Benton Harbor [1]	1919	3	62	7	.....	55	38,500	.....	38,604	29,835	97,673	33
Detroit	1919	56	2,924	54	404	2,466	2,861,724	665,476	2,207,595	1,206,390	5,583,941	2,432
	1914	46	2,662	43	265	2,354	1,436,227	286,126	1,153,957	432,854	2,623,299	2,782
Flint [1]	1919	5	220	5	30	185	163,435	40,255	163,383	85,787	322,905	100
	1919	7	437	6	44	387	359,528	83,835	225,229	123,459	637,625	477
Grand Rapids	1914	7	549	3	89	457	355,485	81,052	196,663	68,322	529,858	933
Jackson	1919	4	78	4	7	67	49,472	9,788	61,125	39,438	150,976	70
	1914	4	92	3	7	82	44,347	5,855	37,210	14,663	75,510	163
Kalamazoo	1919	3	193	2	17	174	277,098	18,269	114,218	64,410	272,267	135
	1914	4	203	7	3	193	183,904	4,160	86,410	55,853	175,355	178
Lansing	1919	4	147	5	9	133	144,869	16,970	104,937	46,748	237,509	25
	1914	11	141	14	7	120	57,077	4,274	53,459	28,417	119,244	180
Muskegon	1919	4	91	3	8	80	89,125	9,748	51,684	39,450	121,165	25
	1914	3	69	2	9	58	20,931	7,816	17,623	15,690	46,019	65
Port Huron	1919	3	134	2	9	123	120,575	13,128	62,544	43,084	158,261	115
	1914	3	112	2	8	102	73,109	4,280	36,398	17,934	87,232	120
Saginaw	1919	3	166	3	19	144	102,078	21,103	98,024	49,632	215,033	227
	1914	5	164	7	14	143	100,008	10,028	52,650	26,523	135,695	156
Sault Ste. Marie	1919	3	88	1	20	67	125,349	21,706	26,495	24,384	93,958	65
MINNESOTA	1919	156	3,818	156	385	3,277	3,967,932	534,725	2,915,506	1,437,708	6,087,088	4,766
	1914	188	4,024	203	327	3,494	2,708,038	332,555	1,640,388	855,443	4,100,464	4,234
Duluth	1919	8	326	5	65	256	368,126	93,057	158,946	106,029	600,059	.....
	1914	15	423	12	57	354	425,348	57,894	173,209	110,819	480,882	371
Minneapolis	1919	50	1,688	50	164	1,474	1,828,639	208,071	1,205,065	652,771	2,858,009	1,697
	1914	50	1,614	54	129	1,431	966,386	142,893	727,840	347,243	1,743,943	1,667
St. Paul	1919	27	972	24	105	843	879,758	143,250	585,586	314,679	1,414,765	1,089
	1914	23	1,079	19	96	964	677,216	96,516	437,282	235,119	1,036,597	927
MISSISSIPPI	1919	23	712	20	58	634	527,254	77,848	319,905	286,102	946,670	1,816
	1914	27	688	32	49	607	347,909	53,270	214,578	122,244	540,209	680
Jackson	1919	3	119	1	17	101	89,101	24,195	41,952	33,323	106,264	100
	1914	3	84	4	8	72	41,500	13,166	27,765	7,985	69,957	85
MISSOURI	1919	165	6,839	112	730	5,997	7,321,472	934,688	3,909,453	2,544,213	9,438,493	8,243
	1914	177	6,757	144	714	5,899	4,332,735	725,766	2,609,155	1,349,790	6,316,206	7,941
Hannibal [1]	1919	3	68	3	12	53	73,512	12,688	23,917	41,940	85,910	40
Joplin	1919	5	158	8	13	137	128,566	14,956	69,621	38,426	166,186	95
	1914	6	140	3	16	121	106,185	18,213	45,893	19,449	111,355	178
Kansas City	1919	32	2,347	15	256	2,076	2,816,305	269,112	1,499,853	816,764	3,534,116	2,715
	1914	35	2,160	19	352	1,789	1,378,004	361,210	855,626	476,574	2,217,291	2,886
St. Joseph	1919	5	286	2	37	247	257,584	69,019	161,165	113,924	442,547	235
	1914	6	324	4	38	282	157,185	31,902	109,067	20,392	281,854	286
St. Louis	1919	51	2,799	20	322	2,457	2,882,764	431,167	1,597,258	1,095,458	3,791,306	3,214
	1914	42	2,800	19	210	2,571	1,755,148	205,207	1,192,880	608,706	2,589,167	2,764
Springfield	1919	3	167	.....	19	148	169,959	31,111	75,291	42,599	190,230	177
	1914	5	210	4	17	189	137,345	18,370	64,901	30,724	175,499	118
MONTANA	1919	49	1,092	34	87	971	1,373,349	163,891	839,771	473,189	1,894,356	1,463
	1914	42	920	37	64	819	954,412	88,745	599,489	226,350	1,266,552	999
Butte	1919	4	240	.....	25	215	408,934	49,498	208,521	78,190	441,756	422
	1914	4	242	.....	16	226	365,518	25,805	172,979	53,205	327,148	271
Great Falls	1919	3	180	3	13	164	181,870	27,382	131,847	81,454	297,305	138
	1914	3	127	2	10	115	64,766	13,660	83,494	36,725	195,617	89
NEBRASKA	1919	69	1,710	73	166	1,471	1,906,483	324,634	979,217	646,759	2,823,234	1,942
	1914	74	1,490	85	102	1,303	995,413	133,644	613,189	372,039	1,517,924	1,779
Hastings [1]	1919	3	45	3	3	39	30,554	10,858	24,013	23,184	74,028	55
Lincoln	1919	6	304	6	41	257	223,672	82,980	117,950	105,754	488,997	262
	1914	6	239	5	20	214	122,880	26,978	100,242	67,452	253,071	167
Omaha	1919	20	790	15	75	700	1,029,032	172,917	533,890	293,571	1,421,239	1,030
	1914	19	670	15	52	603	436,995	77,445	310,015	178,666	725,221	804
NEVADA	1919	13	169	12	9	148	218,366	15,880	142,285	85,588	340,036	223
	1914	12	150	13	13	124	191,392	17,410	88,054	40,374	216,193	247
Reno [1]	1919	4	79	4	5	70	130,547	9,436	66,495	37,348	169,005	99

[1] Not reported in 1914.

TABLE 9.—STATISTICS FOR CITIES OF 10,000 INHABITANTS OR MORE (CENSUS OF 1920) WITH 3 OR MORE ESTABLISHMENTS: 1919 AND 1914—Continued.

STATE AND CITY.	Census year.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Capital.	Salaries.	Wages.	Cost of materials.	Amount received for work done.	Primary horsepower.
NEW HAMPSHIRE	1919	61	708	71	21	616	$380,224	$21,703	$486,877	$254,386	$968,856	1,302
	1914	74	864	86	18	760	440,499	13,291	324,754	132,476	728,733	1,269
Concord	1919	3	101	3	6	92	18,700	9,060	52,183	28,926	115,420	110
	1914	5	118	6	4	108	44,410	4,966	43,800	12,859	100,967	135
Dover	1919	3	33	5	.....	28	7,125	.....	16,408	7,751	36,122	98
	1914	4	30	6	.....	24	11,905	.....	8,218	4,568	18,292	46
Keene	1919	3	42	4	2	36	20,904	845	24,214	14,263	54,971	57
	1914	3	54	4	2	48	18,087	915	18,547	4,035	35,414	55
Manchester	1919	9	130	8	5	117	86,121	3,892	109,584	48,501	222,681	217
	1914	13	176	13	4	159	83,287	2,748	83,820	31,206	170,053	251
Nashua	1919	6	70	8	.....	62	40,050	.....	48,190	23,314	104,747	158
	1914	9	86	15	2	69	27,185	1,024	29,295	16,326	77,178	161
Portsmouth	1919	6	76	8	2	66	37,555	1,176	43,815	23,442	102,734	162
	1914	5	58	6	.....	52	29,700	.....	19,739	7,708	44,123	82
NEW JERSEY	1919	131	4,061	110	370	3,581	4,632,446	669,273	2,863,462	1,392,522	7,091,621	6,257
	1914	142	4,024	124	258	3,642	2,876,920	289,618	1,648,758	655,556	3,590,739	5,103
Asbury Park	1919	5	84	5	2	77	113,452	2,836	46,794	20,190	125,047	122
	1914	3	47	5	.....	42	16,575	.....	15,041	4,475	28,202	59
Atlantic City	1919	5	111	3	3	105	111,196	2,000	81,251	45,992	198,686	73
	1914	5	83	3	10	70	82,803	7,022	27,832	8,535	68,768	154
Camden	1919	6	101	5	4	92	106,561	8,122	73,473	27,640	167,923	139
	1914	6	132	4	11	117	73,135	11,412	45,515	17,803	114,923	150
Hoboken	1919	5	82	4	13	65	85,876	20,287	57,842	43,012	193,983	131
	1914	3	122	1	7	114	106,286	10,191	60,589	33,235	151,834	185
Jersey City	1919	15	936	8	89	839	1,209,143	204,420	701,875	382,849	1,838,979	2,020
	1914	16	804	15	47	742	700,580	86,821	347,612	142,607	788,328	1,168
Newark	1919	16	677	9	100	568	765,054	130,949	398,514	152,083	1,013,920	962
	1914	18	646	10	48	588	466,705	49,631	277,612	107,069	632,286	815
Orange	1919	3	108	1	8	99	104,042	16,278	84,154	37,518	231,273	176
	1914	3	126	1	8	117	54,490	5,048	64,093	19,113	110,265	122
Passaic	1919	6	154	7	12	135	132,106	20,466	113,510	40,086	236,751	191
	1914	4	227	4	8	215	115,510	5,795	83,773	15,016	117,638	102
Paterson	1919	6	221	2	24	195	327,552	61,240	172,781	69,900	421,289	322
	1914	12	228	7	21	200	133,598	24,016	92,079	58,813	219,279	400
Plainfield	1919	4	54	2	3	49	117,277	3,344	42,343	14,156	75,040	114
	1914	3	66	2	6	58	41,640	4,162	23,920	8,860	44,810	95
Trenton	1919	4	215	5	18	192	259,838	21,907	129,450	70,512	303,032	190
	1914	5	232	4	19	209	210,249	21,169	81,436	42,469	185,169	242
NEW MEXICO	1919	16	326	15	19	292	332,123	26,110	171,506	105,609	432,279	345
	1914	15	274	14	20	240	205,065	29,444	104,732	49,719	280,373	396
Albuquerque[1]	1919	3	129	1	12	116	162,571	18,049	64,727	32,385	169,866	142
NEW YORK	1919	535	13,757	495	1,264	21,112	15,758,753	2,271,163	9,600,451	5,622,388	24,627,441	11,998
	1914	614	15,489	638	1,100	13,751	10,354,297	1,135,867	6,062,092	2,821,811	14,304,904	19,288
Albany	1919	9	279	3	41	235	386,206	51,574	143,177	100,003	425,850	357
	1914	15	353	9	36	308	269,605	45,291	136,387	61,950	354,047	428
Amsterdam	1919	5	58	12	.....	46	64,975	.....	31,281	33,426	94,064	77
	1914	6	60	9	1	50	34,508	260	25,615	8,533	70,640	139
Auburn	1919	7	100	11	.....	89	90,953	.....	55,290	42,045	137,827	13
	1914	8	118	12	3	103	62,450	2,040	36,757	22,080	98,243	161
Binghamton	1919	4	155	5	7	143	79,229	81,242	83,927	45,546	187,830	101
	1914	7	161	8	8	145	96,005	10,178	60,627	18,780	129,911	125
Buffalo	1919	26	1,399	18	191	1,190	1,684,748	222,701	808,410	392,995	1,993,151	1,874
	1914	29	1,605	25	167	1,413	1,292,704	170,520	660,994	265,314	1,532,612	1,666
Elmira	1919	4	156	3	18	135	142,598	20,978	71,441	44,381	166,282	99
	1914	4	137	6	7	124	115,117	4,425	45,009	26,862	105,001	108
Gloversville	1919	4	888	6	1	81	51,081	624	65,381	26,942	135,384	130
	1914	8	74	10	1	63	33,479	468	33,039	18,394	72,356	247
Hudson[1]	1919	3	31	4	.....	27	22,250	.....	19,246	14,934	47,402	33
Ithaca	1919	4	122	3	1	118	111,145	3,009	77,276	29,980	143,204	72
	1914	5	131	4	4	123	103,640	2,995	50,999	16,281	110,692	95
Jamestown	1919	4	87	6	5	76	142,600	5,634	48,485	24,495	723,889	114
	1914	7	112	13	7	92	88,046	8,433	46,212	13,347	104,783	156
Johnstown	1919	3	14	4	.....	10	5,776	.....	9,562	6,610	22,882	32
	1914	4	20	7	.....	13	12,169	.....	5,657	5,369	21,327	75
Kingston	1919	3	35	3	8	24	18,150	6,782	17,348	6,275	31,704	41
	1914	5	43	5	2	36	33,735	720	14,252	5,557	29,650	119
Little Falls	1919	3	26	4	.....	22	44,139	.....	10,128	12,517	45,092	24
	1914	3	23	5	.....	18	20,550	.....	9,300	4,190	26,261	5
Lockport	1919	3	51	2	8	41	69,759	7,567	25,879	13,895	60,685	74
	1914	3	41	2	5	34	44,965	4,040	11,180	4,958	30,275	69
Middletown	1919	4	41	4	4	33	18,690	3,912	18,880	18,459	54,389	83
	1914	5	39	5	3	31	28,262	1,424	13,353	9,157	35,264	83
Newburgh[1]	1919	6	61	10	1	50	45,647	750	43,910	29,261	90,229	60

[1] Not reported in 1914.

TABLE 9.—STATISTICS FOR CITIES OF 10,000 INHABITANTS OR MORE (CENSUS OF 1920) WITH 3 OR MORE ESTABLISHMENTS: 1919 AND 1914—Continued.

STATE AND CITY.	Census year.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Capital.	Salaries.	Wages.	Cost of materials.	Amount received for work done.	Primary horsepower.
NEW YORK—Continued.												
New York	1919	170	7,016	108	675	6,233	$7,330,032	$1,462,508	$5,832,782	$3,419,473	$14,610,971	11,336
	1914	149	7,180	118	503	6,559	4,354,648	597,732	2,936,220	1,427,651	6,897,649	8,730
Manhattan borough	1919	80	4,101	43	317	3,741	4,655,878	840,855	3,551,388	1,928,934	8,922,799	6,182
	1914	68	4,395	46	330	4,019	2,454,496	378,938	1,766,770	877,735	4,324,720	5,381
Bronx borough	1919	16	427	9	49	369	422,846	82,519	396,258	195,841	909,828	992
	1914	12	207	10	16	181	160,550	12,628	100,173	35,205	255,119	318
Brooklyn borough	1919	63	2,230	48	279	1,903	2,053,199	487,685	1,716,685	1,154,116	4,339,774	3,865
	1914	62	2,376	58	147	2,171	1,651,551	181,803	995,050	476,458	2,128,635	2,746
Queens borough	1919	11	258	8	30	220	198,109	51,447	168,451	140,582	438,570	297
	1914	7	202	4	10	188	88,051	24,363	74,227	38,253	189,175	285
Niagara Falls [1]	1919	3	.....	.....	32	.....	192,910	43,821	81,720	34,627	218,110	130
Olean	1919	3	56	4	6	46	66,539	8,516	31,526	14,583	71,368	50
	1914	3	51	6	9	36	44,676	7,656	13,758	8,885	42,972	43
Oswego	1919	4	47	6	2	39	40,766	757	23,543	15,927	75,702	40
	1914	6	49	7	1	41	28,147	1,560	17,160	6,457	48,032	47
Plattsburg [1]	1919	3	36	3	2	31	28,641	2,912	16,335	11,507	52,263	50
Poughkeepsie	1919	5	64	5	4	55	49,555	4,192	41,736	31,858	103,656	135
	1914	10	140	11	4	125	64,862	3,432	71,972	18,967	142,463	105
Rensselaer	1919	3	22	3	1	18	32,215	1,000	11,362	6,905	30,136	55
	1914	4	26	4	.....	22	24,005	.....	9,320	5,379	27,485	60
Rochester	1919	15	758	8	102	648	1,107,290	141,505	411,207	257,492	1,111,070	1,020
	1914	18	1,460	9	120	1,331	841,957	101,157	587,716	304,654	1,310,458	1,565
Rome	1919	3	43	6	1	36	31,893	2,080	25,271	16,134	54,498	52
	1914	6	48	8	2	38	33,937	2,080	14,254	7,624	39,805	76
Schenectady	1919	8	107	9	5	93	133,602	1,502	55,872	44,694	132,040	249
	1914	7	95	7	.....	88	175,229	.....	41,593	21,571	83,154	226
Syracuse	1919	21	563	22	475	66	856,720	42,038	295,403	147,628	705,745	1,111
	1914	27	544	29	40	475	480,467	29,658	217,778	93,404	477,429	639
Troy	1919	8	254	10	16	228	128,650	27,191	163,752	99,387	348,126	300
	1914	16	322	19	20	283	178,296	14,548	125,367	53,602	277,527	453
Utica	1919	17	222	19	39	164	782,418	20,500	114,802	60,401	283,998	892
	1914	15	217	20	16	181	173,516	11,873	84,790	26,948	216,517	253
Yonkers [1]	1919	3	93	2	11	80	67,398	20,840	68,003	42,344	185,765	145
NORTH CAROLINA	1919	56	1,631	53	145	1,433	1,161,269	206,632	755,186	462,040	2,252,100	1,354
	1914	59	1,335	56	114	1,165	798,650	100,692	361,497	240,947	1,026,358	1,359
Asheville	1919	3	222	7	25	190	170,931	39,129	74,351	35,459	266,721	105
	1914	4	186	4	10	172	93,800	10,360	57,702	27,462	136,810	90
Charlotte	1919	3	4	271	34	239	304,186	54,485	112,064	108,897	327,276	222
	1914	6	226	5	40	181	211,203	34,780	55,684	77,051	219,555	259
Greensboro [1]	1919	3	146	2	25	119	73,193	28,732	69,750	49,645	198,703	155
New Bern [1]	1919	5	44	6	5	33	24,050	7,200	21,590	6,020	118,635	27
Raleigh	1919	3	132	3	11	118	51,277	12,609	55,677	37,612	168,206	77
	1914	3	115	.....	9	106	48,716	9,470	39,944	22,987	94,497	77
Rocky Mount [1]	1919	3	70	3	2	65	40,979	5,880	42,020	19,465	98,641	20
NORTH DAKOTA	1919	29	488	27	35	426	615,070	57,592	277,297	255,235	844,433	506
	1914	30	478	31	38	409	552,458	34,852	207,953	142,804	592,843	725
Fargo	1919	4	112	1	13	98	154,943	20,276	69,556	51,043	223,707	113
	1914	5	122	2	16	104	162,983	15,512	54,636	43,636	153,102	166
Grand Forks	1919	4	115	4	12	99	153,923	15,156	64,557	55,169	182,983	94
	1914	3	126	3	10	113	119,482	8,886	46,530	26,288	120,155	83
OHIO	1919	277	8,316	273	1,003	7,040	8,209,509	1,418,357	4,703,668	2,874,537	12,528,344	12,107
	1914	206	8,434	309	860	7,265	5,066,162	839,455	3,157,194	1,361,546	7,822,491	10,909
Akron	1919	17	382	24	47	311	641,675	52,868	264,783	176,587	764,744	599
	1914	10	232	12	15	205	168,433	12,816	97,280	41,777	224,672	264
Alliance [1]	1919	3	46	2	5	39	50,580	7,260	25,761	16,575	63,600	55
Ashtabula	1919	3	54	2	3	49	59,943	5,200	34,513	20,111	82,821	52
	1914	3	57	1	3	53	67,959	2,739	22,912	13,317	43,936	92
Canton	1919	5	317	4	30	283	212,608	42,681	118,270	75,664	377,212	364
	1914	5	183	7	29	147	155,728	24,873	63,593	22,718	194,878	206
Cincinnati	1919	17	1,320	11	202	1,107	1,363,095	271,644	621,588	310,683	1,790,873	2,054
	1914	25	1,712	19	199	1,494	794,293	194,568	639,736	261,111	1,553,889	2,011
Cleveland	1919	43	1,887	35	293	1,559	1,624,832	453,520	1,213,916	919,918	3,386,129	2,284
	1914	27	1,818	15	275	1,528	948,720	292,041	703,067	366,600	1,810,406	1,962
Columbus	1919	13	637	12	69	556	693,791	84,057	347,675	200,562	897,779	864
	1914	17	695	15	67	613	465,396	63,076	256,748	81,441	631,896	948
Dayton	1919	10	613	8	79	526	583,581	109,579	369,558	161,183	895,277	826
	1914	7	482	4	47	431	435,723	49,685	181,613	54,651	430,663	694
East Liverpool	1919	3	118	8	5	105	48,000	6,534	43,336	15,200	105,975	47
	1914	3	87	10	.....	77	53,960	.....	33,476	8,411	67,012	46
Elyria [1]	1919	3	62	4	5	53	32,096	7,604	36,319	14,127	82,677	71
Hamilton	1919	4	91	5	7	79	58,134	6,378	48,288	45,268	124,146	108
	1914	4	57	4	7	46	29,318	4,970	18,081	7,214	43,392	59
Lima	1919	3	114	4	8	102	120,446	2,845	68,395	44,304	156,915	135
	1914	3	114	4	11	99	70,715	6,796	41,811	15,559	98,124	180
Lorain [1]	1919	3	93	4	10	79	105,148	17,044	75,410	36,216	165,529	84
Mansfield	1919	4	52	5	.....	47	19,810	.....	26,555	13,730	61,244	61
	1914	3	55	5	1	49	48,111	425	18,986	7,408	43,425	87
Springfield	1919	4	111	3	7	101	117,882	13,440	57,160	28,890	127,361	291
	1914	5	108	4	9	95	72,600	11,876	36,749	14,672	80,456	97

[1] Not reported in 1914.

TABLE 9.—STATISTICS FOR CITIES OF 10,000 INHABITANTS OR MORE (CENSUS OF 1920) WITH 3 OR MORE ESTABLISHMENTS: 1919 AND 1914—Continued.

STATE AND CITY.	Census year.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Capital.	Salaries.	Wages.	Cost of materials.	Amount received for work done.	Primary horsepower.
OHIO—Continued.												
Tiffin	1919	3	41	5	6	30	$18,375	$4,093	$16,930	$15,262	$50,550	50
	1914	3	32	5	1	26	15,539	780	10,352	3,538	27,980	34
Toledo	1919	13	457	9	83	365	401,096	140,272	256,730	141,164	777,640	1,547
	1914	16	499	7	66	426	292,681	68,520	203,344	74,233	565,203	830
Warren	1919	4	78	4	7	67	21,400	10,104	45,715	25,476	101,867	70
	1914	4	63	5	1	57	42,125	1,273	30,681	7,100	70,983	81
Youngstown	1919	4	296	.....	40	256	671,115	45,610	224,147	105,553	472,749	251
	1914	5	274	6	19	249	187,025	16,562	132,205	65,114	286,136	278
OKLAHOMA	1919	99	2,355	117	244	1,994	2,157,041	376,873	1,330,751	875,092	3,561,059	2,191
	1914	101	1,632	115	101	1,416	986,074	100,677	653,320	359,743	1,669,721	1,766
Muskogee	1919	5	167	8	10	149	113,541	20,133	100,616	81,159	253,369	160
	1914	7	148	7	8	133	50,980	8,572	59,545	41,286	152,934	171
Oklahoma City	1919	4	531	2	81	448	638,525	125,978	286,091	151,898	807,936	323
	1914	5	330	7	28	295	199,648	29,518	149,713	64,531	373,912	252
Tulsa	1919	6	293	6	23	264	294,919	37,842	186,946	136,673	513,457	159
	1914	3	38	3	1	34	57,834	1,560	18,868	7,736	50,327	41
OREGON	1919	73	2,253	60	160	2,033	2,117,225	237,322	1,778,645	723,313	3,629,983	2,334
	1914	78	1,969	74	150	1,745	1,669,317	174,382	961,677	385,166	2,146,868	2,338
Eugene City [1]	1919	3	65	3	.....	62	46,462	.....	41,388	10,861	69,131	44
Portland	1919	23	1,426	9	118	1,299	1,273,267	225,490	1,214,017	452,358	2,452,794	1,302
	1914	31	1,320	20	115	1,185	1,155,750	135,241	681,399	259,111	1,489,862	1,514
Salem	1919	3	56	2	4	50	59,902	6,100	29,558	12,915	74,323	73
	1914	3	59	3	4	52	42,575	4,640	24,738	5,154	45,991	111
PENNSYLVANIA	1919	351	9,956	369	1,003	8,584	10,942,553	1,459,390	5,720,792	3,078,721	14,351,068	13,760
	1914	396	11,831	447	974	10,410	8,160,248	884,289	4,236,358	1,848,109	10,225,004	12,602
Allentown	1919	3	70	4	6	60	69,384	6,168	36,608	30,190	81,335	68
	1914	5	86	6	5	75	56,501	3,186	27,079	6,336	69,092	91
Chester [1]	1919	4	109	3	9	97	138,594	13,880	53,610	26,498	120,349	112
Erie	1919	7	233	4	27	202	157,160	52,838	171,067	61,441	358,150	228
	1914	7	219	3	12	204	85,036	10,540	92,911	28,435	177,678	227
Harrisburg	1919	8	353	12	40	301	454,404	46,480	171,547	89,336	431,433	520
	1914	8	363	11	36	316	203,729	29,010	119,222	77,761	281,558	385
Johnstown	1919	4	1	153	14	134	117,123	28,168	71,391	32,422	165,498	109
	1914	3	114	5	6	103	47,420	4,208	39,069	16,487	80,264	99
Lancaster	1919	4	121	3	12	106	146,111	15,519	68,483	25,658	153,261	165
	1914	3	161	3	14	144	139,684	11,899	57,209	10,256	150,159	211
Philadelphia	1919	97	3,491	103	297	3,091	3,721,104	447,980	2,338,433	1,107,887	5,767,846	3,792
	1914	91	4,277	113	330	3,834	2,733,662	278,000	1,603,193	801,356	3,974,099	3,533
Pittsburgh	1919	25	1,692	11	244	1,437	2,108,350	376,488	916,821	564,088	2,545,532	3,573
	1914	25	2,169	11	254	1,904	1,713,036	283,446	854,984	324,777	2,035,245	2,467
Reading	1919	7	121	7	13	111	105,850	20,487	70,993	34,136	172,800	182
	1914	12	175	12	8	155	109,655	6,016	62,266	24,128	135,477	294
Wilkes-Barre	1919	5	167	1	18	148	178,039	27,455	90,902	48,941	218,781	143
	1914	7	195	5	15	175	131,392	13,072	63,242	20,668	143,249	234
Williamsport	1919	6	64	6	2	56	57,500	1,744	23,692	18,681	57,406	120
	1914	7	113	9	4	100	64,080	3,504	33,985	18,234	78,233	136
York	1919	7	138	9	14	115	221,420	17,047	61,030	30,309	154,665	212
	1914	7	143	9	4	130	142,600	2,636	60,643	19,406	136,770	188
RHODE ISLAND	1919	70	1,272	87	150	1,035	1,181,827	201,405	805,303	457,898	2,154,652	2,257
	1914	66	1,402	70	140	1,192	684,194	135,280	544,455	230,604	1,260,942	1,829
Newport	1919	8	156	10	7	139	98,718	8,630	86,019	54,545	195,653	141
	1914	7	127	8	8	111	51,331	6,800	50,088	16,608	84,248	137
Pawtucket	1919	12	170	20	8	142	162,432	9,500	112,402	69,941	278,793	390
	1914	6	185	10	10	165	63,994	6,153	76,958	27,612	151,421	265
Providence	1919	26	786	27	131	628	758,724	178,175	502,817	257,533	1,416,470	1,161
	1914	27	915	25	115	775	503,169	117,860	348,184	156,088	856,110	860
Warwick [1]	1919	4	32	5	.....	27	59,175	.....	17,104	7,683	36,680	104
Woonsocket	1919	6	33	7	1	25	17,610	600	22,922	12,047	64,874	133
	1914	8	64	10	3	51	27,672	1,900	23,992	12,108	64,020	168
SOUTH CAROLINA	1919	28	723	29	69	625	555,911	91,983	316,689	237,036	833,801	654
	1914	23	588	24	47	517	265,692	37,213	146,556	95,898	422,212	604
Charleston	1919	4	172	1	15	156	192,623	23,928	72,368	77,738	215,008	270
	1914	4	166	2	18	146	83,222	11,609	47,689	32,070	120,900	140
Columbia	1919	7	123	4	20	99	64,400	25,949	52,040	44,347	149,783	124
	1914	3	149	2	7	140	53,228	8,900	31,047	22,310	108,678	82
Greenville	1919	3	128	8	18	102	72,938	20,754	41,338	35,749	141,806	53
	1914	3	79	7	8	64	34,016	5,103	20,713	11,046	49,592	115
SOUTH DAKOTA	1919	29	542	29	44	469	841,521	62,908	348,306	252,605	940,179	702
	1914	26	454	29	25	400	352,747	24,559	190,492	112,555	477,474	520
Aberdeen	1919	3	137	2	11	124	258,392	23,370	97,256	54,352	244,193	.....
	1914	3	114	6	10	98	55,644	11,457	42,527	22,843	107,032	88
Sioux Falls	1919	5	107	5	10	92	194,607	10,882	76,045	50,522	209,197	.....
	1914	3	93	4	4	85	79,603	3,128	44,789	28,326	123,147	93

[1] Not reported in 1914.

TABLE 9.—STATISTICS FOR CITIES OF 10,000 INHABITANTS OR MORE (CENSUS OF 1920) WITH 3 OR MORE ESTABLISHMENTS: 1919 AND 1914—Continued.

STATE AND CITY.	Census year.	Number of establishments.	RSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Capital.	Salaries.	Wages.	Cost of materials.	Amount received for work done.	Primary horsepower.
TENNESSEE	1919	59	3,041	51	297	2,693	$2,113,707	$434,931	$1,292,035	$837,634	$3,639,602	3,621
	1914	67	2,898	62	256	2,580	1,558,029	214,819	908,671	437,720	2,296,797	3,107
Chattanooga	1919	5	400	7	348	45	227,970	57,384	201,635	117,803	515,642	278
	1914	6	379	7	26	346	160,349	22,047	121,932	45,338	297,562	273
Knoxville	1919	8	334	8	24	302	206,769	54,049	157,156	142,318	479,793	412
	1914	8	327	8	24	295	105,469	18,042	88,821	72,307	224,389	302
Memphis	1919	7	996	2	90	904	702,746	146,466	450,039	261,217	1,228,590	1,165
	1914	8	1,042	2	67	973	673,517	66,826	402,426	166,931	869,647	1,239
Nashville	1919	7	821	5	94	722	622,777	130,654	294,416	163,879	815,600	862
	1914	6	636	6	100	530	370,115	76,664	163,349	73,943	565,471	497
TEXAS	1919	171	6,321	175	678	5,468	5,582,909	950,709	3,399,532	2,070,297	9,249,915	5,918
	1914	185	5,254	221	428	4,605	3,443,394	485,562	2,117,949	1,071,622	5,521,841	6,063
Amarillo	1919	3	94	3	11	80	111,588	13,697	72,159	32,447	211,208	95
	1914	3	82	.....	9	73	72,173	9,526	45,533	18,603	110,284	85
Austin	1919	5	96	8	3	85	102,945	5,670	52,584	35,537	118,353	193
	1914	4	118	5	5	108	33,653	4,217	41,795	19,223	93,267	104
Beaumont	1919	4	277	.....	38	239	264,512	84,396	136,074	117,327	499,778	.....
	1914	3	167	3	25	139	97,112	32,216	69,245	23,763	238,926	214
Dallas	1919	9	825	4	123	698	567,608	144,350	374,687	167,827	1,170,260	619
	1914	10	637	4	83	550	375,626	109,058	253,621	108,862	755,897	815
El Paso	1919	6	423	2	35	386	412,071	51,347	187,285	103,748	478,786	318
	1914	8	289	6	24	259	237,423	26,673	101,770	63,341	280,046	260
Fort Worth	1919	9	659	12	57	590	480,609	69,723	399,874	182,948	961,597	376
	1914	7	400	6	33	361	334,262	30,788	171,172	53,007	423,867	336
Galveston	1919	3	199	4	31	164	197,125	53,533	99,249	51,557	326,778	120
	1914	3	255	.....	41	214	195,610	55,447	96,811	51,487	308,764	175
Houston	1919	9	731	3	116	612	731,177	198,247	363,736	258,244	1,126,529	625
	1914	8	648	6	83	559	422,509	89,851	266,630	226,024	748,419	640
Paris	1919	3	121	2	11	108	111,431	15,642	73,718	83,983	183,899	88
	1914	3	125	17	5	103	109,500	7,236	42,082	22,866	101,262	135
San Antonio	1919	9	562	2	38	522	422,805	83,462	319,578	178,474	994,452	344
	1914	9	472	4	31	437	312,898	33,270	212,728	73,668	462,348	577
Waco	1919	5	254	5	13	236	196,362	19,658	129,337	71,390	366,037	220
	1914	5	244	6	5	233	73,310	5,950	111,625	47,743	191,398	164
UTAH	1919	27	1,213	20	153	1,040	1,954,869	199,280	767,711	379,339	1,973,166	1,865
	1914	36	1,197	31	96	1,070	1,213,651	108,567	580,473	321,923	1,367,433	1,926
Ogden	1919	5	175	2	25	148	197,975	39,874	111,115	56,187	278,254	343
	1914	8	169	8	13	148	186,283	15,502	82,467	66,502	202,018	239
Salt Lake City	1919	16	801	5	79	717	1,506,538	118,087	547,225	268,251	1,379,035	1,302
	1914	12	846	9	80	757	903,093	89,655	412,938	218,514	958,749	1,400
VERMONT	1919	28	364	32	8	324	253,957	16,531	179,099	97,392	399,668	478
	1914	41	441	49	14	378	233,682	7,628	146,014	63,214	362,041	518
Burlington	1919	4	83	5	.....	78	56,300	.....	47,365	27,822	97,718	79
	1914	5	98	6	4	88	34,017	2,536	36,660	10,270	87,080	76
Rutland	1919	3	33	3	2	28	14,500	1,500	16,254	9,881	40,813	72
	1914	5	56	6	4	46	46,605	1,656	22,189	9,724	48,302	73
VIRGINIA	1919	63	2,674	51	256	2,367	1,724,255	326,067	1,110,703	658,519	3,009,759	1,989
	1914	71	1,965	76	195	1,694	1,055,152	167,266	524,337	285,809	1,453,912	1,918
Lynchburg	1919	4	203	2	20	181	175,204	36,920	90,477	48,992	271,813	178
	1914	3	210	1	18	191	85,085	26,602	58,608	31,836	183,113	109
Newport News [1]	1919	4	175	2	21	152	193,319	28,013	80,474	44,647	198,961	106
	1914											
Norfolk	1919	6	320	4	69	247	311,324	166,741	145,174	72,329	624,147	256
	1914	8	344	7	57	280	316,118	50,549	82,156	44,403	301,480	266
Petersburg	1919	4	92	5	7	80	93,100	5,600	47,939	30,337	105,630	92
	1914	3	61	4	2	55	41,218	1,940	19,086	7,006	44,540	54
Portsmouth	1919	3	73	2	18	53	46,705	22,103	27,858	27,131	96,918	55
	1914	3	69	3	5	61	26,820	4,240	14,740	9,515	45,500	53
Richmond	1919	8	1,048	5	63	980	372,617	70,092	342,732	155,991	787,114	465
	1914	10	559	11	68	480	253,802	47,988	167,856	96,341	429,599	460
Roanoke	1919	5	164	2	22	140	89,114	27,459	96,973	83,279	232,821	196
	1914	6	151	6	8	137	94,852	10,052	46,336	24,123	109,151	188
WASHINGTON	1919	177	4,032	180	313	3,539	3,595,777	515,812	3,387,500	1,359,049	7,336,715	4,932
	1914	192	3,744	205	241	3,298	2,808,858	265,045	1,895,258	655,300	4,251,620	4,022
Aberdeen	1919	4	82	5	5	72	60,211	268,808	1,565,472	18,895	116,112	66
	1914	4	69	7	5	57	25,436	3,036	34,378	12,200	68,784	91
Bellingham	1919	3	104	4	4	96	84,721	5,471	90,103	34,210	175,186	150
	1914	4	80	6	5	69	78,826	3,078	43,239	15,348	81,643	105
Everett	1919	6	138	10	6	122	141,238	6,512	99,257	45,280	207,492	176
	1914	6	107	6	6	95	108,590	8,990	47,939	23,390	107,012	109
Seattle	1919	42	1,619	27	149	1,443	1,349,412	268,808	1,565,472	448,752	3,282,896	1,525
	1914	49	1,545	32	112	1,401	1,141,693	121,003	840,928	258,013	1,837,555	1,241
Spokane	1919	13	543	7	54	482	588,245	93,021	414,930	197,542	972,505	667
	1914	17	585	13	45	527	514,385	59,945	321,255	99,069	745,375	659
Tacoma	1919	25	497	26	41	430	380,936	55,318	402,750	192,407	872,088	480
	1914	17	385	15	20	350	206,389	22,590	198,817	66,079	415,836	383

[1] Not reported in 1914.

TABLE 9.—STATISTICS FOR CITIES OF 10,000 INHABITANTS OR MORE (CENSUS 1920) WITH 3 OR MORE ESTABLISHMENTS: 1919 AND 1914.—Continued.

STATE AND CITY.	Census year.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Capital	Salaries.	Wages.	Cost of materials.	Amount received for work done.	Primary horsepower.
WEST VIRGINIA	1919	44	1,057	50	87	920	$1,175,992	$116,587	$616,267	$327,396	$1,775,349	1,457
	1914	44	929	35	67	827	689,640	61,417	358,301	135,119	785,782	1,305
Charleston	1919	5	154	7	28	119	238,781	31,731	89,704	37,682	219,380	236
	1914	3	115	.....	10	105	41,827	10,216	44,502	15,242	98,613	129
Clarksburg	1919	3	120	1	10	109	192,362	14,348	79,900	27,950	185,966	104
	1914	3	100	1	6	93	140,643	6,833	49,408	11,951	97,500	176
Fairmont	1919	5	95	7	7	81	78,452	6,660	53,581	21,697	111,648	143
	1914	3	81	.....	6	75	76,787	4,870	32,900	8,555	62,748	160
Huntington	1919	4	125	7	5	113	137,651	6,050	79,806	17,168	137,651	135
	1914	4	89	5	7	77	28,650	6,140	34,303	16,650	78,992	92
Parkersburg	1919	3	118	2	9	107	116,143	16,744	57,821	28,797	131,550	116
	1914	3	129	2	10	117	110,741	8,217	45,863	24,505	104,217	100
Wheeling	1919	3	116	.....	11	105	212,613	19,336	76,310	73,980	201,854	297
	1914	3	132	.....	12	120	103,683	12,883	57,759	18,200	127,513	129
WISCONSIN	1919	145	2,529	135	271	2,123	2,633,647	362,073	1,328,275	925,618	3,650,118	4,071
	1914	150	2,645	161	219	2,265	1,794,553	201,026	930,939	525,486	2,353,183	3,175
Beloit	1919	4	58	6	.....	52	86,091	.....	30,867	26,166	70,797	163
	1914	4	57	7	.....	50	53,251	.....	21,412	14,329	44,957	53
Green Bay	1919	3	51	2	5	44	60,954	8,424	20,107	12,144	65,502	139
	1914	3	66	5	7	54	40,394	5,798	21,604	8,597	53,938	78
Kenosha	1919	6	97	10	3	84	53,061	3,730	55,636	42,361	156,599	125
	1914	6	69	8	2	59	29,584	701	23,344	18,871	52,235	122
La Crosse	1919	5	111	3	13	95	133,915	15,555	63,890	35,605	163,113	154
	1914	4	124	1	11	112	64,999	10,008	46,831	18,203	122,734	129
Madison	1919	5	116	7	9	100	80,793	9,400	69,922	38,495	172,441	223
	1914	3	97	5	1	91	115,947	1,140	43,934	21,703	90,724	85
Monotowoc	1919	4	38	4	.....	34	34,725	.....	23,657	13,342	51,431	100
	1914	3	18	6	.....	12	28,950	.....	2,953	3,644	17,495	35
Milwaukee	1919	32	959	20	124	815	851,824	168,688	549,867	308,697	1,420,544	1,353
	1914	33	1,133	24	111	998	592,941	109,602	443,904	222,873	1,012,804	1,422
Racine	1919	5	145	5	20	120	208,470	27,548	75,393	64,380	239,574	317
	1914	4	98	5	11	82	84,190	12,181	35,085	14,063	98,237	108
Superior	1919	3	135	.....	23	112	191,270	39,032	76,057	72,746	244,383	101
	1914	4	158	.....	18	140	194,250	24,005	56,795	31,660	168,719	144
WYOMING	1919	23	412	19	36	357	424,031	45,290	300,815	148,493	763,953	719
	1914	18	212	22	5	185	174,200	6,440	147,728	64,501	238,048	322
Cheyenne	1919	3	108	2	12	94	90,424	15,926	75,280	38,049	205,720	180
	1914	3	69	1	4	64	89,740	5,240	34,426	31,651	87,171	113

[1] Not reported in 1914.

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

POWER.	NUMBER OF ENGINES OR MOTORS. 1919	1914	1909	HORSEPOWER. Amount. 1919	1914	1909	Per cent distribution. 1919	1914	1909
Primary power, total	13,262	10,830	6,928	196,793	174,881	123,477	100.0	100.0	100.0
Owned	3,684	4,902	4,527	147,261	146,817	109,870	74.8	84.0	89.0
Steam [1]	3,461	4,423	4,119	144,194	141,224	105,272	73.2	80.8	85.3
Engines	3,363	(1)	(1)	139,547	(1)	(1)	70.8	.....	.....
Turbines	98	(1)	(1)	4,647	(1)	(1)	2.4	.....	.....
Internal-combustion engines	212	368	379	2,908	4,915	4,073	1.5	2.8	3.3
Water	11	111	29	159	678	525	0.1	0.4	0.4
Water wheels and turbines	7	(1)	(1)	140	(1)	(1)	0.1	.....	.....
Water motors	4	(1)	(1)	19	(1)	(1)	(2)	.....	.....
Rented	9,578	5,928	2,401	49,532	28,064	13,607	25.2	16.0	11.0
Electric	9,578	5,928	2,401	43,887	24,655	11,157	22.3	14.1	9.0
Other	.....	.....	.....	5,645	3,409	2,450	2.9	1.9	2.0
Electric	17,117	12,260	5,693	75,276	44,168	23,916	100.0	100.0	100.0
Rented	9,578	5,928	2,401	43,887	24,655	11,157	58.3	55.8	46.7
Generated by establishments reporting	7,539	6,332	2,092	31,389	19,513	12,759	41.7	44.2	53.3

[1] Not reported separately.

[2] Less than one-tenth of 1 per cent.

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

DIVISION AND STATE.	COAL. Anthracite[1] (tons 2,240 pounds).	COAL. Bituminous (tons 2,000 pounds).	Coke (tons 2,000 pounds)	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
UNITED STATES:						
1919	226,527	1,346,010	22,484	729,444	37,502	2,001,285
1914	212,892	1,212,687	16,161	710,506	(2)	3,786,429
1909	178,640	886,734	14,785	372,586	(2)	2,729,324
Per cent of increase:[3]						
1914-1919	6.4	2.7	39.1	7.9	.....	-47.1
1909-1914	19.2	36.8	9.3	90.7	.....	38.7
NEW ENGLAND:						
1919	13,924	118,266	3,109	14,320	1,318	26,521
1914	20,411	109,883	4,409	576	(2)	43,883
Maine—						
1919	2,562	9,508	342	375	11	1,040
1914	2,846	8,531	.....	48	(2)	4,088
New Hampshire—						
1919	361	7,275	141	42	38	780
1914	796	7,900	244	92	(2)	2,374
Vermont—						
1919	170	3,403	72	2	57	426
1914	360	3,481	104	18	(2)	1,056
Massachusetts—						
1919	6,712	63,883	1,985	4,014	438	8,663
1914	9,100	59,030	3,777	377	(2)	25,777
Rhode Island—						
1919	542	9,675	.....	9,855	16	12,273
1914	1,282	11,723	.....	.....	.....	4,109
Connecticut—						
1919	3,577	24,522	569	32	758	3,330
1914	6,027	18,318	344	41	(2)	6,479
MIDDLE ATLANTIC:						
1919	156,567	162,193	8,042	111	3,761	61,877
1914	166,742	131,051	1,363	1,265	(2)	292,737
New York—						
1919	86,048	68,823	1,272	29	2,158	43,867
1914	80,732	55,150	1,363	538	(2)	87,448
New Jersey—						
1919	29,717	24,028	6,676	55	270	7,402
1914	34,389	8,251	.....	165	(2)	10,410
Pennsylvania—						
1919	40,802	69,342	94	27	1,333	10,608
1914	51,621	67,650	.....	562	(2)	194,879
EAST NORTH CENTRAL:						
1919	32,090	441,162	4,087	587	6,486	218,473
1914	10,809	377,431	1,851	1,475	(2)	884,162
Ohio—						
1919	3,020	97,297	126	.....	1,194	164,574
1914	1,994	57,922	651	116	(2)	742,424
Indiana—						
1919	1,031	59,447	849	30	555	10,299
1914	782	68,095	211	217	(2)	23,565
Illinois—						
1919	2,850	182,475	2,249	542	4,117	28,653
1914	4,305	164,198	667	630	(2)	73,843
Michigan—						
1919	2,279	68,183	739	15	549	11,111
1914	1,777	58,417	318	216	(2)	14,601
Wisconsin—						
1919	22,010	33,760	124	.....	71	3,836
1914	1,951	28,799	4	296	(2)	29,729
WEST NORTH CENTRAL:						
1919	9,245	232,354	1,529	59,434	4,537	259,357
1914	3,201	227,296	919	52,437	(2)	284,359
Minnesota—						
1919	4,322	42,805	1,013	2	399	5,732
1914	2,148	40,549	12	295	(2)	6,786
Iowa—						
1919	2,052	42,198	334	50	2,204	1,069
1914	23	56,924	435	709	(2)	6,481
Missouri—						
1919	104	81,272	175	51,008	822	20,542
1914	660	72,494	357	48,422	(2)	69,329
North Dakota—						
1919	1,755	6,945	.....	67	10	.....
1914	40	9,564	.....	89	(2)	528
South Dakota—						
1919	12	9,000	.....	2	146	403
1914	10	8,141	.....	99	(2)	537
Nebraska—						
1919	385	22,800	.....	8	325	692
1914	320	20,386	115	469	(2)	4,624
Kansas—						
1919	15	27,334	7	8,297	631	230,919
1914	.....	19,238	.....	2,854	(2)	196,074
SOUTH ATLANTIC:						
1919	4,151	107,655	1,610	6,894	1,681	240,958
1914	4,967	93,265	775	3,571	(2)	232,895
Delaware—						
1919	.....	3,093	.....	.....	.....	1,157
1914	117	2,320	26	.....	.....	805
SOUTH ATLANTIC—Contd.						
Maryland—						
1919	1,326	17,284	.....	.....	11	57,928
1914	603	14,345	.....	220	(2)	35,595
District of Columbia—						
1919	415	13,353	.....	8	104	2,322
1914	6	11,174	.....	150	(2)	2,654
Virginia—						
1919	85	20,761	600	4	335	1,146
1914	1,372	18,716	.....	29	(2)	6,377
West Virginia—						
1919	.....	5,310	.....	2,500	20	170,935
1914	74	4,355	.....	7	(2)	179,868
North Carolina—						
1919	795	14,893	.....	125	4	1,525
1914	651	13,670	5	127	(2)	2,475
South Carolina—						
1919	750	7,104	147	.....	310	2,256
1914	1,500	6,834	.....	107	(2)	424
Georgia—						
1919	280	23,126	863	121	756	3,479
1914	544	18,026	744	64	(2)	2,698
Florida—						
1919	500	2,731	.....	4,136	141	210
1914	100	3,825	.....	2,867	(2)	1,999
EAST SOUTH CENTRAL:						
1919	553	101,160	267	1	6,988	26,821
1914	565	97,116	2,585	2,430	(2)	42,411
Kentucky—						
1919	.....	36,707	.....	.....	619	19,649
1914	.....	33,618	260	38	(2)	23,380
Tennessee—						
1919	150	40,908	267	1	606	5,179
1914	315	39,431	280	64	(2)	16,897
Alabama—						
1919	403	16,754	.....	.....	5,559	751
1914	250	17,120	2,045	287	(2)	1,107
Mississippi—						
1919	.....	6,791	.....	.....	204	1,242
1914	.....	6,947	.....	2,041	(2)	1,027
WEST SOUTH CENTRAL:						
1919	7,787	71,411	3,231	84,448	2,967	994,115
1914	2,995	80,537	550	53,516	(2)	1,891,725
Arkansas—						
1919	1,730	4,195	61	.....	272	298,118
1914	557	7,661	.....	1,351	(2)	154,147
Louisiana—						
1919	.....	9,622	.....	6,276	10	22,921
1914	.....	7,251	.....	788	(2)	49,068
Oklahoma—						
1919	1,319	8,507	.....	12,764	1,004	504,686
1914	1,202	9,161	550	188	(2)	1,220,414
Texas—						
1919	4,738	49,087	3,170	65,408	1,681	168,390
1914	1,146	56,464	.....	51,189	(2)	468,096
MOUNTAIN:						
1919	1,232	96,851	331	25,624	1,402	8,643
1914	2,207	81,902	345	14,704	(2)	17,666
Montana—						
1919	630	19,302	.....	12	65	1,703
1914	390	14,846	.....	140	(2)	3,816
Idaho—						
1919	.....	11,332	.....	2	180	.....
1914	.....	7,285	.....	67	(2)	300
Wyoming—						
1919	.....	6,712	.....	1,371	163	235
1914	600	3,904	.....	32	(2)	2,304
Colorado—						
1919	599	36,369	321	.....	393	2,813
1914	156	35,004	.....	120	(2)	6,647
New Mexico—						
1919	.....	3,666	.....	25	199	756
1914	1,061	2,967	.....	77	(2)	43
Arizona—						
1919	3	997	.....	16,894	120	3,106
1914	.....	1,206	345	10,229	(2)	2,068
Utah—						
1919	.....	17,623	.....	.....	66	30
1914	.....	15,819	.....	5	(2)	2,418
Nevada—						
1919	.....	850	10	7,320	216	.....
1914	.....	871	.....	4,034	(2)	70
PACIFIC:						
1919	978	14,958	278	538,025	8,362	164,523
1914	995	14,206	3,304	580,532	(2)	96,591
Washington—						
1919	154	11,358	32	31,807	1,272	6,188
1914	250	9,880	809	44,724	(2)	9,500
Oregon—						
1919	556	735	.....	53,149	712	3,019
1914	200	1,525	150	53,969	(2)	3,325
California—						
1919	268	2,865	246	453,069	6,378	155,316
1914	545	2,801	2,345	481,839	(2)	83,766

[1] Includes some semianthracite.

[2] Included in figures for fuel oils.

[3] A minus sign (—) denotes decrease.

TABLE 12.—DETAILED STATEMENT FOR THE INDUSTRY,

	DIVISION AND STATE.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Capital.
1	UNITED STATES	5,678	152,569	5,514	4,953	4,809	7,414	131,879	Ju 134,919	Fe 128,629	135,698	40,007	94,838	411	442	$153,805,268
2	NEW ENGLAND	708	13,782	732	419	393	515	11,813	Jy 12,307	Ja 11,258	12,073	4,369	7,552	39	113	12,625,547
3	Maine	81	1,144	81	37	1	32	993	Au 1,199	Ja 814	1,062	333	726	2	1	1,121,566
4	New Hampshire	61	708	71	7	2	12	616	Au 688	Ja 566	627	215	410	1	1	380,224
5	Vermont	28	364	32	2	1	5	324	Au 360	Ja 302	320	71	248	1	.....	253,957
6	Massachusetts	340	7,960	330	254	220	335	6,821	Jy 6,951	Ja 6,650	6,914	2,541	4,266	23	84	7,266,319
7	Rhode Island	70	1,272	87	45	43	62	1,035	Jy 1,078	Ja 980	1,074	439	609	8	18	1,181,827
8	Connecticut	128	2,334	131	74	36	61	2,024	Se 2,092	Ja 1,946	2,076	770	1,293	4	9	2,421,654
9	MIDDLE ATLANTIC	1,017	27,774	974	937	614	1,086	24,163	Au 24,690	Fe 23,611	24,884	8,180	16,562	55	87	31,333,753
10	New York	535	13,757	495	462	265	537	11,998	Au 12,332	Fe 11,671	12,583	4,369	8,203	7	4	15,758,753
11	New Jersey	131	4,061	110	130	124	116	3,581	Au 3,783	Fe 3,434	3,655	1,319	2,309	6	21	4,632,446
12	Pennsylvania	351	9,956	369	345	225	433	8,581	No 8,718	Ja 8,497	8,646	2,492	6,050	42	62	10,942,554
13	EAST NORTH CENTRAL	1,247	33,108	1,184	1,168	1,293	1,240	28,223	Jy 28,795	Fe 27,714	28,970	8,118	20,701	31	120	32,522,122
14	Ohio	277	8,316	273	265	386	352	7,010	De 7,233	Fe 6,923	7,280	2,206	5,067	3	4	8,209,509
15	Indiana	158	4,328	153	148	315	144	3,568	De 3,651	Au 3,437	3,715	960	2,706	2	47	3,629,011
16	Illinois	470	12,189	405	467	365	373	10,579	Jy 10,702	Se 10,451	10,677	3,172	7,448	14	43	12,627,971
17	Michigan	197	5,746	218	182	174	259	4,913	Jy 5,238	Fe 4,577	5,121	1,241	3,864	8	8	5,421,984
18	Wisconsin	145	2,529	135	106	53	112	2,123	Au 2,159	Ap 2,079	2,177	539	1,616	4	18	2,633,647
19	WEST NORTH CENTRAL	713	18,133	699	614	443	704	15,673	Jy 15,891	Fe 15,232	15,774	4,178	11,564	9	23	19,204,479
20	Minnesota	156	3,818	156	116	83	186	3,277	De 3,350	Se 3,210	3,404	899	2,496	2	7	3,967,932
21	Iowa	129	2,460	137	93	54	108	2,074	Jy 2,140	My 2,012	2,132	570	1,562	.....	.....	2,569,074
22	Missouri	165	6,839	112	240	205	285	5,997	De 6,085	Fe[3] 5,937	6,279	1,544	4,721	3	11	7,321,472
23	North Dakota	29	488	27	11	10	14	426	Au 459	Ja 377	456	122	334	.....	.....	615,070
24	South Dakota	29	542	20	18	9	17	469	Au 395	Fe 325	494	127	364	1	2	841,521
25	Nebraska	69	1,710	73	73	49	44	1,471	De 1,532	Ja 1,397	1,542	400	1,137	2	3	1,906,483
26	Kansas	136	2,270	165	63	33	50	1,959	Jy 2,024	Ja 1,881	1,467	516	950	1	.....	1,982,927
27	SOUTH ATLANTIC	351	13,746	305	498	493	370	12,080	De 12,480	Ap[3] 11,741	12,638	3,388	9,219	21	10	10,686,295
28	Delaware	6	300	10	4	.....	2	284	Je 293	Mh 276	285	89	195	.....	1	375,386
29	Maryland	46	1,888	39	56	95	79	1,619	De 1,639	Mh 1,603	1,689	498	1,191	.....	.....	1,519,051
30	District of Columbia	21	1,805	10	53	45	42	1,655	Jy 1,709	Ap 1,603	1,658	395	1,261	2	.....	1,374,200
31	Virginia	63	2,674	51	84	102	70	2,367	Au 2,475	Ja 2,200	2,442	668	1,771	.....	3	1,724,255
32	West Virginia	44	1,057	50	41	17	29	920	No 967	Ja 862	969	289	679	1	.....	1,175,992
33	North Carolina	56	1,631	53	71	37	37	1,433	Au 1,497	Ja 1,370	1,457	366	1,090	1	.....	1,161,269
34	South Carolina	28	723	29	33	22	14	625	No 672	My 595	675	188	487	.....	.....	555,911
35	Georgia	52	2,522	40	98	119	71	2,194	No 2,353	Fe 2,067	2,302	602	1,686	14	.....	1,919,132
36	Florida	35	1,146	23	58	56	26	983	De 1,117	My 878	1,161	293	859	3	6	881,099
37	EAST SOUTH CENTRAL	182	8,028	155	249	296	245	7,083	No 7,245	Je 6,929	7,482	1,964	5,299	214	5	5,579,837
38	Kentucky	63	2,591	53	102	67	75	2,294	No 2,345	Ja 2,240	2,337	668	1,658	9	2	1,688,280
39	Tennessee	59	3,041	51	89	105	103	2,693	Jy 2,783	Ap 2,645	2,923	730	1,992	201	.....	2,113,707
40	Alabama	37	1,684	31	38	105	48	1,462	No 1,578	Je 1,284	1,587	384	1,202	1	.....	1,250,596
41	Mississippi	23	712	20	20	19	19	634	Jy 661	Ja 611	635	182	447	3	3	527,254
42	WEST SOUTH CENTRAL	343	11,558	355	390	474	335	10,004	Se 10,452	Fe 9,463	10,565	2,906	7,617	17	25	9,885,520
43	Arkansas	49	1,045	46	36	5	21	937	Se 973	Ap 910	1,026	257	769	.....	.....	696,445
44	Louisiana	24	1,837	17	60	94	61	1,605	Au 1,652	Ja 1,529	1,655	444	1,205	.....	6	1,449,125
45	Oklahoma	90	2,355	117	100	78	66	1,994	Se 2,085	Ja 1,887	2,025	475	1,519	14	17	2,157,041
46	Texas	171	6,321	175	194	297	187	5,468	De 5,808	Fe 5,072	5,859	1,730	4,124	3	2	5,582,909
47	MOUNTAIN	281	6,932	237	231	222	238	6,004	Au 6,394	Mh 5,716	6,089	1,687	4,380	5	17	7,881,234
48	Montana	49	1,092	34	40	29	18	971	Jy 1,020	No 933	1,011	267	743	1	.....	1,373,349
49	Idaho	40	652	38	18	10	15	571	Jy 602	Fe 530	580	164	416	.....	.....	877,560
50	Wyoming	23	412	19	16	3	17	357	Au 395	Fe 325	359	82	274	1	2	424,031
51	Colorado	92	2,470	86	80	112	106	2,086	Au 2,286	Mh 1,956	2,120	545	1,564	.....	11	2,255,955
52	New Mexico	16	326	15	5	8	6	292	Au 328	Fe[3] 253	251	78	170	2	1	382,123
53	Arizona	21	598	13	24	10	12	539	Jy 592	Fe 508	564	150	411	.....	3	444,981
54	Utah	27	1,213	20	42	50	61	1,040	Au 1,085	My 1,006	1,056	339	717	.....	.....	1,954,869
55	Nevada	13	169	12	6	.....	3	148	My 155	Oc 142	148	62	85	1	.....	218,366
56	PACIFIC	836	19,508	873	447	671	681	16,836	De 17,249	Ap 16,409	17,223	5,217	11,944	20	42	24,086,481
57	Washington	177	4,032	180	128	58	127	3,539	De 3,666	Mh 3,400	3,684	1,114	2,568	1	1	3,595,777
58	Oregon	73	2,253	60	57	23	80	2,033	Au 2,127	Ja 1,938	1,861	381	1,479	1	.....	2,117,225
59	California	586	13,223	633	262	590	474	11,264	Jy 11,530	Ap 11,009	11,678	3,722	7,897	18	41	18,373,479

[1] Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).
[2] Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

BY DIVISIONS AND STATES: 1919.

EXPENSES.									POWER.							
Salaries and wages.				Rent and taxes.		For materials.			Primary horsepower.							
										Owned.						
Officials.	Clerks, etc.	Wage earners.	For contract work.	Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.	Amount received for work done.	Total.	Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power.[1]	Rented.[2]	Electric horsepower generated in establishments reporting.	
$12,398,761	$10,299,424	$92,898,837	$1,554,764	$3,864,409	$2,866,160	$39,694,801	$13,807,376	$236,382,369	196,793	139,547	4,647	2,908	159	49,532	31,389	1
979,718	792,303	8,894,947	767,896	337,892	219,727	3,081,056	1,425,497	21,462,585	20,762	15,920	257	190	134	4,261	2,036	2
58,033	22,449	607,083	6,392	16,208	17,759	284,565	128,263	1,514,854	1,577	1,032	60	14	.....	471	27	3
12,350	9,353	486,877	5,004	15,772	5,771	167,305	87,081	968,856	1,302	939	50	17	14	282	.....	4
3,016	13,515	179,090	810	9,104	4,439	57,748	39,644	399,668	478	173	.....	.....	46	259	1	5
624,695	541,331	5,285,153	738,385	215,379	147,082	1,706,535	777,815	12,864,279	11,502	8,846	127	112	25	2,392	1,523	6
104,207	97,198	805,303	4,040	25,516	18,766	315,904	141,994	2,154,652	2,257	1,774	.....	21	.....	462	216	7
177,417	108,457	1,531,432	13,265	55,913	25,910	548,999	250,700	3,560,276	3,646	3,156	20	26	49	395	269	8
2,791,805	1,608,021	18,184,705	188,147	770,127	549,659	7,552,687	2,540,944	46,070,130	41,129	31,679	1,037	735	10	7,668	6,898	9
1,545,712	725,451	9,600,451	120,272	486,527	233,659	4,207,503	1,414,885	24,627,441	21,112	15,825	667	267	10	4,343	3,979	10
413,271	256,002	2,863,402	7,190	85,833	139,821	1,007,111	385,411	7,091,621	6,257	5,394	250	39	.....	574	1,320	11
832,822	626,568	5,720,792	60,685	197,767	176,179	2,338,073	740,648	14,351,068	13,760	10,460	120	429	.....	2,751	1,599	12
2,847,471	2,492,929	19,824,175	291,672	847,143	536,622	9,581,345	2,911,709	51,789,615	43,422	30,181	1,501	647	.....	11,093	8,040	13
616,651	801,706	4,703,668	64,089	180,825	134,268	2,181,743	692,794	12,528,344	12,107	7,930	477	454	.....	3,246	1,755	14
322,967	213,890	2,107,064	24,495	90,580	46,095	1,215,946	340,559	5,588,748	5,260	3,589	130	12	.....	1,529	749	15
1,213,086	874,072	7,895,989	173,575	392,325	226,940	3,864,746	1,078,172	20,606,032	14,833	10,960	621	87	.....	3,165	3,814	16
477,031	458,924	3,789,179	26,372	116,127	93,927	1,651,581	540,895	9,416,373	7,151	4,679	5	44	.....	2,423	1,383	17
217,736	144,337	1,328,275	3,141	67,286	35,392	667,329	259,289	3,650,118	4,071	3,023	268	50	.....	730	339	18
1,440,537	1,023,739	10,583,132	47,357	687,684	341,749	5,061,791	1,888,198	27,396,421	22,112	16,850	221	260	.....	4,781	6,433	19
282,947	251,778	2,415,506	8,884	154,550	61,396	1,038,194	399,514	6,087,088	4,766	3,630	25	10	.....	1,101	1,007	20
193,675	164,276	1,372,508	12,128	231,804	58,121	603,582	297,828	3,904,658	3,168	2,406	.....	5	.....	757	.....	21
552,291	382,397	3,909,453	17,624	160,661	91,051	1,972,108	572,105	9,438,493	8,243	7,406	34	132	.....	671	5,027	22
38,128	19,464	277,207	1,233	14,596	10,961	175,959	79,276	844,433	506	167	.....	6	.....	333	12	23
39,186	23,722	348,306	3,278	11,118	11,799	172,517	80,088	940,179	702	265	83	.....	.....	354	115	24
219,802	104,832	979,217	3,300	61,823	24,358	461,617	185,142	2,823,234	1,942	1,394	10	7	.....	531	222	25
114,508	77,270	1,280,845	910	53,132	84,063	637,814	274,245	3,358,336	2,785	1,582	69	100	.....	1,034	50	26
1,158,508	815,997	6,731,272	20,131	282,769	264,279	3,165,305	1,025,633	18,211,883	13,765	10,648	80	205	.....	2,832	2,200	27
11,180	2,755	220,984	.....	585	4,280	70,004	25,818	444,095	334	320	.....	.....	.....	14	.....	28
123,216	163,191	968,450	1,514	24,387	23,533	552,892	137,841	2,640,686	2,341	2,077	.....	.....	.....	264	316	29
193,571	120,897	1,049,580	4,882	32,329	37,402	367,529	113,507	2,559,210	1,633	1,590	.....	.....	.....	43	987	30
225,613	100,454	1,110,703	200	43,856	46,102	485,642	172,877	3,009,759	1,989	1,238	.....	.....	.....	751	13	31
78,005	38,582	616,267	.....	24,188	16,896	251,678	75,718	1,775,349	1,457	1,057	.....	105	.....	295	150	32
138,505	68,127	755,186	950	39,054	21,585	317,814	144,226	2,252,100	1,354	857	75	85	.....	337	95	33
58,258	33,725	316,689	5,105	21,378	5,838	167,749	69,287	833,801	654	340	.....	.....	.....	314	46	34
223,836	202,343	1,205,256	1,837	58,061	73,550	689,745	183,150	3,216,832	2,566	1,897	.....	2	.....	667	245	35
106,224	85,923	488,157	5,643	38,931	35,093	262,252	103,209	1,480,051	1,437	1,272	5	13	.....	147	348	36
572,990	531,192	3,566,610	32,870	135,950	115,675	1,801,873	574,384	9,687,736	12,874	6,713	612	37	.....	5,512	1,544	37
176,861	59,265	1,183,377	691	11,185	40,187	613,724	175,276	2,905,346	5,762	2,329	392	35	.....	3,006	256	38
192,738	242,193	1,202,035	2,062	60,635	42,749	621,221	216,413	3,639,602	3,621	2,688	180	.....	.....	753	669	39
158,882	196,395	771,203	3,199	55,754	22,676	341,777	121,744	2,196,118	1,675	1,246	40	2	.....	387	339	40
44,509	33,339	319,905	26,918	8,376	10,063	225,151	60,951	946,670	1,816	450	.....	.....	.....	1,366	280	41
914,166	830,299	6,067,983	27,068	205,284	253,737	2,773,975	996,246	16,553,772	10,945	7,544	119	307	.....	2,975	1,017	42
60,492	26,954	549,125	.....	26,266	24,370	238,573	101,046	1,393,024	1,058	708	.....	54	.....	296	150	43
177,800	151,637	788,575	2,903	22,282	45,530	365,909	119,304	2,349,774	1,778	1,419	.....	.....	.....	359	12	44
212,385	164,488	1,330,751	250	45,656	33,584	628,705	246,387	3,561,059	2,191	1,267	29	78	.....	817	42	45
463,489	487,220	3,399,532	23,915	111,080	150,253	1,540,788	529,509	9,249,915	5,918	4,150	90	175	.....	1,503	813	46
556,709	468,133	4,577,956	9,413	165,547	168,141	1,749,091	707,985	11,330,923	8,981	6,532	302	65	.....	2,082	1,458	47
96,907	66,984	839,771	100	25,950	25,841	343,189	130,000	1,894,356	1,463	1,082	.....	7	.....	374	4	48
34,145	25,275	487,635	2,565	10,339	10,515	216,552	106,029	1,179,846	756	290	.....	6	.....	460	114	49
29,270	16,020	300,815	.....	20,421	8,265	95,109	53,384	763,953	719	504	.....	6	.....	209	66	50
224,729	217,404	1,437,628	2,210	74,870	57,715	510,599	177,938	3,759,849	2,925	2,114	290	40	.....	481	.....	51
12,190	13,920	171,506	2,850	6,792	5,130	68,473	37,136	432,279	345	208	.....	6	.....	131	10	52
51,948	20,890	430,605	1,688	12,080	10,853	170,794	82,946	987,438	685	502	.....	.....	.....	183	10	53
95,036	104,244	767,711	.....	11,364	46,618	294,834	84,505	1,973,166	1,865	1,667	.....	.....	.....	198	1,254	54
12,484	3,396	142,285	.....	3,731	3,204	49,541	36,047	340,036	223	165	12	.....	.....	46	.....	55
1,136,857	1,736,811	14,468,057	170,210	432,013	416,571	4,027,678	1,736,780	33,879,304	22,803	13,480	518	462	15	8,328	1,763	56
318,044	197,768	3,387,500	10,728	149,724	102,847	1,039,526	319,523	7,336,715	4,932	3,480	198	2	.....	1,252	428	57
165,571	71,751	1,778,645	6,664	35,144	33,146	516,112	207,201	3,629,983	2,334	1,861	.....	20	.....	453	114	58
653,242	1,467,292	9,301,912	152,818	247,145	280,579	3,372,040	1,210,056	22,912,606	15,537	8,139	320	440	15	6,623	1,221	59

[1] Same number reported for one or more other months.

DYEING AND CLEANING.

General character of the industry.—Dyeing and cleaning is not considered a manufacturing industry, and statistics relating thereto were not gathered at prior censuses, but at the census of 1919 reports were secured for establishments operated by mechanical power, which, as in the laundry industry, has been taken as a basis for segregating the establishments operated on a factory basis from the numerous neighborhood establishments of a hand character, engaged in cleaning and pressing, and to some extent in dyeing. The industry is not to be confused with "Dyeing and finishing textiles," which embraces establishments engaged in the bleaching, dyeing, and mercerizing of yarns and fabrics, an important branch of the great textile industry. These statistics are not included in the report for the manufacturing industries.

Summary.—Table 1 presents the general statistics for 1919, in harmony with Table 1 of the report on power laundries, which gives comparative statistics for that industry for prior years.

Summary, by states.—Statistics are presented in Table 2 for the chief factors, number of establishments, number of persons engaged in the industry, and the amount received for work done, by geographic divisions and states, together with the urban population. The states are grouped by geographic divisions so as to bring together those operating under similar industrial conditions. Every state is represented by a sufficient number of establishments to permit of the statistics being reported separately, with the exception of Nevada, which has been combined with Utah.

Persons engaged in the industry.—The age classification of the average number of wage earners in Table 3 and other tables is an estimate obtained by the method described in the "Explanation of terms," page 2. Detailed figures for states will be found in Table 12.

Wage earners, by months.—The statistics for wage earners in Table 4 are intended to show the steadiness of employment, or the reverse, in accordance with the industrial conditions existing during the year. For the country as a whole, females constituted 43.6 per cent of the average number of wage earners and males 56.4 per cent.

Prevailing hours of labor.—A notable feature of Table 5 is the relatively large percentage of wage earners in establishments where the prevailing hours of labor per week were 44 and under, chiefly in the Middle Atlantic and East North Central states. Of the total number of wage earners, 46.5 per cent were in the groups of 48 hours per week or less. Only 5.6 per cent are found in the groups 60 hours per week and over, and the higher groups are most pronounced in the states of the East South Central division.

Size of establishments, by average number of wage earners.—The industry is one of relatively small units, as shown by Table 6, 60 per cent of the establishments employing fewer than 6 wage earners, or no wage earners. The table shows only 9 establishments employing more than 100 wage earners.

Size of establishments, by amount received for work done.—A classification as to size, on the basis of income, or amount received for work done, is given in Table 7. The average income per establishment for all classes was approximately $25,000, and the industry includes comparatively few large establishments, only 4 reporting income for work done in excess of $500,000.

Character of ownership.—Table 8 shows that in most states the bulk of the business, whether measured by number of wage earners or by income, is under corporate ownership, although in a number of states there are no establishments under corporate ownership, and in some of the others the income and number of employees in individually owned plants exceed those operated by corporations.

Statistics for cities.—Table 9 gives the statistics for cities of 10,000 inhabitants reporting 3 or more establishments. The table also carries the figures for the respective states. States not represented by cities are not included.

Number and horsepower of types of prime movers.—Table 10 gives the total horsepower reported for the industry. The industry is, relatively, a large consumer of electric power, 71 per cent of the total horsepower being utilized in the form of electrical energy, either purchased or generated.

Fuel consumed.—Table 11 shows the consumption of fuel, by kinds and by states. The figures for gas include both manufactured and natural gas.

Detailed statement, by geographic divisions and states.—Table 12 presents the statistics in detail for all states, grouped by geographic divisions.

TABLE 1.—SUMMARY, 1919.

	Number or amount.
Number of establishments	2,156
Persons engaged	24,934
Proprietors and firm members	2,285
Salaried employees	3,842
Wage earners (average number)	18,807
Primary horsepower	23,946
Capital	$28,734,049
Salaries and wages	23,520,907
Salaries	5,275,883
Wages	18,245,024
Paid for contract work	460,660
Rent and taxes	2,231,379
Cost of materials	11,801,549
Amount received for work done	54,421,305

TABLE 2.—URBAN POPULATION AND THE DYEING AND CLEANING INDUSTRY, BY DIVISIONS AND STATES, WITH STATE RANK: 1919.

DIVISION AND STATE.	URBAN POPULATION.[1]		DYEING AND CLEANING.			
	Number.	State rank.	Number of establishments.	Number of persons engaged in the industry.	Amount received for work done. Amount.	Amount received for work done. State rank.
UNITED STATES	47,119,807	.....	2,156	24,934	$54,421,305	.....
NEW ENGLAND	5,447,404	.....	102	1,542	3,691,562	.....
Maine	252,109	33	12	126	241,671	33
New Hampshire	214,104	34	8	62	111,359	43
Vermont	75,095	40	6	25	42,883	47
Massachusetts	3,247,063	5	45	894	2,252,321	7
Rhode Island	532,408	20	7	174	388,639	27
Connecticut	1,126,625	12	24	261	654,689	23
MIDDLE ATLANTIC	15,151,031	.....	340	4,746	11,248,444	.....
New York	8,230,190	1	159	2,428	5,956,122	1
New Jersey	2,172,199	6	39	536	1,408,447	11
Pennsylvania	4,748,642	2	142	1,782	3,883,875	5
EAST NORTH CENTRAL	11,600,805	.....	548	6,584	14,957,484	.....
Ohio	3,326,337	4	173	2,113	4,657,055	3
Indiana	1,273,203	10	101	825	1,588,752	10
Illinois	3,944,757	3	159	2,119	5,298,935	2
Michigan	2,050,776	7	73	895	2,043,559	8
Wisconsin	1,005,732	13	42	632	1,369,183	12
WEST NORTH CENTRAL	3,788,495	.....	371	3,511	7,502,266	.....
Minnesota	876,532	14	46	629	1,368,915	13
Iowa	636,695	17	70	584	1,333,047	14
Missouri	1,398,187	9	125	1,414	2,827,687	6
North Dakota	47,124	44	14	90	201,086	36
South Dakota	67,031	42	15	78	178,570	38
Nebraska	313,624	20	41	415	983,987	17
Kansas	449,302	24	60	301	608,974	24
SOUTH ATLANTIC	3,590,017	.....	146	1,059	3,543,316	.....
Delaware	111,248	39	3	33	73,834	46
Maryland	820,430	15	9	598	1,011,843	16
SOUTH ATLANTIC—Contd.						
District of Columbia	443,056	25	6	103	$236,761	34
Virginia	565,451	18	30	371	698,898	22
West Virginia	273,834	31	37	295	560,139	25
North Carolina	352,770	27	21	197	321,586	29
South Carolina	201,740	34	18	105	152,458	40
Georgia	553,656	19	12	169	320,963	30
Florida	267,832	32	10	88	166,834	39
EAST SOUTH CENTRAL	1,489,738	.....	124	1,258	2,230,520	.....
Kentucky	482,428	22	41	360	720,341	21
Tennessee	467,168	23	32	511	894,743	18
Alabama	394,859	25	27	282	487,293	45
Mississippi	145,283	37	24	105	128,143	42
WEST SOUTH CENTRAL	2,193,317	.....	183	1,522	3,356,379	.....
Arkansas	167,482	36	10	101	215,912	35
Louisiana	508,541	21	26	220	384,776	28
Oklahoma	351,774	28	50	363	844,692	19
Texas	1,165,520	11	97	838	1,910,999	9
MOUNTAIN	858,858	.....	113	866	1,847,235	.....
Montana	118,183	38	23	125	312,189	31
Idaho	53,569	43	4	56	130,507	41
Wyoming	35,062	45	12	39	110,366	44
Colorado	382,528	26	42	346	753,058	20
New Mexico	15,370	46	4	17	29,873	48
Arizona	69,714	41	15	104	200,055	37
Utah and Nevada[2]	184,432	.....	13	179	311,187	.....
PACIFIC	3,000,142	.....	229	2,946	6,044,099	.....
Washington	656,681	16	46	549	1,127,528	15
Oregon	303,248	30	23	274	534,282	26
California	2,040,213	8	160	2,123	4,382,289	4

[1] Population of incorporated places (municipalities) as of July 1, 1920.

[2] Combined to avoid disclosure.

TABLE 3.—PERSONS ENGAGED IN THE INDUSTRY: 1919.

CLASS.	Total.	Male.	Female.	PER CENT OF TOTAL. Male.	PER CENT OF TOTAL. Female.
All classes	24,934	14,482	10,452	58.3	41.9
Proprietors and officials	3,557	3,249	308	91.3	8.7
Proprietors and firm members	2,285	2,154	131	94.3	5.7
Salaried officers of corporations	631	585	46	92.7	7.3
Superintendents and managers	641	510	131	79.6	20.4
Clerks and other subordinate salaried employees	2,570	619	1,951	24.1	75.9
Wage earners (average number)	18,807	10,614	8,193	56.4	43.6
16 years of age and over	18,681	10,509	8,172	56.3	43.7
Under 16 years of age	126	105	21	83.3	16.7

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR STATES:[1] 1919.

[The month of maximum employment for each industry 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. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Per cent minimum is of maximum.
United States	18,807	*16,750*	16,839	17,727	18,976	19,066	19,248	19,130	19,241	19,807	**20,156**	19,748	18,996	83.1
Males	10,614	*9,544*	9,564	9,967	10,622	10,683	10,840	10,791	10,901	11,136	**11,327**	11,171	10,822	84.3
Females	8,193	*7,206*	7,275	7,760	8,354	8,383	8,408	8,339	8,340	8,671	**8,829**	8,577	8,174	81.6
California	1,687	*1,586*	1,624	1,631	1,679	1,672	1,674	1,701	1,697	1,746	**1,756**	1,750	1,728	90.3
Males	828	*781*	812	800	812	810	820	827	835	844	**881**	858	856	88.6
Females	859	*805*	812	831	867	862	854	874	862	902	**875**	892	872	89.2
Illinois	1,633	1,474	*1,472*	1,552	1,660	1,691	1,691	1,662	1,640	1,664	**1,744**	1,704	1,642	84.4
Males	936	845	*842*	896	944	959	958	948	950	945	**1,007**	985	953	83.6
Females	697	*629*	630	656	716	732	733	714	690	719	**737**	719	689	85.5
Indiana	599	*545*	*545*	572	612	609	606	609	612	611	**627**	622	618	86.9
Males	359	329	*325*	340	366	365	360	363	366	369	**377**	374	374	86.2
Females	240	*216*	220	232	246	244	246	246	246	242	**250**	248	244	86.4
Massachusetts	723	*585*	588	638	742	758	779	761	745	777	**805**	774	724	72.7
Males	407	*321*	328	346	408	424	448	435	435	440	**454**	436	409	70.7
Females	316	264	*260*	292	334	334	331	326	310	337	**351**	338	315	74.1

[1] States with 200 or more wage earners; states with 500 or more wage earners distributed by sex.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR STATES:[1] 1919—Continued.

[The month of maximum employment for each industry 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	
Michigan	681	596	*590*	620	687	676	679	684	730	731	**744**	734	701	79.3
Males	361	318	*317*	328	352	347	352	363	394	394	**395**	393	379	80.3
Females	320	278	*273*	292	335	329	327	321	336	337	**349**	341	322	73.2
Missouri	1,062	911	*887*	978	1,124	1,088	1,088	1,059	1,084	1,160	**1,243**	1,118	1,004	71.4
Males	566	507	*501*	527	583	576	578	560	568	604	**629**	608	551	79.6
Females	496	404	*386*	451	541	512	510	499	516	556	**614**	510	453	62.9
New York	1,793	1,650	*1,611*	1,705	1,796	1,788	1,875	1,831	1,834	1,851	1,899	1,873	1,803	84.8
Males	1,100	1,021	*978*	1,042	1,110	1,101	1,152	1,122	1,122	1,120	**1,166**	1,152	1,105	83.9
Females	693	*629*	633	663	686	687	723	709	712	722	**733**	721	698	85.8
Ohio	1,594	*1,308*	1,359	1,510	**1,717**	1,677	1,689	1,647	1,635	1,714	1,705	1,644	1,523	76.2
Males	952	*783*	798	871	1,018	996	1,006	990	981	1,021	**1,031**	996	934	75.8
Females	642	*526*	561	639	699	681	683	657	654	693	**674**	648	589	75.9
Pennsylvania	1,320	1,154	*1,150*	1,227	1,328	1,333	1,346	1,334	1,332	1,375	**1,448**	1,435	1,378	79.4
Males	741	*651*	653	693	745	740	748	745	748	773	**810**	807	779	80.4
Females	579	503	*497*	534	583	593	598	589	584	602	**638**	628	599	77.9
Texas	614	*540*	546	565	590	594	598	623	632	662	672	661	**685**	78.8
Males	417	*378*	*378*	388	401	405	416	430	434	443	444	442	**445**	84.9
Females	197	*162*	168	177	189	189	182	193	198	219	228	219	**240**	67.5
Alabama	220	206	199	*193*	196	199	214	221	227	246	**258**	246	237	74.8
Colorado	252	*217*	222	228	252	255	270	275	277	**277**	260	250	241	78.3
Iowa	405	377	*375*	388	400	402	414	412	406	421	**432**	428	405	86.8
Kansas	203	183	*181*	187	197	203	198	196	201	224	**225**	225	216	80.4
Kentucky	259	*238*	241	247	259	260	261	263	263	264	268	**274**	270	86.9
Maryland	441	*379*	411	440	443	441	448	446	464	463	**468**	464	425	81.0
Minnesota	482	418	*417*	456	504	510	493	479	485	514	**526**	502	480	79.3
Nebraska	299	*246*	249	261	291	292	292	301	331	338	**340**	330	317	72.4
New Jersey	455	425	*423*	435	459	470	470	459	459	453	467	**475**	464	89.1
Oklahoma	255	*223*	233	234	240	251	251	266	274	**284**	274	267	263	78.5
Oregon	207	192	*190*	196	207	212	219	203	198	204	**228**	218	221	83.3
Tennessee	390	*341*	356	380	395	412	402	393	391	**416**	416	399	379	82.0
Virginia	281	280	*275*	278	284	**287**	284	277	276	*275*	284	**287**	285	95.8
Washington	437	388	*387*	413	435	449	453	460	458	**488**	425	450	438	79.3
West Virginia	232	*224*	225	225	229	231	232	236	237	235	235	237	241	92.9
Wisconsin	475	455	*454*	466	472	474	482	490	490	475	470	482	481	92.7

[1] States with 200 or more wage earners; states with 500 or more wage earners distributed by sex.

TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, BY DIVISIONS AND STATES: 1919.

INDUSTRY AND CITY.	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.	Over 60.
UNITED STATES	18,807	1,444	498	6,806	3,876	4,689	434	998	62
NEW ENGLAND	1,185	62	38	562	243	212	61	7	.....
Maine	94	.....	.....	15	7	72	.....	.....	.....
New Hampshire	46	.....	.....	20	.....	22	4	.....	.....
Vermont	16	4	.....	4	.....	7	.....	1	.....
Massachussets	723	37	12	456	130	79	8	1	.....
Rhode Island	121	5	20	10	38	.....	48	.....	.....
Connecticut	185	16	6	57	68	32	1	5	.....
MIDDLE ATLANTIC	3,568	634	122	631	1,091	969	68	53	.....
New York	1,793	536	17	365	398	460	11	6	.....
New Jersey	455	57	66	69	224	30	.....	9	.....
Pennsylvania	1,320	41	39	197	469	479	57	38	.....
EAST NORTH CENTRAL	4,982	438	217	1,139	1,818	1,043	99	219	9
Ohio	1,594	66	103	383	843	161	10	28	.....
Indiana	590	26	32	154	110	174	18	81	4
Illinois	1,633	283	78	342	387	431	22	85	5
Michigan	681	24	.....	173	248	195	21	20	.....
Wisconsin	475	39	4	87	230	82	28	5	.....
WEST NORTH CENTRAL	2,572	129	53	692	490	1,009	24	169	6
Minnesota	482	64	7	239	108	55	5	4	.....
Iowa	405	6	.....	86	42	204	2	65	.....
Missouri	1,062	55	34	176	243	514	1	34	5
North Dakota	64	.....	.....	27	9	23	5	.....	.....
South Dakota	57	1	.....	12	.....	15	5	24	.....
Nebraska	299	.....	12	101	78	98	1	8	1
Kansas	203	3	.....	51	10	100	5	34	.....
SOUTH ATLANTIC	1,494	32	30	730	119	279	90	206	8
Delaware	23	18	.....	5	.....	.....	.....	.....	.....
Maryland	441	.....	.....	407	28	6	.....	.....	.....
SOUTH ATLANTIC—Con.									
District of Columbia	94	.....	.....	90	.....	4	.....	.....	.....
Virginia	281	.....	30	60	42	91	8	50	.....
West Virginia	232	14	.....	63	15	110	3	26	1
North Carolina	151	.....	.....	67	4	.....	44	36	.....
South Carolina	77	.....	.....	13	.....	23	22	12	7
Georgia	129	.....	.....	17	30	5	13	64	.....
Florida	66	.....	.....	8	.....	40	.....	18	.....
EAST SOUTH CENTRAL	937	27	16	203	8	387	41	241	14
Kentucky	259	11	11	48	8	106	15	60	.....
Tennessee	390	14	4	142	.....	149	.....	78	3
Alabama	220	.....	.....	12	.....	112	26	60	10
Mississippi	68	2	1	1	.....	20	.....	43	1
WEST SOUTH CENTRAL	1,102	1	.....	324	76	563	30	83	25
Arkansas	75	.....	.....	25	.....	24	.....	15	11
Louisiana	158	.....	.....	53	.....	85	18	.....	2
Oklahoma	255	.....	.....	38	16	152	12	28	9
Texas	614	1	.....	208	60	302	.....	40	3
MOUNTAIN	636	4	.....	534	10	79	.....	9	.....
Montana	94	.....	.....	88	6	.....	.....	.....	.....
Idaho	44	.....	.....	37	.....	7	.....	.....	.....
Wyoming	26	.....	.....	14	.....	12	.....	.....	.....
Colorado	252	.....	.....	212	4	27	.....	9	.....
New Mexico	12	.....	.....	10	.....	2	.....	.....	.....
Arizona	79	.....	.....	53	.....	26	.....	.....	.....
Utah and Nevada	129	4	.....	120	.....	5	.....	.....	.....
PACIFIC	2,331	117	22	1,991	21	148	21	11	.....
Washington	437	26	5	406	.....	.....	.....	.....	.....
Oregon	207	21	.....	170	.....	5	.....	2	.....
California	1,687	70	17	1,406	21	143	21	9	.....

TABLE 6.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, BY DIVISIONS AND STATES: 1919.

DIVISION AND STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING—										
			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.	
	Establishments.	Wage earners. (average number).	Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
UNITED STATES	2,156	18,807	113	1,171	3,167	704	7,358	125	4,227	34	2,262	9	1,793
NEW ENGLAND	102	1,185	5	50	142	33	364	10	330	3	173	1	176
Maine	12	94	1	5	9	5	38	1	47				
New Hampshire	8	46		4	10	4	36						
Vermont	6	16	1	5	16								
Massachusetts	45	723	3	19	54	13	170	7	202	2	121	1	176
Rhode Island	7	121		4	20	1	20	2	81				
Connecticut	24	185		13	33	10	100			1	52		
MIDDLE ATLANTIC	340	3,568	19	172	449	109	1,234	32	997	5	337	3	551
New York	159	1,793	13	74	175	49	582	19	572	2	113	2	351
New Jersey	30	455	1	20	63	11	127	6	199	1	66		
Pennsylvania	142	1,320	5	78	211	49	525	7	226	2	158	1	200
EAST NORTH CENTRAL	548	4,982	32	273	755	193	2,009	36	1,083	12	780	2	355
Ohio	173	1,594	14	92	249	54	536	8	269	3	185	2	355
Indiana	101	599	5	67	175	24	244	4	120	1	60		
Illinois	150	1,633	9	62	185	68	735	16	450	4	263		
Michigan	73	681	4	29	90	34	340	4	132	2	119		
Wisconsin	42	475		23	56	13	154	4	112	2	153		
WEST NORTH CENTRAL	371	2,572	20	236	650	95	932	12	379	7	425	1	186
Minnesota	46	482	1	22	66	19	198	1	31	3	187		
Iowa	70	405	2	46	114	19	197	3	94				
Missouri	125	1,062	6	79	222	30	304	6	181	3	169	1	186
North Dakota	14	64	2	9	31	3	33						
South Dakota	15	57		12	30	3	27						
Nebraska	41	299	1	29	89	8	68	2	73	1	69		
Kansas	60	203	8	39	98	13	105						
SOUTH ATLANTIC	146	1,494	5	71	200	58	550	11	688	1	56		
Delaware	3	23		2	10	1	13						
Maryland	9	441		2	5	6	57	1	379				
District of Columbia	6	94		3	13	2	25			1	56		
Virginia	30	281		9	25	18	175	3	81				
West Virginia	37	232	3	20	53	12	108	2	71				
North Carolina	21	151		14	38	5	42	2	71				
South Carolina	18	77	1	13	30	3	25	1	22				
Georgia	12	129		5	14	5	51	2	64				
Florida	10	66	1	3	12	6	54						
EAST SOUTH CENTRAL	124	937	1	80	201	35	372	6	169	2	195		
Kentucky	41	259		30	73	10	88			1	98		
Tennessee	32	390		18	58	8	93	5	142	1	97		
Alabama	27	220	1	10	28	15	165	1	27				
Mississippi	24	68		22	42	2	26						
WEST SOUTH CENTRAL	183	1,102	7	112	296	58	605	5	146	1	55		
Arkansas	10	75		3	7	7	68						
Louisiana	26	158	1	16	38	7	77	2	43				
Oklahoma	50	255	4	33	107	12	110	1	38				
Texas	97	614	2	60	144	32	350	2	65	1	55		
MOUNTAIN	113	636	8	62	169	40	366	3	101				
Montana	23	94	1	16	42	6	52						
Idaho	4	44		3	11	1	33						
Wyoming	12	26	3	8	20	1	6						
Colorado	42	252	3	18	46	20	180	1	26				
New Mexico	4	12		4	12								
Arizona	15	79		7	22	8	57						
Utah and Nevada	13	129	1	6	16	4	38	2	75				
PACIFIC	229	2,331	16	115	305	83	926	10	334	3	241	2	525
Washington	46	437	4	24	69	14	157	3	119	1	92		
Oregon	23	207		15	34	6	64	1	38	1	71		
California	160	1,687	12	76	202	63	705	6	177	1	78	2	525

TABLE 7.—SIZE OF ESTABLISHMENTS, BY AMOUNT RECEIVED FOR WORK DONE: 1919, 1914, AND 1909.

VALUE OF PRODUCT.	Number of establishments.	Average number of wage earners.	Amount received for work done.	PER CENT DISTRIBUTION.		
				Number of establishments.	Average number of wage earners.	Amount received for work done.
All classes	2,156	18,807	$54,421,305	100.0	100.0	100.0
Less than $5,000	408	399	1,238,563	18.9	2.1	2.3
$5,000 to $20,000	1,014	3,904	11,272,973	47.0	20.8	20.7
$20,000 to $100,000	661	9,141	27,136,718	30.7	48.6	49.9
$100,000 to $500,000	69	4,421	12,098,790	3.2	23.5	22.2
$500,000 and over	4	942	2,683,261	0.2	5.0	4.9

TABLE 8.—CHARACTER OF OWNERSHIP, BY DIVISIONS AND STATES: 1919.

Division and state.	Number of establishments owned by—			Average number of wage earners.							Amount received for work done.						
				Total.	In establishments owned by—			Per cent of total.			Total.	In establishments owned by—			Per cent of total.		
	Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
UNITED STATES	1,230	432	494	18,807	6,448	9,782	2,577	34.3	52.0	13.7	$54,421,305	$18,639,034	$27,393,531	$8,388,740	34.2	50.3	15.1
NEW ENGLAND	50	30	22	1,185	277	772	136	23.4	65.1	11.5	3,691,562	859,857	2,379,814	451,891	23.3	64.5	12.2
Maine	8	3	1	94	[1] 34	60	.....	.....	63.8	.....	241,671	[1] 110,724	130,947	.....	.....	54.2	.....
New Hampshire	5	.....	3	46	36	.....	10	78.3	.....	21.7	111,359	75,141	.....	36,218	67.5	.....	32.5
Vermont	3	1	2	16	.....	.....	[2] 16	.....	.....	.....	42,883	.....	.....	[2] 42,883	.....	.....	.....
Massachusetts	20	16	9	723	104	566	53	14.4	78.3	7.3	2,252,321	343,707	1,721,030	187,584	15.3	76.4	8.3
Rhode Island	4	2	1	121	63	[1] 58	.....	52.1	.....	.....	388,639	158,752	[1] 229,887	.....	40.8	.....	.....
Connecticut	10	8	6	185	41	105	39	22.2	56.8	21.1	654,689	177,023	337,913	139,753	27.0	51.6	21.3
MIDDLE ATLANTIC	183	84	73	3,568	1,063	2,029	476	29.8	56.9	13.3	11,248,444	3,310,577	6,385,195	1,552,672	29.4	56.8	13.8
New York	76	48	35	1,793	469	1,127	197	26.2	62.9	11.0	5,956,122	1,538,567	3,685,968	731,587	25.8	61.9	12.3
New Jersey	24	11	4	455	207	232	16	45.5	51.0	3.5	1,408,447	596,047	773,257	39,143	42.3	54.9	2.8
Pennsylvania	83	25	34	1,320	387	670	263	29.3	50.8	19.9	3,883,875	1,175,963	1,925,970	781,942	30.3	49.6	20.1
EAST NORTH CENTRAL	304	140	104	4,982	1,638	2,786	558	32.9	55.9	11.2	14,957,484	4,868,209	8,272,964	1,816,311	32.5	55.3	12.1
Ohio	91	45	37	1,594	351	1,059	184	22.0	66.4	11.5	4,657,055	1,031,063	3,030,969	595,023	22.1	65.1	12.8
Indiana	63	19	19	599	281	249	69	46.9	41.6	11.5	1,588,752	714,039	645,236	229,477	44.9	40.6	14.4
Illinois	80	54	25	1,633	505	979	149	30.9	60.0	9.1	5,298,935	1,638,486	3,137,710	522,739	30.9	59.2	9.9
Michigan	46	11	16	681	415	173	93	60.9	25.4	13.7	2,043,559	1,245,216	487,379	310,964	60.9	23.8	15.2
Wisconsin	24	11	7	475	86	326	63	18.1	68.6	13.3	1,369,183	239,405	971,670	158,108	17.5	71.0	11.6
WEST NORTH CENTRAL	221	62	88	2,572	938	1,263	371	36.5	49.1	14.4	7,502,266	2,836,919	3,481,706	1,183,641	37.8	46.4	15.8
Minnesota	26	10	10	482	167	199	116	34.6	41.3	24.1	1,368,915	481,080	609,535	278,291	35.1	44.5	20.3
Iowa	41	13	16	405	203	160	42	50.1	39.5	10.4	1,333,047	655,882	477,737	199,428	49.2	35.8	15.0
Missouri	71	30	24	1,062	253	730	79	23.8	68.7	7.4	2,827,687	758,656	1,813,689	255,342	26.8	64.1	9.0
North Dakota	9	.....	5	64	30	.....	34	46.9	.....	53.1	201,086	101,446	.....	99,640	50.4	.....	49.6
South Dakota	9	1	5	57	41	.....	[3] 16	71.9	.....	.....	178,570	130,888	.....	[3] 47,682	73.3	.....	.....
Nebraska	26	7	8	299	109	163	27	36.5	54.5	9.0	983,987	338,530	558,166	87,282	34.4	56.7	8.9
Kansas	39	1	20	203	135	.....	[3] 68	66.5	.....	.....	608,974	370,419	.....	[3] 238,555	60.8	.....	.....
SOUTH ATLANTIC	90	32	24	1,494	554	807	133	37.1	54.0	8.9	3,543,316	1,249,214	1,914,392	379,710	35.3	54.0	10.7
Delaware	1	2	.....	23	.....	[4] 23	.....	.....	.....	.....	73,834	.....	[4] 73,834	.....	.....	.....	.....
Maryland	5	4	.....	441	35	406	.....	7.9	92.1	.....	1,011,843	104,109	907,734	.....	10.3	89.7	.....
District of Columbia	6	.....	.....	94	94	.....	.....	100.0	.....	.....	236,761	236,761	.....	.....	100.0	.....	.....
Virginia	17	10	3	281	108	150	23	38.4	53.4	8.2	698,898	233,389	400,314	65,195	33.4	57.3	9.3
West Virginia	23	8	6	232	84	118	30	36.2	50.9	12.9	560,139	185,129	272,574	102,436	33.1	48.7	18.3
North Carolina	10	3	8	151	50	74	27	33.1	49.0	17.9	321,586	107,450	145,183	68,953	33.4	45.1	21.4
South Carolina	13	2	3	77	51	[1] 26	.....	66.2	.....	.....	152,458	79,738	[1] 72,720	.....	52.3	.....	.....
Georgia	8	1	3	129	73	.....	[3] 56	56.6	.....	.....	320,063	160,854	.....	[4] 160,109	50.1	.....	.....
Florida	7	2	1	66	54	[1] 12	.....	81.8	18.2	.....	166,834	129,666	[1] 37,168	.....	77.7	22.3	.....
EAST SOUTH CENTRAL	69	28	27	937	277	488	172	29.6	52.1	18.4	2,230,520	631,786	1,182,205	416,529	28.3	53.0	18.7
Kentucky	24	9	8	259	75	154	30	29.0	59.5	11.6	720,341	204,792	422,896	92,653	28.4	58.7	12.9
Tennessee	12	13	7	390	74	248	68	19.0	63.6	17.4	894,743	179,908	556,566	158,269	20.1	62.2	17.7
Alabama	15	5	7	220	90	70	60	40.9	31.8	27.3	487,293	182,243	171,143	133,907	37.4	35.1	27.5
Mississippi	18	1	5	68	38	.....	[3] 30	55.9	.....	.....	128,143	64,843	.....	[3] 63,300	50.6	.....	.....
WEST SOUTH CENTRAL	108	20	55	1,102	581	238	283	52.7	21.6	25.7	3,356,379	1,695,847	639,626	1,020,906	50.5	19.1	30.4
Arkansas	4	1	5	75	29	.....	[3] 46	38.7	.....	.....	215,912	77,643	.....	[3] 138,269	36.0	.....	.....
Louisiana	17	7	2	158	50	[1] 108	.....	31.6	.....	.....	384,776	117,861	[1] 266,915	.....	30.6	.....	.....
Oklahoma	31	2	17	255	156	.....	[3] 99	61.2	.....	.....	844,692	482,842	.....	[3] 361,850	57.2	.....	.....
Texas	56	10	31	614	346	130	138	56.4	21.2	22.5	1,910,999	1,017,501	384,102	509,396	53.2	20.1	26.7
MOUNTAIN	71	7	35	636	328	205	103	51.6	32.2	16.2	1,847,235	995,603	543,683	307,859	53.9	29.4	16.7
Montana	16	2	5	94	61	.....	[3] 33	64.9	.....	.....	312,189	200,949	.....	[3] 111,240	64.4	.....	35.6
Idaho	2	.....	2	44	[1] 44	.....	.....	.....	.....	.....	130,507	[1] 130,507	.....	.....	.....	.....	.....
Wyoming	9	1	2	26	17	.....	[3] 9	65.4	.....	.....	110,366	80,786	.....	[3] 29,580	73.2	.....	.....
Colorado	23	.....	10	252	106	102	44	42.1	40.5	17.5	753,058	330,914	305,434	116,710	43.9	40.6	15.5
New Mexico	3	.....	1	12	[1] 12	.....	.....	.....	.....	.....	29,873	[1] 29,873	.....	.....	.....	.....	.....
Arizona	11	1	3	79	57	.....	[3] 22	72.2	.....	.....	200,055	139,966	.....	[3] 60,089	70.0	.....	.....
Utah and Nevada	7	3	3	129	42	79	8	32.6	61.2	6.2	311,187	119,630	171,507	20,050	38.4	55.1	6.4
PACIFIC	134	29	66	2,331	792	1,194	345	34.0	51.2	14.8	6,044,099	2,190,932	2,593,946	1,259,221	36.2	42.9	20.8
Washington	25	8	13	437	94	269	74	21.5	61.6	16.9	1,127,528	301,838	603,019	222,671	26.8	53.5	19.7
Oregon	9	7	7	207	34	142	31	16.4	68.6	15.0	534,282	119,930	315,275	99,068	22.4	59.0	18.5
California	100	14	46	1,687	664	783	240	39.4	46.4	14.2	4,382,289	1,769,155	1,675,652	937,482	40.4	38.2	21.4

[1] Includes the group "All others."
[2] Includes the groups "Individuals" and "Corporations."
[3] Includes the group "Corporations."
[4] Includes the group "Individuals."

TABLE 9.—STATISTICS FOR CITIES OF 10,000 INHABITANTS OR MORE (CENSUS OF 1920):[1] 1919.

STATE AND CITY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.				Capital.	Salaries.	Wages.	Cost of materials.	Amount received for work done.	Primary horsepower.
		Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).						
ALABAMA	27	282	29	33	220	$219,717	$47,126	$158,458	$115,201	$487,293	219
Birmingham	10	113	10	12	91	84,949	18,390	69,824	42,532	224,328	117
Montgomery	3	72	4	17	51	29,484	19,580	33,711	39,227	116,940	25
ARIZONA	15	104	17	8	79	60,691	7,138	95,047	32,978	200,055	69
Phoenix	8	63	11	5	47	25,331	4,488	55,647	15,064	112,600	26
ARKANSAS	10	101	12	14	75	71,641	17,131	66,635	42,144	215,912	120
Little Rock	6	64	7	7	50	43,978	9,305	49,201	34,564	163,269	103
CALIFORNIA	160	2,123	205	231	1,687	2,025,673	336,454	1,618,999	799,908	4,382,289	1,697
Los Angeles	34	787	34	128	625	649,253	176,480	571,591	309,217	1,489,377	450
San Francisco	11	481	9	45	427	626,431	79,354	299,107	137,226	1,094,573	510
Oakland	9	133	10	12	111	58,682	21,174	130,436	42,873	263,967	85
San Jose	5	75	8	10	57	59,519	15,303	97,613	19,732	169,138	45
Sacramento	13	59	18	2	39	54,854	1,716	47,291	29,944	144,089	63
Berkeley	3	85	3	10	72	76,852	9,120	84,194	15,059	142,988	36
San Diego	13	83	8	5	70	59,790	6,115	57,253	27,489	127,180	108
Fresno	4	47	6	7	34	39,935	15,749	32,184	20,293	100,649	20
COLORADO	42	346	43	51	252	414,500	68,833	255,460	138,819	753,058	313
Denver	17	202	11	35	156	235,214	50,557	163,540	84,599	467,903	174
CONNECTICUT	24	261	24	52	185	364,256	76,165	210,956	111,512	654,689	242
Hartford	6	131	7	26	98	198,916	39,598	110,416	49,918	304,844	66
FLORIDA	10	88	9	13	66	86,273	14,037	52,536	39,185	166,834	58
Jacksonville	5	62	6	8	48	58,140	8,240	35,360	23,968	115,240	34
GEORGIA	12	169	3	37	129	129,541	32,022	93,775	90,559	320,963	187
Atlanta	7	137	8	28	101	109,439	25,282	74,937	78,841	263,720	162
ILLINOIS	159	2,119	133	353	1,633	2,601,186	612,619	1,809,096	1,249,966	5,298,935	2,165
Chicago	80	1,463	52	255	1,156	1,766,311	488,363	1,372,340	927,452	3,915,399	1,325
Rock Island	3	67	.....	21	46	88,110	30,880	47,127	21,359	135,934	61
Rockford	5	44	3	8	33	50,930	15,791	32,922	16,669	120,755	57
Springfield	4	82	3	15	64	89,924	22,484	43,980	14,303	120,591	165
INDIANA	101	825	106	120	599	790,474	138,315	514,916	390,055	1,588,752	1,024
Indianapolis	18	279	14	44	221	209,278	58,474	161,319	109,576	489,659	268
Terre Haute	5	84	4	28	52	149,743	27,215	38,813	58,744	190,412	210
Fort Wayne	5	54	4	11	39	27,088	17,057	42,808	20,768	105,064	44
IOWA	70	584	76	103	405	679,719	127,310	422,751	253,684	1,333,047	523
Sioux City	8	95	10	20	65	62,261	20,386	91,990	55,710	280,366	.....
Des Moines	6	115	2	29	84	129,164	19,678	86,611	48,405	238,121	73
Waterloo	5	81	3	12	66	66,358	16,640	61,573	21,667	145,405	.....
KENTUCKY	41	360	40	61	259	343,830	77,180	192,690	152,731	720,341	347
Louisville	12	223	10	49	164	220,067	73,330	109,638	91,879	484,445	202
LOUISIANA	26	220	23	39	158	187,960	51,613	113,801	80,375	384,776	240
New Orleans	16	153	16	30	107	99,762	32,800	61,866	39,159	235,698	166
MAINE	12	126	10	22	94	131,883	24,567	87,054	43,905	241,671	112
Portland	3	79	1	16	62	77,757	10,487	53,785	24,347	134,947	28
MARYLAND	9	598	7	150	441	1,072,586	153,003	249,761	154,711	1,011,843	721
Cumberland	3	524	2	130	392	1,020,987	133,855	202,940	131,210	870,653	612
Baltimore	5	63	5	18	40	41,309	17,565	41,184	20,053	123,551	43
MASSACHUSETTS	45	894	38	133	723	896,211	185,412	671,117	584,673	2,252,321	1,063
Watertown	3	251	2	31	218	124,621	51,615	199,025	184,492	761,646	229
Boston	9	218	1	34	183	164,257	44,785	185,933	89,993	477,394	233
MICHIGAN	73	895	79	135	681	1,240,651	164,490	792,308	445,540	2,043,559	714
Detroit	22	412	16	14	382	774,320	100,818	483,465	262,504	1,180,979	368
Flint	4	42	5	2	35	99,612	4,056	49,830	22,570	107,587	40
MINNESOTA	46	629	48	99	482	739,244	126,330	488,498	271,765	1,368,915	593
Minneapolis	17	317	19	44	254	379,039	54,730	259,168	135,603	704,556	321
St. Paul	9	160	9	34	117	149,308	47,269	117,777	84,187	350,086	160
Duluth	5	74	2	14	58	111,023	19,423	55,491	17,742	166,507	65
MISSOURI	125	1,414	124	228	1,062	1,281,853	359,455	899,098	650,768	2,827,687	1,292
St. Louis	36	868	24	171	673	758,528	283,379	505,698	378,090	1,669,507	715
Kansas City	40	306	45	28	233	306,182	52,896	253,389	159,126	693,507	326
Joplin	6	49	5	7	37	53,269	7,921	38,442	17,222	106,605	85
NEBRASKA	41	415	43	73	299	698,613	111,472	289,080	219,597	983,987	408
Omaha	15	238	11	41	186	475,824	70,034	184,166	140,179	613,051	221
Lincoln	5	79	6	23	50	58,234	34,349	45,998	36,015	161,374	53
NEW JERSEY	39	536	34	47	455	559,997	87,646	549,119	369,990	1,408,447	608
Newark	5	88	3	8	77	111,906	16,281	133,462	161,397	367,050	98
Jersey City	5	69	6	11	52	85,828	27,190	52,357	22,482	165,104	46
NEW YORK	159	2,428	150	485	1,793	3,311,500	656,964	1,964,813	1,347,027	5,956,122	1,617
New York	60	1,640	33	377	1,230	1,899,545	493,994	1,394,043	798,087	4,091,267	833
Buffalo	20	234	20	44	170	402,046	48,014	178,830	195,458	546,270	206
Rochester	8	94	9	15	70	198,217	17,695	77,429	66,070	256,790	40
Syracuse	8	87	9	11	67	86,956	10,874	59,877	33,530	154,759	107

[1] Cities with 3 establishments and income of $100,000 for work done.

TABLE 9.—STATISTICS FOR CITIES OF 10,000 INHABITANTS OR MORE (CENSUS OF 1920):[1] 1919—Continued.

STATE AND CITY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Capital.	Salaries.	Wages.	Cost of materials.	Amount received for work done.	Primary horsepower.
OHIO	173	2,113	165	354	1,594	$2,630,374	$483,306	$1,528,284	$893,346	$4,657,055	2,714
Cleveland	25	564	15	84	465	571,831	137,063	485,801	298,659	1,290,470	632
Cincinnati	8	422	3	111	308	602,176	129,166	225,072	136,992	880,054	499
Akron	12	156	10	19	127	303,557	51,044	145,537	63,019	381,252	218
Columbus	12	182	6	49	127	176,125	48,173	85,951	64,544	341,555	165
Toledo	13	123	12	20	91	132,217	32,865	95,811	45,176	301,812	113
Dayton	9	67	8	15	44	90,046	15,911	47,805	37,085	166,557	104
Youngstown	5	60	3	16	41	52,073	23,883	58,236	22,175	145,719	88
OKLAHOMA	50	363	73	35	255	425,037	43,129	298,423	152,201	844,692	259
Tulsa	6	100	9	18	73	77,214	26,880	80,943	35,709	230,671	49
Oklahoma City	5	51	15	3	33	76,766	4,580	40,322	16,187	125,397	32
OREGON	23	274	24	43	207	187,110	37,740	204,799	126,459	534,282	198
Portland	12	233	11	40	182	154,729	47,065	180,829	106,985	451,028	139
PENNSYLVANIA	142	1,782	165	297	1,320	2,711,626	401,361	1,260,980	1,052,188	3,883,875	1,697
Philadelphia	33	605	43	112	450	1,067,955	130,527	411,474	457,496	1,348,872	549
Pittsburgh	16	448	8	83	357	616,058	166,910	387,225	257,151	1,073,393	504
RHODE ISLAND	7	174	7	46	121	226,928	58,883	96,984	61,238	388,639	132
Providence	3	91	3	30	58	157,379	46,013	58,184	31,317	229,887	87
TENNESSEE	32	511	27	94	390	450,607	117,460	264,863	178,919	894,743	485
Memphis	8	281	6	53	222	267,024	57,998	162,454	86,289	464,953	220
Chattanooga	6	86	2	22	62	65,428	33,964	45,903	27,117	181,580	100
Nashville	5	62	2	7	53	44,193	12,642	22,280	31,125	105,384	60
TEXAS	97	838	125	99	614	914,340	143,036	640,298	339,770	1,910,999	798
Dallas	15	198	11	37	150	290,401	66,584	172,806	77,962	496,499	134
Fort Worth	11	146	17	13	116	190,140	14,408	101,413	57,502	329,800	88
Wichita Falls	7	64	13	5	46	65,942	6,850	69,174	32,816	226,305	24
Houston	10	101	11	13	77	65,825	14,840	69,366	32,861	196,717	252
El Paso	9	71	14	11	46	41,905	17,365	39,981	21,695	141,499	33
San Antonio	6	53	8	6	39	58,831	7,502	30,427	13,743	100,717	48
UTAH AND NEVADA	13	179	14	36	129	180,243	47,267	122,307	67,760	311,187	115
Salt Lake City	9	162	10	34	118	176,483	44,867	106,067	60,568	275,147	95
VIRGINIA	30	371	23	67	281	426,901	58,041	222,528	138,208	698,898	406
Richmond	12	106	13	12	81	156,917	13,288	74,693	45,364	215,669	120
Norfolk	3	56	2	19	35	39,310	22,334	22,441	14,234	112,113	74
Roanoke	5	66	2	13	51	69,606	12,924	30,602	17,077	108,673	79
WASHINGTON	46	549	54	58	437	445,964	107,150	480,233	210,689	1,127,528	395
Seattle	12	292	10	42	240	239,833	80,671	280,126	84,565	567,496	191
Spokane	5	94	3	6	85	73,009	9,712	82,900	52,452	200,909	41
Tacoma	4	43	8	3	32	21,815	8,148	26,848	28,453	110,514	38
WEST VIRGINIA	37	295	36	27	232	357,443	45,307	196,194	105,934	560,139	241
Clarksburg	7	61	9	3	49	67,323	11,040	49,561	24,752	151,951	41
Huntington	3	64	2	9	53	46,074	15,150	36,984	18,438	109,537	21
WISCONSIN	42	632	30	118	475	579,471	152,182	407,073	361,122	1,369,183	561
Milwaukee	11	382	2	70	301	301,637	112,870	263,563	239,203	909,929	309

[1] Cities with 3 establishments and income of $100,000 for work done.

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

	Number of engines or motors.	HORSEPOWER. Amount.	Per cent distribution.
Primary power, total	3,370	23,046	100.0
Owned	527	8,885	37.1
Steam [1]	394	7,429	31.0
Internal combustion engines	131	1,450	6.1
Water motors	2	6	(2)
Primary power—Continued.			
Rented	2,852	15,061	62.9
Electric	2,852	14,902	62.2
Other	.....	159	0.7
Electric	3,141	16,593	100.0
Rented	2,852	14,902	89.8
Generated by establishments reporting	289	1,691	10.2

[1] Includes 36 of 579 horsepower reported as steam turbines.

[2] Less than one-tenth of 1 per cent.

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

DIVISION AND STATE.	COAL. Anthracite[1] (tons, 2,240 pounds).	COAL. Bituminous (tons, 2,000 pounds).	Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
UNITED STATES	24,954	131,102	3,451	40,451	32,024	321,981
NEW ENGLAND	2,360	8,544	261	216	1,318	4,131
Maine	825	670	40	4	203	560
New Hampshire	12	391	.....	.....	.....	62
Vermont	118	56	.....	.....	.....	6
Massachusetts	74	5,751	221	122	682	1,614
Rhode Island	852	451	.....	.....	.....	116
Connecticut	479	1,225	.....	90	433	1,773
MIDDLE ATLANTIC	18,586	12,663	1,277	192	2,411	20,529
New York	11,505	5,336	859	114	1,230	13,020
New Jersey	2,139	969	82	.....	42	2,711
Pennsylvania	4,942	6,358	336	78	1,139	4,798
EAST NORTH CENTRAL	2,274	52,693	673	228	9,291	89,767
Ohio	269	13,753	143	115	2,929	64,164
Indiana	.....	6,786	22	12	1,198	7,310
Illinois	1,109	18,129	19	101	1,394	11,349
Michigan	66	7,160	346	.....	3,758	5,047
Wisconsin	830	6,865	143	.....	12	1,897
WEST NORTH CENTRAL	854	25,847	477	755	5,391	34,164
Minnesota	350	4,657	29	70	1,877	1,703
Iowa	113	5,539	.....	464	1,525	3,982
Missouri	278	9,738	128	178	1,482	10,964
North Dakota	90	604	306	.....	76	326
South Dakota	.....	584	.....	.....	77	762
Nebraska	23	3,017	14	32	329	7,154
Kansas	.....	1,708	.....	11	25	9,273
SOUTH ATLANTIC	166	10,818	177	732	2,425	35,765
Delaware	6	150	.....	.....	300	.....
Maryland	10	3,591	.....	.....	15	316
SOUTH ATLANTIC—Contd.						
District of Columbia	130	153	.....	.....	50	960
Virginia	20	2,408	.....	674	200	1,368
West Virginia	.....	282	.....	30	684	31,471
North Carolina	.....	1,317	25	20	152	750
South Carolina	.....	494	.....	6	57	377
Georgia	.....	2,153	18	2	730	523
Florida	.....	270	134	.....	237	.....
EAST SOUTH CENTRAL	20	7,739	340	11	853	26,782
Kentucky	.....	2,718	.....	.....	44	24,484
Tennessee	.....	3,351	54	2	193	827
Alabama	15	1,342	258	.....	562	1,314
Mississippi	5	328	28	9	54	157
WEST SOUTH CENTRAL	651	3,682	94	920	2,206	82,060
Arkansas	20	81	.....	2	43	2,846
Louisiana	.....	801	18	18	413	12,180
Oklahoma	150	229	.....	17	60	36,479
Texas	481	2,571	76	883	1,690	30,555
MOUNTAIN	25	7,577	27	11	372	4,512
Montana	.....	1,147	.....	.....	4	150
Idaho	.....	246	.....	.....	.....	.....
Wyoming	.....	215	.....	.....	140	.....
Colorado	.....	4,649	24	10	110	2,005
New Mexico	.....	122	.....	.....	.....	24
Arizona	25	223	1	1	28	2,033
Utah and Nevada	.....	975	2	.....	90	300
PACIFIC	18	1,539	125	37,386	7,757	24,271
Washington	12	1,225	125	327	1,170	2,365
Oregon	.....	29	.....	2,246	29	2,217
California	6	285	.....	34,813	6,558	19,689

TABLE 12.—DETAILED STATEMENT FOR THE

DIVISION AND STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male	Under 16. Female	Capital.	EXPENSES Salaries and wages.	EXPENSES Officials.
UNITED STATES	2,156	24,934	2,285	1,272	619	1,951	18,807	Oc 20,156	Ja 16,750	19,101	10,841	8,131	107	22	$28,734,049	$3,039,187	
NEW ENGLAND	102	1,542	100	71	19	167	1,185	Oc 1,304	Ja 989	1,189	709	402	12	6	1,670,321	196,935	
Maine	12	126	10	8	.....	14	94	Oc [1] 103	Ja 80	94	51	43	.....	.....	131,883	13,500	
New Hampshire	8	62	13	.....	1	2	46	Au [1] 49	De 43	46	29	17	.....	.....	24,923	.....	
Vermont	6	25	8	.....	.....	1	16	Ja [1] 18	Jy [1] 14	17	10	7	.....	.....	26,120	.....	
Massachusetts	45	894	38	31	10	92	723	Oc 805	Ja 585	738	415	309	8	6	896,211	97,417	
Rhode Island	7	174	7	12	5	29	121	Ju 141	Ja 87	107	54	49	4	.....	226,928	36,154	
Connecticut	24	261	24	20	3	29	185	Oc 191	Ja 175	187	150	37	.....	.....	364,256	49,864	
MIDDLE ATLANTIC	340	4,746	349	232	135	462	3,508	Oc 3,814	Fe 3,184	3,679	2,164	1,506	8	1	6,583,123	678,253	
New York	159	2,428	150	123	100	262	1,793	Oc 1,899	Fe 1,611	1,813	1,099	712	2	.....	3,311,500	378,497	
New Jersey	39	536	34	26	3	18	455	No 475	Fe 423	464	278	186	.....	.....	559,997	68,347	
Pennsylvania	142	1,782	165	83	32	182	1,320	Oc 1,448	Fe 1,150	1,402	787	608	6	1	2,711,626	231,409	
EAST NORTH CENTRAL	548	6,584	522	374	123	583	4,982	Oc 5,299	Ja 4,378	5,055	2,891	2,139	18	7	7,842,156	909,483	
Ohio	173	2,113	165	118	25	211	1,594	Ap 1,717	Ja 1,308	1,582	947	630	5	.....	2,630,374	294,544	
Indiana	101	825	106	48	14	58	599	Oc 627	Ja [1] 545	617	370	241	4	2	790,474	86,294	
Illinois	159	2,119	133	142	51	160	1,633	Oc 1,744	Fe 1,472	1,670	962	700	5	3	2,601,186	385,255	
Michigan	73	895	79	34	14	87	681	Oc 744	Fe 590	697	380	315	2	.....	1,240,651	65,399	
Wisconsin	42	632	39	32	19	67	475	Ja [1] 490	Fe 454	489	232	253	2	2	579,471	77,991	
WEST NORTH CENTRAL	371	3,511	416	175	87	261	2,572	Oc 2,899	Fe 2,202	2,509	1,449	1,044	15	1	3,885,400	429,923	
Minnesota	46	629	48	33	20	46	482	Oc 526	Fe 417	484	244	240	.....	.....	739,244	71,595	
Iowa	70	584	76	31	19	53	405	Oc 432	Fe 375	407	240	164	3	.....	679,719	60,157	
Missouri	125	1,414	124	87	37	104	1,062	Oc 1,243	Fe 887	1,009	549	451	8	1	1,281,853	232,614	
North Dakota	14	90	20	.....	1	5	64	Au 85	Ja [1] 44	82	46	36	.....	.....	140,535	.....	
South Dakota	15	78	19	.....	.....	2	57	Se [1] 62	Ja [1] 49	58	38	20	.....	.....	95,039	.....	
Nebraska	41	415	43	23	9	41	299	Oc 340	Ja 246	317	182	133	2	.....	698,613	64,153	
Kansas	60	301	86	1	1	10	203	Oc [1] 225	Fe 181	152	150	.....	2	.....	250,397	1,404	
SOUTH ATLANTIC	146	1,959	132	185	40	108	1,404	Mh 1,727	Ja 1,366	1,510	764	732	11	3	2,483,367	264,341	
Delaware	3	33	1	3	1	5	23	Ap [1] 24	Ja [1] 22	24	20	4	.....	.....	97,632	6,500	
Maryland	9	598	7	122	10	18	441	Oc 468	Ja 379	425	117	307	1	.....	1,072,586	128,465	
District of Columbia	6	103	6	.....	1	2	94	Se [1] 100	Ja 81	99	60	39	.....	.....	147,450	.....	
Virginia	30	371	23	25	10	32	281	My [1] 287	Fe [1] 275	286	169	117	.....	.....	426,901	49,427	
West Virginia	37	295	36	14	.....	13	232	De 241	Ja 224	241	130	111	.....	.....	357,443	35,992	
North Carolina	21	197	28	7	.....	11	151	Jy 166	Fe 128	153	94	59	.....	.....	86,952	18,850	
South Carolina	18	105	19	4	.....	5	77	Se [1] 79	Fe [1] 74	78	51	26	1	.....	78,589	11,307	
Georgia	12	169	3	5	16	16	129	Oc 149	Ja 107	139	77	50	9	3	129,541	6,520	
Florida	10	88	9	5	2	6	66	Se [1] 67	Ju [1] 65	65	46	19	.....	.....	86,273	7,280	
EAST SOUTH CENTRAL	124	1,258	125	56	40	100	937	Oc 1,007	Ja 772	966	520	414	19	4	1,073,934	164,066	
Kentucky	41	360	40	16	2	43	259	No 274	Ja 238	268	151	110	3	4	343,830	58,540	
Tennessee	32	511	27	33	24	37	390	Se [1] 416	Ja 341	390	212	175	3	.....	450,607	77,216	
Alabama	27	282	29	5	11	17	220	Oc 255	Mh 193	238	126	105	7	.....	219,717	24,910	
Mississippi	24	105	29	2	3	3	68	Jy [1] 70	Ja 67	70	40	24	6	.....	59,780	3,400	
WEST SOUTH CENTRAL	183	1,522	233	70	47	70	1,102	Oc 1,187	Ja 992	1,167	783	368	16	.....	1,598,978	141,178	
Arkansas	10	101	12	6	5	3	75	([1]) 81	Ja 69	74	52	22	.....	.....	71,641	9,400	
Louisiana	26	220	23	17	6	16	158	No 161	Au 151	180	101	70	.....	.....	187,960	34,357	
Oklahoma	50	363	73	13	3	19	255	Se 284	Ja 223	261	176	83	2	.....	425,037	25,5 0	
Texas	97	838	125	34	33	32	614	De 685	Ja 540	652	454	184	14	.....	914,340	71,861	
MOUNTAIN	113	866	125	31	27	47	636	Se 709	Ja 551	642	351	287	4	.....	938,023	68,510	
Montana	23	125	27	2	1	1	94	Se 111	Fe 74	107	51	56	.....	.....	170,027	7,200	
Idaho	4	56	6	1	1	4	44	Au [1] 46	Ja [1] 41	46	26	20	.....	.....	46,610	2,000	
Wyoming	12	39	13	.....	.....	.....	26	Oc 30	Ja [1] 22	25	13	12	.....	.....	40,646	.....	
Colorado	42	346	43	20	9	22	252	Au [1] 277	Ja 217	243	141	100	2	.....	414,500	43,674	
New Mexico	4	17	5	.....	.....	.....	12	([2]) 12	([2]) 12	10	10	.....	.....	.....	16,306	.....	
Arizona	15	104	17	.....	.....	8	79	Oc [1] 83	Ja 76	83	49	34	.....	.....	60,691	.....	
Utah and Nevada	13	179	14	8	16	12	129	Ja [1] 100	Ja 105	128	61	65	2	.....	189,243	15,636	
PACIFIC	220	2,946	283	78	101	153	2,331	Se 2,443	Ja 2,166	2,384	1,201	1,179	4	.....	2,658,747	186,498	
Washington	46	549	54	23	10	25	437	Se 488	Fe 387	426	238	185	3	.....	445,964	57,575	
Oregon	23	274	24	18	.....	25	207	Oc 228	Fe 190	224	106	118	.....	.....	187,110	25,620	
California	160	2,123	205	37	91	103	1,687	Oc 1,756	Ja 1,586	1,734	857	876	1	.....	2,025,673	103,303	

[1] Same number reported for one or more other months.

[2] Same number reported throughout the year.

INDUSTRY, BY DIVISIONS AND STATES: 1919.

Division and state.	Expenses—continued. Salaries and wages—Continued. Clerks, etc.	Salaries and wages—Continued. Wage earners.	For contract work.	Rent and taxes. Rent of factory.	Rent and taxes. Taxes, Federal, state, county, and local.	For materials. Principal materials.	For materials. Fuel and rent of power.	Amount received for work done.	Power. Primary horsepower. Total.	Owned. Steam engines (not turbines).	Owned. Steam turbines.	Owned. Internal-combustion engines.	Owned. Water power (motors).	Rented.[1]	Electric horsepower generated in establishments reporting.
United States	$2,236,696	18,245,024	$460,660	$1,571,202	$660,117	$9,801,650	$1,999,899	$54,421,305	23,946	6,850	579	1,450	6	15,061	1,691
New England	150,338	1,118,763	20,713	94,827	76,366	689,013	141,152	3,691,562	1,625	465	22	2	6	1,129	117
Maine	11,067	87,054	1,627	5,270	2,796	30,222	13,683	241,671	112	8	.....	.....	.....	104	.....
New Hampshire	1,946	40,098	829	3,697	496	14,194	5,575	111,359	46	10	.....	.....	.....	36	.....
Vermont	300	12,554	380	2,426	301	6,534	2,534	42,883	30	10	.....	.....	2	18	.....
Massachusetts	87,995	671,117	15,947	61,577	63,496	505,459	79,214	2,252,321	1,053	370	2	.....	4	687	117
Rhode Island	22,729	96,984	168	2,939	2,913	48,846	12,392	388,639	132	12	.....	2	.....	118	.....
Connecticut	26,301	210,956	1,762	18,918	6,364	83,758	27,754	654,689	242	56	20	.....	.....	166	.....
Middle Atlantic	467,718	3,774,912	151,653	275,144	138,645	2,369,363	399,842	11,248,444	3,922	941	127	457	.....	2,397	382
New York	278,467	1,964,813	112,299	159,439	44,794	1,108,686	238,341	5,956,122	1,617	282	76	29	.....	1,230	75
New Jersey	19,299	549,119	22,084	37,875	7,453	323,727	46,263	1,408,447	608	247	25	11	.....	325	.....
Pennsylvania	169,952	1,260,980	17,270	77,830	86,398	936,950	116,238	3,883,875	1,697	412	26	417	.....	842	305
East North Central	641,429	5,051,677	65,133	416,199	174,719	2,781,804	558,225	14,957,484	7,178	2,173	149	509	.....	4,347	627
Ohio	188,762	1,528,284	10,518	106,331	74,411	725,287	168,059	4,657,055	2,714	845	17	472	.....	1,380	332
Indiana	52,021	514,916	8,958	53,117	10,732	331,378	58,677	1,588,752	1,024	273	6	18	.....	727	.....
Illinois	227,364	1,809,096	25,495	149,971	48,318	1,067,657	182,309	5,298,935	2,165	709	111	6	.....	1,339	107
Michigan	99,091	792,308	10,328	67,622	15,689	360,218	85,322	2,043,559	714	145	.....	11	.....	558	8
Wisconsin	74,191	407,073	9,834	39,158	25,569	297,264	63,858	1,369,183	561	201	15	2	.....	343	180
West North Central	309,769	2,439,286	54,166	267,054	57,934	1,296,652	314,003	7,502,266	3,233	895	.....	182	.....	2,156	35
Minnesota	54,735	488,498	20,371	44,281	8,985	210,649	61,116	1,368,915	593	237	.....	.....	.....	356	35
Iowa	67,153	422,751	5,593	57,290	7,973	181,341	72,343	1,333,047	523	172	.....	3	.....	348	.....
Missouri	126,841	899,098	8,985	95,432	23,272	554,824	95,944	2,827,687	1,292	400	.....	158	.....	734	.....
North Dakota	4,583	57,825	5,850	8,994	1,898	32,167	8,785	201,086	77	12	.....	4	.....	61	.....
South Dakota	1,898	65,758	2,996	6,986	1,378	26,692	8,542	178,570	76	.....	.....	2	.....	74	.....
Nebraska	47,319	289,080	8,348	20,466	11,576	177,874	41,723	983,987	498	42	.....	2	.....	364	.....
Kansas	7,240	216,276	2,023	24,605	2,852	113,105	25,550	608,974	264	32	.....	13	.....	219	.....
South Atlantic	97,135	1,092,388	27,552	123,363	56,763	562,008	135,502	3,543,316	1,894	1,084	21	51	.....	738	415
Delaware	5,297	18,813	208	1,110	1,338	16,280	1,688	73,834	31	18	.....	.....	.....	13	.....
Maryland	24,538	249,761	6,134	46,125	16,730	124,981	29,730	1,011,843	721	698	.....	.....	.....	23	412
District of Columbia	3,131	102,601	.....	2,160	2,484	37,081	7,097	236,761	73	40	.....	14	.....	19	3
Virginia	9,514	222,528	2,542	19,585	6,820	108,807	29,401	698,898	406	136	17	3	.....	250	.....
West Virginia	9,315	196,104	849	23,068	7,787	85,090	20,844	560,139	241	47	.....	21	.....	173	.....
North Carolina	9,106	106,739	5,000	9,648	5,142	62,609	14,050	321,586	130	71	.....	6	.....	53	.....
South Carolina	3,975	49,441	77	5,320	3,041	24,457	5,651	152,458	47	14	.....	5	.....	28	.....
Georgia	25,502	93,775	860	8,041	12,297	69,913	20,646	320,963	187	49	4	2	.....	132	.....
Florida	6,757	52,536	11,882	8,306	1,124	32,790	6,395	166,834	58	11	.....	.....	.....	47	.....
East South Central	86,554	662,018	4,100	76,863	64,964	391,044	82,423	2,230,520	1,686	534	42	47	.....	1,063	95
Kentucky	18,640	192,690	829	16,407	37,685	129,575	23,156	720,341	347	170	.....	6	.....	171	39
Tennessee	40,244	264,863	105	29,377	20,845	149,346	29,573	894,743	485	203	30	4	.....	248	.....
Alabama	22,216	158,458	2,741	24,377	4,821	93,273	21,928	487,293	219	122	12	7	.....	78	6
Mississippi	5,454	46,007	425	6,702	1,613	18,850	7,766	128,143	635	39	.....	30	.....	566	50
West South Central	113,731	1,110,157	49,026	120,166	38,415	493,642	120,848	3,356,379	1,417	194	214	152	.....	857	22
Arkansas	7,731	66,635	1,059	9,733	2,250	34,202	7,942	215,912	120	12	25	12	.....	71	.....
Louisiana	17,256	113,801	440	12,093	3,166	62,732	17,643	384,776	240	44	21	65	.....	110	22
Oklahoma	17,569	208,423	3,472	34,306	3,964	127,543	24,658	844,692	259	27	10	13	.....	209	.....
Texas	71,175	640,298	44,055	64,034	29,035	269,165	70,605	1,910,999	798	111	158	62	.....	467	.....
Mountain	75,176	682,792	50,131	79,936	12,829	255,518	73,454	1,847,235	701	165	4	.....	.....	532	.....
Montana	2,590	115,490	.....	17,732	1,968	49,084	9,987	312,189	115	.....	.....	.....	.....	115	.....
Idaho	8,658	48,110	41,329	3,600	273	5,336	2,616	130,507	18	.....	.....	.....	.....	18	.....
Wyoming	.....	31,618	150	8,412	239	12,413	4,527	110,366	53	4	.....	.....	.....	49	.....
Colorado	25,159	255,400	8,167	25,612	6,722	103,467	35,352	753,058	313	104	4	.....	.....	205	.....
New Mexico	.....	14,760	120	3,120	288	3,080	2,372	29,873	18	.....	.....	.....	.....	18	.....
Arizona	7,138	95,047	.....	10,213	786	23,369	9,609	200,055	69	.....	.....	.....	.....	69	.....
Utah and Nevada	31,631	122,307	365	11,247	2,553	58,769	8,991	311,187	115	57	.....	.....	.....	58	.....
Pacific	294,846	2,304,031	38,186	117,710	39,482	962,606	174,450	6,044,099	2,290	398	.....	50	.....	1,842	.....
Washington	49,575	480,233	8,273	27,938	9,695	174,220	36,469	1,127,528	395	46	.....	2	.....	347	.....
Oregon	12,120	204,799	565	13,228	2,995	110,522	15,937	534,282	198	58	.....	.....	.....	140	.....
California	233,151	1,618,999	29,348	76,544	26,792	677,864	122,044	4,382,289	1,697	294	.....	48	.....	1,355	.....

[1] Chiefly electric motors operated by rented (or purchased) current; other power included chiefly shaft-belt or transmitted power from neighboring power plants.

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

WASHINGTON

FOURTEENTH CENSUS OF THE UNITED STATES

MANUFACTURES: 1919

PRINTING AND PUBLISHING

Prepared under the supervision of EUGENE F. HARTLEY, Chief Statistician for Manufactures

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WASHINGTON

GOVERNMENT PRINTING OFFICE

1922.

EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census did not cover establishments which were idle during the entire year or for which products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1919, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city, county, or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city, county, or state in which it was located. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products different from those covered by the class designation, and, on the other hand, may not represent the total product covered by this designation, because some products of this class may be made in establishments in which it is not the product of chief value.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1919 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the manufacturing industries were distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners.

The number of persons engaged in each industry, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where this date did not portray such conditions, an earlier date was requested.

In the case of employees other than wage earners the number thus reported for the representative date has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, by sex, without distinction of age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given in certain tables for each separate industry, is not totaled for all industries combined, because, in view of the variations of date, such a total is not believed to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation.

In order to determine as nearly as possible the age distribution of the average number of wage earners for an industry, the per cent distribution by age of the wage earners for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. The percentages thus obtained have been applied to the average number of wage earners for the year to determine the average numbers 16 years and over, and under 16, employed.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number of wage earners fluctuates from month to month in every industry, and in some cases to a very great extent. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month, and while representing the number according to the pay rolls to whom wages were paid on that date, no doubt represent a larger number than would be required to perform the work in any industry if all were continuously employed during the year.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a few wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital (amount actually invested).—The instructions on the schedule for securing data relating to capital were as follows:

"The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises."

These instructions were identical with those employed at the censuses of 1914 and 1909. The data compiled in respect to capital, however, at both censuses, as well as at all preceding censuses of manufactures, have been so defective as to be of little value except as indicating general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include certain Federal taxes and state, county, and local taxes. Under "Federal taxes" there are included the internal revenue tax on manufactures (tobacco, beverages, etc.), excise taxes when included in values reported for products, corporation capital stock tax, and corporation income tax, but not the income tax for individuals and partners.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of depreciation or interest, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power equipment of the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, fuel oils, gasoline and other volatile oils, and gas, and represent the quantity used during the year. As only the principal kinds of fuel are shown, comparison as to the total cost of all fuel is impracticable.

PRINTING AND PUBLISHING.

GENERAL STATISTICS.

General character of the industry.—The printing and publishing industry as here presented comprises establishments included under six census classifications, as follows: (1) Job printing, book printing and publishing, or publishing only, and machine composition; (2) music printing and publishing, or publishing only; (3) newspaper and periodical printing and publishing, or publishing only; (4) bookbinding and blank-book making; (5) engraving, steel and copper plate, including plate printing; and (6) lithographing. The first three comprise what is referred to in this publication as the printing and publishing industry proper. It should be stated that an establishment printing and publishing or publishing a newspaper or periodical is classified under newspapers and periodicals, regardless of the fact that the value of its receipts from other sources may be greater. Somewhat similar conditions prevail in the other branches of the industry in which there is more or less overlapping. The value of products, therefore, represents the total receipts of the establishments of these branches, which may not represent the exact totals in accordance with the industry heading.

Comparison with earlier censuses.—Table 1 shows the statistics for the six branches of the printing and publishing industry combined, for five censuses, 1899 to 1919. In all essential features, increases are shown from census to census, except that from 1914 to 1919 there are decreases in number of establishments and proprietors and firm members. The large increases in salaries and wages, cost of materials, and the value of products from 1914 to 1919 are due largely to a general rise of prices and wages following the World War, and can not, therefore, properly be used to measure the growth of the industry during that census period. The addition of the Federal income tax since 1914 will account for the exceptional increase in "Rent and taxes."

Comparative summary.—Table 2 shows the general statistics of each of the six branches of the printing and publishing industry for 1919 and 1914. In this industry, as in many other industries, there are duplications of values. A publisher, for instance, often has the printing or the machine composition done by another establishment in the industry, and this work legitimately becomes part of the value of products of each. These duplications in the three printing and publishing industries proper, to which they apply, may, in part, be secured from Table 14.

Of the three printing and publishing industries proper, only one, book and job, shows an increase in number of establishments for the five-year period 1914–1919. During this five-year period the increase in value of products for book and job printing was $290,332,367, or 94.5 per cent. For newspapers and periodicals, the increase in value of products was $428,246,930, or 86.4 per cent, and for music, $7,320,911, or 100.7 per cent. In average number of wage earners, for the same five-year period, book and job printing reported the largest absolute increase, 9,884, or 8.7 per cent; as compared with 6,006, or 5.3 per cent, for newspapers and periodicals; and 26, or 3 per cent, for music.

Of the three analogous branches—bookbinding and blank-book making; engraving, steel and copper plate, including plate printing; and lithographing—lithographing reported 44.8 per cent of the total value of products; engraving, steel and copper plate, 14.8 per cent; and bookbinding and blank-book making, 40.4 per cent. Their percentages of increase in value of products over 1914 were 86.9, 75.6, and 73.3 per cent, respectively. These three industries combined, in 1919, reported 9.6 per cent of the total value of products for the six branches combined, as compared with 10.1 per cent in 1914.

Summary, by states.—Table 3 shows, by states, for the six branches of the industry combined, so far as they can be presented without disclosing individual operations, the average number of wage earners, value of products, and value added by manufacture, with per cent distribution and rank for 1919. The states in this table are ranked by value of products, which is not always conclusive as indicating their real importance. Their ranking in many instances would change materially if based upon average number of wage earners or value added by manufacture. The total value of products for the nine states included as "All other states" represented only 1 per cent of the total value of products for all states in the industry in 1919.

Persons engaged in the industry.—All branches of the industry combined are shown in Table 4, by persons engaged, according to occupation and sex, and by age, for wage earners. The decrease in proprietors and firm members from 1914 to 1919 naturally follows the reduction in number of establishments shown in other tables and the increase in corporations. The increase in salaried officers of corporations likewise is in harmony with the increase in number of corporations, shown in Table 9. The decrease in percentage of male and increase of female wage earners appears to be one of the effects of the World War.

In 1919 as compared with 1914, while there was an actual increase of 5.6 per cent in the average number of wage earners, their relative proportion to all classes decreased 2 per cent. Clerks and other subordinate salaried employees increased 16.7 per cent, while proprietors and officials increased 10.3 per cent.

Wage earners, by months.—Table 5 shows the statistics for wage earners, by months, for all branches combined, and for each of the six branches, 1919 and 1914, and by states, 1919. The table also shows for 1919 the number of males and females for all branches of the industry combined and for each branch separately, and the number of females in certain states in which a comparatively large number of female wage earners were employed.

Prevailing hours of labor.—Table 6 presents the classification of wage earners by number of hours worked per week, in each of the six branches of the industry, and separately for the states, 1919 and 1914. This table shows a marked shortening of the working day for the industry since 1914. In that year only 68.6 per cent of the wage earners were reported in the group "48 and under" as against 86.8 per cent in 1919. In 1914 the groups "Between 48 and 54," "54," and "Between 54 and 60" constituted 29.6 per cent, and the groups "60" and "Over 60," 1.8 per cent of the total number of wage earners, as compared with 12.4 per cent and eight-tenths of 1 per cent, respectively, for 1919. The same general conditions of the shortening of the hours of labor in 1919 as compared with 1914 are evidenced for the separate states.

Size of establishments, by average number of wage earners.—Table 7 gives the size of establishments, by average number of wage earners, for the six branches of the industry separately, and for all branches combined for 1919 and 1914, and by states for 1919. The statistics in this table emphasize the predominance of the number of small establishments, when based on the number of wage earners employed. In 1919, for instance, of the total number of establishments in the printing and publishing industry as a whole, 98.6 per cent were in the several classes having fewer than 101 wage earners, while such establishments employed 61.5 per cent of the total number of wage earners. The establishments in the industry employing an average of more than 100 wage earners represented only 1.4 per cent of the total number of establishments, but reported 38.5 per cent of the total number of wage earners.

Size of establishments, by value of products.—Table 8 presents the statistics for all branches of the industry combined, and separately for each of the six branches, as to the number of establishments in the several classes by value of products, 1919 and 1914. The figures strikingly illustrate the fact that the number of establishments of itself is no real index of their importance to the industry.

Character of ownership.—Table 9 shows the character of ownership for the industry as a whole, and for each of the six branches, 1919 and 1914, and by states for 1919. This table illustrates the preponderance of corporate ownership. Although corporations owned but 27.5 per cent of the number of establishments in the combined industry, they reported 74.9 per cent of the average number of wage earners and 80 per cent of value of products. During the five-year period 1914–1919, the average number of wage earners, as reported by corporations, increased 26,208, or 13.9 per cent, and the value of products $672,967,256, or 98 per cent. Similar conditions prevailed in practically all branches of the industry.

Number and horsepower of types of prime movers.—Table 10 shows, for the industry as a whole, the total number and horsepower of the several types of prime movers used in the industry in 1919, 1914, and 1909. The total horsepower reported in 1919, as compared with that for 1914, shows an increase of 32,913 horsepower, or 10 per cent. This increase is due to the gain of 54,596 horsepower, or 22.5 per cent, in rented power, since owned power decreased 21,683 horsepower, or 25.1 per cent, during the five-year period. Of the total horsepower in 1914, 26.2 per cent was owned power and 73.8 per cent rented. The corresponding proportions for 1919 were 17.9 per cent and 82.1 per cent, respectively.

Fuel consumed.—Table 11 shows the principal kinds and the quantities of fuel used in the combined industry, by states, for 1919 and 1914. The most marked increase during the five-year period was in oils, 49,105 barrels, or 92.9 per cent, several states showing a decrease in the use of coal with an increase in oil.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

	1919	1914	1909	1904	1899	PER CENT OF INCREASE.[1] 1914–1919	1909–1914	1904–1909	1899–1904
Number of establishments	32,476	33,471	31,445	27,703	23,814	−3.0	6.4	13.1	16.7
Persons engaged	455,822	419,313	388,466	316,047	261,440	8.0	7.9	22.9	20.9
Proprietors and firm members	28,493	31,041	30,424	28,368	25,495	−8.2	2.0	7.2	11.3
Salaried employees	140,051	116,180	99,608	68,592	40,685	21.4	16.6	45.2	68.6
Wage earners (average number)	287,278	272,092	258,434	219,087	195,260	5.6	5.3	18.0	12.2
Primary horsepower	362,123	329,210	297,763	166,380	110,775	10.0	10.9	79.0	33.9
Capital	$1,150,505,247	$720,231,054	$588,345,708	$432,853,984	$333,003,432	59.7	22.4	35.9	30.0
Salaries and wages	563,584,011	33[illegible],907,294	2[illegible]8,086,431	194,944,287	139,291,335	69.3	24.2	37.5	40.0
Salaries	232,064,588	137,396,936	103,458,251	67,748,298	39,475,220	68.9	32.8	52.7	71.6
Wages	331,519,423	195,510,358	164,628,180	127,195,989	99,816,115	69.6	18.8	29.4	27.4
Paid for contract work	87,687,115	41,532,901	36,384,359	28,880,362	19,235,938	111.1	14.2	26.0	50.1
Rent and taxes	56,464,238	24,291,193	16,347,981	[2] 12,123,388	10,383,485	132.4	48.6	34.8	16.8
Cost of materials	571,510,277	257,847,976	201,774,690	142,514,182	103,654,284	121.6	27.8	41.6	37.5
Value of products	1,699,789,229	901,534,801	737,876,087	552,473,353	395,186,629	88.5	22.2	33.6	39.8
Value added by manufacture[3]	1,128,278,952	643,686,825	536,101,497	409,959,171	291,532,345	75.3	20.1	30.8	40.6

[1] A minus sign (—) denotes decrease. [2] Exclusive of internal revenue. [3] Value of products less cost of materials.

TABLE 2.—COMPARATIVE SUMMARY FOR THE COMBINED INDUSTRY AND EACH OF THE SIX BRANCHES: 1919 AND 1914.

	TOTAL FOR INDUSTRY.			ESTABLISHMENTS ENGAGED PRIMARILY IN—					
				Printing and publishing, book and job.			Printing and publishing, music.		
	1919	1914	Per cent of increase,[1] 1914–1919.	1919	1914	Per cent of increase, 1914–1919.	1919	1914	Per cent of increase,[1] 1914–1919.
Number of establishments	32,476	33,471	−3.0	13,089	12,115	8.0	160	180	−11.1
Persons engaged	455,822	419,313	8.0	171,199	152,908	12.0	2,622	2,182	20.2
Proprietors and firm members	28,493	31,041	−8.2	12,185	11,717	4.0	107	146	−26.7
Salaried employees	140,051	116,180	21.4	36,009	28,070	28.3	1,616	1,163	39.0
Wage earners (average number)	287,278	272,092	5.6	123,005	113,121	8.7	899	873	3.0
Primary horsepower	362,123	329,210	10.0	131,961	115,233	14.5	634	594	6.7
Capital	$1,150,505,247	$720,231,654	59.7	$405,554,984	$247,282,409	64.0	$8,006,122	$4,260,844	87.9
Salaries and wages	563,584,011	332,907,294	69.3	207,196,883	113,419,236	82.7	3,974,228	1,903,872	108.7
Salaries	232,064,588	137,396,936	68.9	65,720,640	35,005,536	87.7	3,047,240	1,330,887	129.0
Wages	331,519,423	195,510,358	69.6	141,476,243	78,413,700	80.4	926,988	572,985	61.8
Paid for contract work	87,687,115	41,532,901	111.1	32,243,303	17,658,478	82.6	2,713,899	1,561,812	73.8
Rent and taxes	56,464,238	24,291,193	132.4	19,853,046	10,278,667	93.1	642,249	246,945	160.1
Cost of materials	571,510,277	257,847,976	121.6	211,067,174	96,453,232	118.8	2,123,781	1,046,630	102.9
Value of products	1,699,789,229	901,534,801	88.5	597,663,228	307,330,861	94.5	14,592,177	7,271,266	100.7
Value added by manufacture[2]	1,128,278,952	643,686,825	75.3	386,596,054	210,877,629	83.3	12,468,396	6,224,636	100.3

	ESTABLISHMENTS ENGAGED PRIMARILY IN—											
	Printing and publishing, newspapers and periodicals.			Bookbinding and blank-book making.			Engraving, steel and copper plate, including plate printing.			Lithographing.		
	1919	1914	Per cent of increase,[1] 1914–1919.	1919	1914	Per cent of increase,[1] 1914–1919.	1919	1914	Per cent of increase,[1] 1914–1919.	1919	1914	Per cent of increase,[1] 1914–1919.
Number of establishments	17,362	19,317	−10.1	1,113	1,124	−1.0	421	399	5.5	331	336	−1.5
Persons engaged	228,030	212,000	7.8	25,287	25,633	−1.3	8,779	8,521	3.0	19,305	18,069	6.8
Proprietors and firm members	14,570	17,560	−17.0	1,111	1,078	3.1	370	369	0.3	150	171	−12.3
Salaried employees	93,679	80,005	17.0	3,815	2,862	33.3	1,395	1,293	7.9	3,537	2,727	29.7
Wage earners (average number)	120,381	114,375	5.3	20,361	21,693	−6.1	7,014	6,859	2.3	15,618	15,171	2.9
Primary horsepower	194,361	181,269	7.2	11,123	11,266	−1.3	5,420	5,670	−4.4	18,624	15,178	22.7
Capital	$614,045,344	$384,744,761	59.6	$43,041,207	$29,179,790	47.5	$19,040,260	$19,078,545	−0.2	$60,817,330	$35,685,305	70.4
Salaries and wages	288,198,701	179,580,971	60.5	26,112,733	15,026,590	73.8	10,787,426	6,404,409	68.4	27,314,040	16,572,216	64.8
Salaries	143,850,528	91,019,723	58.0	7,453,912	3,451,867	115.9	2,879,317	1,877,725	53.3	9,112,951	4,711,198	93.4
Wages	144,348,173	88,561,248	63.0	18,658,821	11,574,723	61.2	7,908,109	4,526,684	74.7	18,201,089	11,861,018	53.5
Paid for contract work	50,776,049	20,960,716	142.2	452,225	381,087	18.7	138,215	267,207	−48.3	1,363,424	703,601	93.8
Rent and taxes	30,201,682	10,816,276	179.2	2,501,266	1,372,860	82.2	865,542	471,509	83.6	2,400,403	1,104,936	117.2
Cost of materials	300,185,187	129,082,218	132.7	23,235,171	13,334,207	74.3	6,980,747	3,914,508	78.3	27,718,217	14,017,181	97.7
Value of products	924,152,878	495,905,948	86.4	66,020,677	38,104,368	73.3	24,209,154	13,786,385	75.6	73,151,115	39,135,973	86.9
Value added by manufacture[2]	623,767,691	366,823,730	70.0	42,785,506	24,770,161	72.7	17,228,407	9,871,877	74.5	45,432,898	25,118,792	80.9

[1] A minus sign (−) denotes decrease.

[2] Value of products less cost of materials.

TABLE 3.—PRINCIPAL STATES, RANKED BY VALUE OF PRODUCTS—ALL BRANCHES COMBINED: 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	32,476	287,278	100.0	.....	$1,699,789	100.0	.....	$1,128,279	100.0	.....
New York	4,831	67,491	23.5	1	478,898	28.2	1	326,371	28.9	1
Illinois	2,647	36,537	12.7	2	219,331	12.9	2	140,023	12.4	2
Pennsylvania	2,457	26,456	9.2	3	165,344	9.7	3	104,322	9.3	3
Ohio	1,780	19,174	6.7	4	112,029	6.6	4	73,712	6.5	4
Massachusetts	1,327	18,247	6.3	5	104,551	6.2	5	69,645	6.2	5
California	1,504	10,047	3.5	7	61,815	3.6	6	41,476	3.7	6
Missouri	1,310	11,465	4.0	6	61,250	3.6	7	38,118	3.4	7
Michigan	1,015	7,880	2.7	8	46,829	2.8	8	31,293	2.8	8
Minnesota	1,003	6,319	2.2	10	33,480	2.0	9	23,127	2.0	9
Texas	1,087	5,594	1.9	12	32,687	1.9	10	21,561	1.9	10
Indiana	865	6,772	2.4	9	30,612	1.8	11	20,504	1.8	11
Iowa	997	4,808	1.7	14	26,806	1.6	12	18,955	1.7	12
Wisconsin	842	5,838	2.0	11	26,467	1.6	13	17,377	1.5	13
New Jersey	772	5,356	1.9	13	24,218	1.4	14	15,567	1.4	14
Maryland	385	4,391	1.5	15	23,835	1.4	15	14,720	1.3	15
Washington	569	2,453	0.8	23	17,349	1.0	16	12,796	1.1	16
District of Columbia	186	2,154	0.7	25	16,859	1.0	17	12,311	1.1	17
Tennessee	366	2,967	1.0	18	15,833	0.9	18	10,361	0.9	19
Nebraska	694	2,531	0.9	22	15,322	0.9	19	10,374	0.9	18
Georgia	418	2,844	1.0	19	14,130	0.8	20	8,908	0.8	21

TABLE 3.—PRINCIPAL STATES, RANKED BY VALUE OF PRODUCTS—ALL BRANCHES COMBINED: 1919—Continued.

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.
Connecticut	412	3,021	1.1	17	$14,036	0.8	21	$9,496	0.8	20
Virginia	380	2,719	0.9	21	13,162	0.8	22	8,626	0.8	22
Kansas	738	3,043	1.0	16	12,717	0.7	23	7,696	0.7	25
Colorado	464	2,306	0.8	24	12,613	0.7	24	8,449	0.7	23
Kentucky	373	2,850	1.0	20	11,735	0.7	25	8,121	0.7	24
Oklahoma	510	1,931	0.7	26	10,241	0.6	26	7,193	0.6	26
Oregon	358	1,595	0.6	30	10,155	0.6	27	7,149	0.6	27
Louisiana	270	1,581	0.6	31	8,110	0.5	28	5,029	0.5	29
Rhode Island	155	1,650	0.6	27	7,326	0.4	29	5,108	0.5	28
Alabama	237	1,253	0.4	33	7,286	0.4	30	4,907	0.4	30
North Carolina	319	1,608	0.6	28	6,404	0.4	31	4,371	0.4	31
Maine	175	1,599	0.6	29	5,932	0.3	32	3,531	0.3	33
Florida	237	1,172	0.4	35	5,618	0.3	33	3,911	0.3	32
West Virginia	222	1,339	0.5	32	4,837	0.3	34	3,255	0.3	36
Montana	247	1,011	0.4	38	4,763	0.3	35	3,436	0.3	34
Arkansas	294	1,102	0.4	36	4,747	0.3	36	3,300	0.3	35
Utah	156	1,218	0.4	34	4,581	0.3	37	3,165	0.3	37
South Carolina	174	1,022	0.4	37	4,005	0.2	38	2,801	0.2	39
South Dakota	358	766	0.3	40	3,882	0.2	39	2,900	0.3	38
North Dakota	318	660	0.2	41	3,225	0.2	40	2,374	0.2	40
All other states	994	4,508	1.6	.....	16,769	1.0	.....	11,939	1.1	.....

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

CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL. Male.	PER CENT OF TOTAL. Female.
All classes	1919	455,822	335,663	120,159	73.6	26.4
	1914	419,313	325,983	93,330	77.7	22.3
	1909	388,466	301,681	86,785	77.7	22.3
Proprietors and officials	1919	58,164	54,606	3,558	93.9	6.1
	1914	52,711	50,236	2,475	95.3	4.7
	1909	49,332	47,351	1,981	96.0	4.0
Proprietors and firm members	1919	28,493	26,941	1,552	94.6	5.4
	1914	31,041	29,467	1,574	94.9	5.1
	1909	30,424	29,130	1,294	95.7	4.3
Salaried officers of corporations	1919	11,523	10,805	718	93.8	6.2
	1914	9,000	8,528	472	94.8	5.2
	1909	7,265	6,952	313	95.7	4.3
Superintendents and managers	1919	18,148	16,860	1,288	92.9	7.1
	1914	12,670	12,241	429	96.6	3.4
	1909	11,643	11,269	374	96.8	3.2
Clerks and other subordinate salaried employees	1919	110,380	62,338	48,042	56.5	43.5
	1914	94,510	62,436	32,074	66.1	33.9
	1909	80,700	54,905	25,795	68.0	32.0
Wage earners (average number)	1919	287,278	218,719	68,559	76.1	23.9
	1914	272,092	213,311	58,781	78.4	21.6
	1909	258,434	199,425	59,009	77.2	22.8
16 years of age and over	1919	278,990	211,939	67,051	76.0	24.0
	1914	265,860	208,053	57,807	78.3	21.7
	1909	252,101	194,175	57,926	77.0	23.0
Under 16 years of age	1919	8,288	6,780	1,508	81.8	18.2
	1914	6,232	5,258	974	84.4	15.6
	1909	6,333	5,250	1,083	82.9	17.1

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES AND EACH OF THE SIX BRANCHES OF THE INDUSTRY, 1919 AND 1914; AND FOR COMBINED INDUSTRIES, FOR STATES: 1919.

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

INDUSTRY, SEX, AND 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	287,278	*276,442*	278,620	281,043	281,491	283,046	285,243	288,116	291,226	293,648	287,446	293,783	**307,232**	90.0
Males	218,719	*200,618*	211,226	212,977	214,274	215,894	218,242	220,147	222,802	224,746	218,248	222,734	**233,720**	89.7
Females	68,559	*66,824*	67,394	68,066	67,217	67,152	67,001	67,969	68,424	68,902	69,198	71,049	**73,512**	90.9
1914	272,092	274,519	274,926	276,848	273,961	272,907	271,313	267,625	*266,932*	269,842	271,909	271,598	**272,724**	96.4
Printing and publishing, book and job:														
1919	123,005	*119,117*	119,993	120,294	120,266	120,515	121,811	123,230	125,111	126,470	121,000	124,512	**133,741**	89.1
Males	91,544	*88,480*	88,916	89,080	89,518	90,069	91,107	92,198	93,752	94,623	89,436	91,866	**99,483**	88.9
Females	31,461	30,637	31,077	31,214	30,748	*30,446*	30,704	31,032	31,359	31,847	31,564	32,646	**34,258**	88.9
1914	113,121	114,868	115,215	**116,496**	114,034	113,221	112,223	*110,463*	110,475	111,999	112,852	112,726	112,890	94.8
Printing and publishing, music:														
1919	899	*840*	863	850	890	909	920	897	892	902	919	950	**956**	87.9
Males	714	661	675	*658*	692	718	738	725	721	732	740	755	**753**	87.2
Females	185	179	188	192	198	191	182	172	171	*170*	170	195	**203**	83.7
1914	873	893	880	**901**	887	876	850	*845*	849	873	877	884	**852**	93.8
Printing and publishing, newspapers and periodicals:														
1919	120,381	*115,926*	116,902	118,540	118,724	119,798	120,078	120,617	121,511	122,279	121,215	123,006	**125,967**	92.0
Males	99,572	*95,396*	96,304	97,530	97,981	98,960	99,629	99,796	100,730	101,635	100,522	102,006	**104,375**	91.4
Females	20,809	20,530	20,598	21,019	20,743	20,838	*20,449*	20,821	20,781	20,644	20,693	21,000	**21,592**	94.7
1914	114,375	114,402	114,495	114,838	114,812	114,842	114,145	112,555	*112,504*	113,694	115,041	115,248	**115,834**	97.1

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES AND EACH OF THE SIX BRANCHES OF THE INDUSTRY, 1919 AND 1914; AND FOR COMBINED INDUSTRIES, FOR STATES: 1919—Continued.

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

INDUSTRY, SEX, AND 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.	
Bookbinding and blank-book making:														
1919	20,361	*19,354*	19,565	19,858	19,789	19,756	20,016	20,488	20,734	20,773	20,845	21,379	**21,775**	88.9
Males	10,195	*9,491*	9,670	9,840	9,888	9,806	10,096	10,345	10,409	10,521	10,483	10,763	**11,028**	86.1
Females	10,166	*9,863*	9,895	10,018	9,901	9,950	9,920	10,143	10,325	10,252	10,362	10,616	**10,747**	91.8
1914	21,693	22,166	22,311	**22,536**	22,099	21,706	21,781	21,853	21,272	21,376	21,191	*20,878*	21,147	92.6
Engraving, steel and copper plate, including plate printing:														
1919	7,014	*6,462*	6,551	6,530	6,776	6,927	6,998	7,040	6,978	7,103	7,288	7,572	**7,943**	81.4
Males	4,273	*3,996*	4,030	4,044	4,152	4,219	4,299	4,363	4,332	4,372	4,299	4,447	**4,723**	84.6
Females	2,741	*2,466*	2,521	2,486	2,624	2,708	2,699	2,677	2,646	2,731	2,989	3,125	**3,220**	76.6
1914	6,859	7,020	6,977	6,917	6,951	7,022	6,971	6,710	*6,624*	6,724	6,761	6,704	6,927	94.3
Lithographing:														
1919	15,618	*14,743*	14,746	14,962	15,046	15,141	15,420	15,844	16,000	16,121	16,179	16,364	**16,850**	87.5
Males	12,421	*11,694*	11,631	11,825	12,043	12,122	12,373	12,720	12,858	12,863	12,768	12,897	**13,358**	86.8
Females	3,197	3,149	3,115	3,137	*3,003*	3,019	3,047	3,124	3,142	3,258	3,411	3,467	**3,492**	86.0
1914	15,171	15,080	*15,039*	15,160	15,178	15,240	15,343	15,209	15,208	15,176	15,187	15,158	15,074	98.0
Alabama	1,253	*1,173*	1,219	1,227	1,253	1,258	1,231	1,242	1,244	1,285	1,290	1,294	**1,320**	88.9
Arizona	518	*501*	507	505	504	512	510	520	514	519	534	538	**552**	90.8
Arkansas	1,110	*1,045*	1,074	1,062	1,074	1,098	1,099	1,108	1,118	1,137	1,146	**1,198**	1,161	87.2
California	10,047	*9,522*	9,680	9,677	9,679	9,764	9,910	10,041	10,134	10,119	10,401	10,782	**10,855**	87.7
Colorado	2,306	2,230	*2,216*	2,255	2,277	2,315	2,293	2,325	2,340	2,216	2,361	2,411	**2,433**	91.1
Connecticut	3,068	*2,902*	2,952	2,981	3,016	3,045	3,045	3,037	3,048	3,083	3,177	3,244	**3,286**	88.3
Delaware	381	*365*	370	377	378	381	373	376	378	393	392	392	**397**	91.9
District of Columbia	2,154	*1,992*	2,056	2,121	2,120	2,099	2,166	2,167	2,137	2,128	2,223	2,302	**2,337**	85.2
Florida	1,172	1,171	1,171	1,162	1,158	1,120	1,131	*1,118*	1,140	1,144	1,190	1,242	**1,317**	84.9
Georgia	2,895	*2,777*	2,778	2,825	2,803	2,814	2,851	2,847	2,889	2,992	3,024	3,041	**3,099**	89.6
Idaho	438	404	410	*403*	437	437	440	433	434	450	451	470	**487**	82.8
Illinois	36,537	35,037	35,933	35,582	*34,860*	35,094	35,524	36,528	37,592	37,705	37,058	37,941	**38,990**	89.4
Indiana	6,772	*6,372*	6,533	6,561	6,643	6,696	6,796	6,845	6,900	6,909	7,013	6,992	**7,004**	90.9
Iowa	4,831	*4,574*	4,644	4,708	4,716	4,699	4,709	4,756	4,773	4,714	5,084	5,174	**5,421**	84.4
Kansas	3,055	*2,966*	3,000	3,015	3,012	3,031	3,025	3,034	3,035	3,073	3,117	3,150	**3,202**	92.6
Kentucky	2,882	2,906	2,925	2,953	2,969	*2,608*	2,647	2,669	2,716	3,033	3,022	3,053	**3,083**	84.6
Louisiana	1,583	*1,493*	1,497	1,515	1,534	1,567	1,578	1,580	1,603	1,611	1,653	1,670	**1,695**	88.1
Maine	1,600	1,630	1,649	**1,664**	1,642	1,598	1,587	1,553	*1,500*	1,532	1,561	1,621	1,663	90.1
Maryland	4,391	4,336	4,311	4,304	*4,296*	4,313	4,303	4,347	4,406	4,432	4,471	4,553	**4,620**	93.0
Massachusetts	18,247	*17,209*	17,433	17,678	17,980	18,154	18,253	18,188	18,101	18,392	18,921	19,274	**19,381**	88.8
Michigan	7,899	*7,472*	7,602	7,606	7,648	7,662	7,715	7,826	7,935	8,146	8,275	8,355	**8,546**	87.4
Minnesota	6,352	*6,075*	6,174	6,193	6,260	6,276	6,250	6,256	6,342	6,402	6,535	6,696	**6,761**	89.9
Mississippi	595	*576*	581	578	586	585	593	595	595	595	611	622	**623**	92.5
Missouri	11,465	*10,773*	11,021	11,159	11,183	11,137	11,291	11,336	11,438	11,525	11,894	12,261	**12,562**	85.8
Montana	1,011	981	*976*	990	1,012	1,010	1,017	1,025	1,010	1,013	1,023	1,047	**1,028**	93.2
Nebraska	2,531	*2,383*	2,412	2,442	2,475	2,504	2,522	2,475	2,521	2,582	2,611	2,706	**2,739**	87.0
Nevada	130	127	*126*	129	129	132	132	133	129	130	133	126	**134**	94.0
New Hampshire	862	*823*	848	858	862	872	849	842	834	860	869	896	**931**	88.4
New Jersey	5,356	5,194	5,291	5,316	5,220	5,352	5,394	5,265	*5,189*	5,245	5,519	5,491	**5,796**	89.5
New Mexico	287	*277*	291	288	281	280	280	288	292	292	292	289	**294**	94.2
New York	67,491	65,889	66,512	67,648	67,895	68,174	68,353	69,251	69,986	70,681	*60,556*	62,574	**72,373**	83.7
North Carolina	1,617	1,585	*1,571*	1,576	1,586	1,587	1,608	1,611	1,629	1,643	1,653	1,677	**1,678**	93.6
North Dakota	660	632	*631*	637	645	655	672	653	667	672	674	684	**693**	90.4
Ohio	19,174	*17,849*	17,981	18,225	18,507	18,712	19,003	19,344	19,542	19,564	19,997	20,568	**20,796**	85.8
Oklahoma	1,931	1,830	*1,837*	1,852	1,896	1,885	1,889	1,924	1,966	2,010	2,030	2,017	**2,027**	90.5
Oregon	1,505	1,535	*1,526*	1,531	1,559	1,589	1,586	1,578	1,598	1,599	1,640	1,675	**1,724**	88.5
Pennsylvania	26,456	25,906	*25,388*	25,780	25,517	25,922	26,247	26,371	26,701	26,964	27,319	27,659	**27,698**	91.7
Rhode Island	1,650	1,555	*1,547*	1,580	1,581	1,607	1,645	1,640	1,625	1,676	1,718	1,766	**1,860**	83.2
South Carolina	1,025	*984*	998	996	1,004	1,010	1,017	1,029	1,029	1,047	1,055	1,056	**1,075**	91.5
South Dakota	766	739	*730*	742	740	739	746	752	759	767	813	830	**835**	87.4
Tennessee	3,009	*2,782*	2,845	2,854	2,959	2,995	3,023	3,004	3,030	3,107	3,136	3,175	**3,198**	87.0
Texas	5,594	*5,318*	5,364	5,363	5,406	5,416	5,505	5,641	5,707	5,609	5,908	5,964	**5,927**	89.2
Utah	1,258	1,234	1,235	1,236	1,252	1,262	1,247	*1,229*	1,245	1,256	1,282	1,306	**1,312**	93.7
Vermont	616	608	610	*606*	609	608	610	608	621	624	628	625	**635**	95.4
Virginia	2,829	2,766	2,807	2,826	*2,748*	2,756	2,779	2,832	2,839	2,860	2,888	2,915	**2,932**	93.7
Washington	2,453	2,393	2,321	2,340	2,428	2,444	2,454	2,427	2,475	*2,311*	2,536	2,580	**2,727**	84.7
West Virginia	1,354	1,309	*1,304*	1,326	1,322	1,357	1,378	1,367	1,371	1,373	1,368	1,392	**1,381**	93.7
Wisconsin	5,838	*5,421*	5,529	5,579	5,614	5,694	5,741	5,861	5,898	5,974	6,146	6,228	**6,371**	85.1
Wyoming	234	208	*204*	212	216	221	226	239	251	254	248	261	**268**	76.1
States showing a large proportion of females.														Per ct. av. is of state.
Connecticut	646	626	624	631	639	644	637	*619*	625	644	675	684	**704**	21.1
District of Columbia	475	471	480	**493**	486	471	473	491	469	*443*	466	469	488	22.1
Georgia	554	*529*	536	552	562	542	543	544	540	565	573	566	**596**	19.1
Illinois	8,943	8,874	8,880	9,097	8,508	*8,416*	8,451	8,736	9,206	9,218	8,996	9,245	**9,689**	24.5
Indiana	1,805	*1,673*	1,732	1,744	1,759	1,783	1,803	1,855	1,861	1,830	**1,883**	1,875	1,862	26.7
Maine	632	671	683	**690**	677	641	614	588	*535*	558	602	646	679	39.5
Massachusetts	4,961	*4,720*	4,827	4,896	4,942	4,925	4,961	4,915	4,824	4,933	5,136	**5,237**	5,216	27.2
Michigan	2,036	*1,940*	1,966	1,975	1,958	1,954	1,964	1,954	2,013	2,112	2,151	2,186	**2,259**	25.8
Missouri	3,271	3,201	3,250	3,253	3,162	*3,109*	3,162	3,176	3,150	3,211	3,353	3,579	**3,646**	28.5
New York	15,842	15,054	15,884	16,067	15,903	15,946	15,686	16,064	16,042	16,091	*14,934*	15,305	**16,528**	23.5
Ohio	4,689	4,485	*4,405*	4,426	4,505	4,596	4,627	4,755	4,713	4,711	4,836	5,053	**5,156**	24.5
Pennsylvania	6,643	6,448	6,513	6,583	6,496	6,536	*6,445*	6,555	6,683	6,724	6,842	7,019	**6,872**	25.1
Wisconsin	1,702	*1,598*	1,621	1,623	1,623	1,644	1,656	1,651	1,646	1,706	1,807	1,921	**1,928**	29.2

TABLE 6.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR EACH OF THE SIX BRANCHES OF THE INDUSTRY AND FOR THE COMBINED INDUSTRY, FOR STATES: 1919 AND 1914.

INDUSTRY AND STATE.	Census year.	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.	Over 60.
United States.	1919	287,278	24,274	8,952	216,138	20,179	10,501	5,003	1,841	387
	1914	272,092	(2)	(2)	186,759	37,240	35,118	8,131	4,501	334
	1909	258,434	(2)	(2)	138,850	41,510	47,320	10,124	10,011	719
Printing and publishing, book and job.	1919	123,005	8,500	2,927	98,259	10,453	2,048	467	241	110
	1914	113,121	(2)	(2)	80,023	19,145	12,093	1,293	549	18
Printing and publishing, music.	1919	899	12	.....	864	14	1	8	.....	....
	1914	873	(2)	(2)	95	676	60	39	3	....
Printing and publishing, newspapers and periodicals.	1919	120,381	12,573	4,689	83,406	6,074	7,643	4,225	1,497	274
	1914	114,375	(2)	(2)	80,130	7,077	17,057	5,139	3,765	307
Bookbinding and blank-book making.	1919	20,361	2,049	449	15,033	1,789	683	262	93	3
	1914	21,693	(2)	(2)	9,195	5,814	5,053	1,593	38	....
Engraving, steel and copper plate, including plate printing.	1919	7,014	949	406	4,932	590	112	25	.....	....
	1914	6,859	(2)	(2)	4,032	1,727	327	47	55	9
Lithographing.	1919	15,618	191	481	13,644	1,259	17	16	10	....
	1914	15,171	(2)	(2)	12,622	1,910	528	20	91	....
Alabama.	1919	1,253	9	8	1,013	90	80	4	34	15
	1914	1,346	(2)	(2)	737	78	335	44	90	62
Arizona.	1919	518	.....	57	460	.....	1	.....	.....	....
	1914	335	(2)	(2)	322	.....	12	1	.....	....
Arkansas.	1919	1,110	9	5	800	31	103	2	54	16
	1914	893	(2)	(2)	534	51	137	30	128	13
California.	1919	10,047	527	820	8,533	49	89	4	16	....
	1914	8,759	(2)	(2)	8,208	184	322	4	39	2
Colorado.	1919	2,306	34	14	2,211	4	25	10	4	4
	1914	2,173	(2)	(2)	1,927	24	118	95	8	1
Connecticut.	1919	3,068	217	219	2,156	235	61	179	.....	1
	1914	2,838	(2)	(2)	1,647	675	348	72	96	....
Delaware.	1919	381	33	.....	301	7	31	8	1	....
	1914	371	(2)	(2)	212	98	33	23	5	....
District of Columbia.	1919	2,154	103	145	1,719	.....	.....	187	.....	....
	1914	1,677	(2)	(2)	1,578	58	38	.....	3	....
Florida.	1919	1,172	14	7	924	32	146	35	14	....
	1914	1,220	(2)	(2)	604	102	349	142	23	....
Georgia.	1919	2,895	46	39	2,203	158	274	106	68	1
	1914	2,476	(2)	(2)	1,495	202	393	82	191	23
Idaho.	1919	438	1	33	364	11	16	12	1	....
	1914	488	(2)	(2)	352	32	68	22	14	....
Illinois.	1919	36,537	2,633	413	27,333	5,401	479	125	89	64
	1914	32,838	(2)	(2)	24,447	5,181	2,698	312	200	....
Indiana.	1919	6,772	226	152	4,161	1,095	581	450	106	1
	1914	6,140	(2)	(2)	3,412	851	1,068	575	234	....
Iowa.	1919	4,831	40	22	3,360	407	704	233	65	....
	1914	4,948	(2)	(2)	2,449	519	1,396	330	246	8
Kansas.	1919	3,055	55	80	2,342	108	428	9	29	4
	1914	2,818	(2)	(2)	1,882	147	579	48	160	2
Kentucky.	1919	2,882	340	5	1,614	292	202	325	104	....
	1914	3,028	(2)	(2)	1,908	174	686	61	188	11
Louisiana.	1919	1,583	49	5	1,117	33	154	191	32	2
	1914	1,405	(2)	(2)	836	36	331	58	137	7
Maine.	1919	1,600	15	12	1,316	67	174	8	.....	8
	1914	1,772	(2)	(2)	624	231	821	65	31	....
Maryland.	1919	4,391	365	619	3,103	246	37	11	10	....
	1914	4,174	(2)	(2)	2,446	1,245	320	90	69	4
Massachusetts.	1919	18,247	2,257	331	14,555	815	240	19	30	....
	1914	18,170	(2)	(2)	14,156	2,033	1,340	635	6	....
Michigan.	1919	7,809	205	196	6,142	831	338	58	126	3
	1914	8,166	(2)	(2)	5,001	1,394	1,318	297	132	24
Minnesota.	1919	6,352	404	595	4,661	353	298	12	28	1
	1914	6,134	(2)	(2)	3,442	1,639	795	64	172	22
Mississippi.	1919	595	6	.....	398	11	75	18	84	3
	1914	673	(2)	(2)	369	21	157	6	120	....
Missouri.	1919	11,465	1,266	493	8,171	846	574	24	84	7
	1914	10,571	(2)	(2)	7,550	1,358	1,283	155	212	13
Montana.	1919	1,011	4	94	688	143	15	59	8	....
	1914	902	(2)	(2)	713	28	98	59	4	....
Nebraska.	1919	2,531	74	16	1,880	295	219	6	34	7
	1914	2,413	(2)	(2)	1,238	429	627	25	91	3
Nevada.	1919	130	5	.....	113	.....	.....	12	.....	....
	1914	161	(2)	(2)	161	.....	.....	.....	.....	....
New Hampshire.	1919	862	49	3	674	70	60	6	.....	....
	1914	717	(2)	(2)	201	169	198	146	3	....
New Jersey.	1919	5,356	370	123	4,119	520	66	133	15	1
	1914	5,433	(2)	(2)	3,509	929	624	285	83	3
New Mexico.	1919	287	1	.....	276	.....	10	.....	.....	....
	1914	258	(2)	(2)	178	1	41	29	9	....
New York.	1919	67,491	11,201	1,783	48,492	3,128	1,376	1,448	63	....
	1914	64,020	(2)	(2)	44,314	10,504	7,407	1,522	220	53
North Carolina.	1919	1,617	8	17	1,120	96	98	86	119	64
	1914	1,542	(2)	(2)	720	79	422	90	231	....
North Dakota.	1919	660	12	2	573	22	32	.....	17	2
	1914	752	(2)	(2)	405	91	186	9	59	2
Ohio.	1919	19,174	504	1,032	15,192	1,424	496	401	77	48
	1914	18,070	(2)	(2)	12,587	1,826	2,453	1,055	149	....
Oklahoma.	1919	1,931	10	3	1,613	31	122	138	13	1
	1914	1,619	(2)	(2)	1,176	50	295	22	68	8
Oregon.	1919	1,595	143	22	1,381	32	15	1	.....	1
	1914	1,556	(2)	(2)	1,365	48	128	.....	13	2
Pennsylvania.	1919	26,456	1,720	660	21,320	1,677	797	227	47	8
	1914	26,909	(2)	(2)	18,878	4,230	2,980	713	97	11
Rhode Island.	1919	1,650	27	219	1,231	160	8	5	.....	....
	1914	1,515	(2)	(2)	1,158	196	121	19	21	....
South Carolina.	1919	1,025	32	.....	793	37	114	23	25	1
	1914	901	(2)	(2)	456	60	211	57	115	2
South Dakota.	1919	766	17	3	498	43	162	2	33	8
	1914	801	(2)	(2)	274	141	315	13	58	....
Tennessee.	1919	3,009	64	126	2,199	234	299	17	68	2
	1914	2,665	(2)	(2)	1,621	469	354	74	142	5
Texas.	1919	5,594	199	48	4,006	417	691	169	60	4
	1914	4,690	(2)	(2)	2,939	204	923	332	261	31
Utah.	1919	1,258	48	4	1,181	1	12	3	7	2
	1914	872	(2)	(2)	812	22	31	2	5	....
Vermont.	1919	616	10	8	409	67	82	7	3	....
	1914	660	(2)	(2)	174	31	405	31	19	....
Virginia.	1919	2,829	50	133	2,324	100	90	5	58	69
	1914	2,790	(2)	(2)	1,232	549	812	83	112	2
Washington.	1919	2,453	596	238	1,598	14	6	.....	.....	1
	1914	2,356	(2)	(2)	2,225	28	62	27	13	1
West Virginia.	1919	1,354	17	13	930	72	83	129	67	34
	1914	1,218	(2)	(2)	741	90	288	10	89	....
Wisconsin.	1919	5,838	257	126	4,342	433	433	96	147	4
	1914	5,076	(2)	(2)	3,421	627	1,165	316	128	19
Wyoming.	1919	234	2	.....	211	2	18	.....	1	....
	1914	183	(2)	(2)	123	25	27	1	7	....

[1] Includes 48 and under for 1914 and 1909.

[2] Corresponding figures not available.

TABLE 7.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR EACH OF THE SIX BRANCHES OF THE INDUSTRY, 1919 AND 1914; AND FOR THE COMBINED INDUSTRIES, FOR STATES: 1919.

INDUSTRY AND 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	32,476	287,278	9,116	15,879	35,464	4,916	53,158	1,588	51,023	531	37,139	325	49,866	86	28,968	28	19,365	7	12,295
1914	33,471	272,092	8,524	17,456	40,665	5,081	53,694	1,500	47,285	499	35,067	311	47,650	71	23,909	25	16,939	4	6,883
Printing and publishing, book and job:																				
1919	13,089	123,005	3,220	6,167	14,124	2,479	27,141	822	26,221	236	16,919	122	18,748	32	11,115	9	6,009	2	2,728
1914	12,115	113,121	2,672	6,009	14,329	2,337	25,046	726	23,000	208	14,561	123	18,438	28	9,255	11	7,366	1	1,126
Printing and publishing, music:																				
1919	160	899	124	21	54	6	70	4	133	2	130	3	512							
1914	180	873	139	20	47	13	137	4	128	1	64	3	497							
Printing and publishing, newspapers and periodicals:																				
1919	17,362	120,381	5,568	9,034	19,490	1,828	19,240	549	17,918	199	13,608	128	19,980	39	12,796	13	9,139	4	8,210
1914	19,317	114,375	5,541	10,749	24,506	2,151	21,854	532	16,604	188	13,352	117	18,421	28	9,100	9	6,036	2	4,502
Bookbinding and blank-book making:																				
1919	1,113	20,361	101	449	1,217	376	3,968	101	3,203	41	2,729	35	5,145	8	2,664	2	1,435		
1914	1,124	21,693	72	475	1,233	362	4,068	124	3,916	51	3,616	29	4,407	9	3,355	2	1,098		
Engraving, steel and copper plate, including plate printing:																				
1919	421	7,014	62	150	407	146	1,699	38	1,151	14	919	9	1,183	1	298			1	1,357
1914	399	6,859	57	147	385	129	1,457	43	1,296	13	899	8	1,256	1	311			1	1,255
Lithographing:																				
1919	331	15,618	41	58	172	81	1,040	73	2,346	40	2,885	28	4,298	6	2,095	4	2,782		
1914	336	15,171	43	56	165	89	1,132	71	2,341	38	2,575	31	4,631	5	1,888	3	2,439		
Alabama	237	1,253	50	137	282	34	316	14	478	2	177								
Arizona	85	518	22	42	92	16	152	3	110	1	57	1	107						
Arkansas	297	1,110	63	199	427	25	235	8	236	1	87	1	125						
California	1,504	10,047	459	714	1,517	231	2,445	66	2,087	20	1,371	11	1,648	3	979				
Colorado	464	2,306	140	248	431	56	601	13	409	2	157	5	708						
Connecticut	414	3,068	123	189	404	61	698	27	844	12	857	2	265						
Delaware	58	381	15	28	70	9	77	5	174	1	60								
District of Columbia	186	2,154	83	50	117	28	327	15	562	4	241	6	907						
Florida	237	1,172	46	143	354	39	375	6	188	2	141	1	114						
Georgia	419	2,895	91	243	536	59	654	16	535	6	345	3	494	1	331				
Idaho	160	438	42	100	196	16	180	2	62										
Illinois	2,647	36,537	817	1,108	2,545	412	4,568	183	5,904	58	4,121	46	7,365	15	4,759	6	4,547	2	2,728
Indiana	865	6,772	181	460	1,082	153	1,620	53	1,770	13	895	4	679			1	726		
Iowa	999	4,831	226	610	1,365	115	1,185	36	1,071	8	498	3	459	1	253				
Kansas	739	3,055	202	448	865	69	732	16	504	2	145	1	111			1	698		
Kentucky	376	2,882	75	219	537	56	799	15	435	5	332	6	779						
Louisiana	272	1,583	61	146	335	46	460	14	438	5	350								
Maine	176	1,600	41	84	213	32	282	11	330	6	386	2	339						
Maryland	386	4,391	98	183	414	64	694	22	673	10	754	5	677	4	1,179				
Massachusetts	1,327	18,247	362	534	1,303	277	3,014	89	2,860	32	2,243	22	3,216	5	1,690	6	3,921		
Michigan	1,048	7,899	241	538	1,200	184	1,953	56	1,792	23	1,559	4	738	2	657				
Minnesota	1,006	6,352	206	549	1,101	137	1,508	35	1,147	10	687	6	814	3	1,095				
Mississippi	193	595	51	114	230	23	226	5	139										
Missouri	1,310	11,465	327	701	1,579	176	1,940	64	2,090	23	1,540	13	1,935	5	1,860	1	521		
Montana	247	1,011	68	148	263	20	215	10	410			1	123						
Nebraska	694	2,531	232	387	712	52	595	16	531	4	303	3	390						
Nevada	39	130	6	28	67	4	38	1	25										
New Hampshire	130	862	38	61	149	22	222	6	188	2	112	1	191						
New Jersey	774	5,356	220	387	906	120	1,234	27	797	12	904	7	1,237	1	278				
New Mexico	87	287	23	56	117	5	59	3	111										
New York	4,831	67,491	1,643	1,815	4,413	836	9,160	305	9,883	111	7,763	78	12,109	29	10,389	10	7,283	4	6,491
North Carolina	321	1,617	59	198	493	51	566	9	269	4	289								
North Dakota	318	660	114	180	298	18	184	6	178										
Ohio	1,780	19,174	445	812	2,016	341	3,831	111	3,523	38	2,773	25	3,915	6	1,966	2	1,150		
Oklahoma	510	1,931	161	282	573	53	544	10	331	1	59	3	424						
Oregon	358	1,595	122	174	311	52	578	5	176	3	210	2	320						
Pennsylvania	2,457	26,456	695	1,092	2,053	445	4,786	132	4,095	46	3,086	36	5,525	9	2,716	1	519	1	3,076
Rhode Island	155	1,650	36	76	168	23	267	13	394	5	404	2	417						
South Carolina	175	1,025	31	106	252	31	338	3	118	4	317								
South Dakota	358	766	115	218	374	19	206	6	186										
Tennessee	371	3,009	90	200	458	52	532	14	459	8	550	7	1,010						
Texas	1,089	5,594	311	586	1,267	140	1,454	35	1,183	14	959	2	280	1	451				
Utah	159	1,258	46	80	188	22	223	7	244	1	53	3	550						
Vermont	108	616	28	53	134	19	179	7	250	1	53								
Virginia	382	2,829	94	199	487	55	555	23	722	7	455	4	610						
Washington	571	2,453	197	287	547	66	712	14	418	3	235	4	541						
West Virginia	223	1,354	37	142	348	30	356	10	321	3	225	1	104						
Wisconsin	842	5,838	200	467	974	112	1,172	39	1,300	19	1,437	4	590	1	365				
Wyoming	92	234	23	58	101	10	111	1	22										

TABLE 8.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR THE COMBINED INDUSTRIES AND EACH OF THE SIX BRANCHES: 1919 AND 1914.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
	1919	1914	Per cent distribution. 1919	Per cent distribution. 1914	1919	1914	Per cent distribution. 1919	Per cent distribution. 1914	1919	1914	Per cent distribution. 1919	Per cent distribution. 1914	1919	1914	Per cent distribution. 1919	Per cent distribution. 1914
UNITED STATES	32,476	33,471	100.0	100.0	287,278	272,092	100.0	100.0	$1,699,789,229	$901,534,801	100.0	100.0	$1,128,278,952	$643,686,825	100.0	100.0
Less than $5,000	12,113	17,201	37.3	51.4	7,309	19,265	2.5	7.1	31,520,745	42,356,622	1.9	4.7	23,362,140	33,658,091	2.1	5.2
$5,000 to $20,000	11,547	10,306	35.6	30.8	30,791	43,437	10.7	16.0	116,673,997	99,039,126	6.9	11.0	84,772,863	76,856,305	7.5	11.9
$20,000 to $100,000	6,140	4,473	18.9	13.4	62,046	68,253	21.6	25.1	270,110,339	193,007,423	15.9	21.4	190,081,006	142,655,537	16.8	22.2
$100,000 to $500,000	2,117	1,239	6.5	3.7	81,623	101,634	28.4	37.4	441,666,418	248,103,243	26.0	27.5	302,974,293	246,958,797	26.9	38.4
$500,000 to $1,000,000	324	148	1.0	0.4	35,439		12.3		219,155,554	103,149,363	12.9	11.4	146,319,733		13.0	
$1,000,000 and over	235	104	0.7	0.3	70,070	39,503	24.4	14.5	620,662,176	215,879,024	36.5	23.9	380,768,917	143,558,095	33.7	22.3
PRINTING AND PUBLISHING, BOOK AND JOB	13,089	12,115	100.0	100.0	123,005	113,121	100.0	100.0	597,663,228	307,330,861	100.0	100.0	386,596,054	210,877,629	100.0	100.0
Less than $5,000	4,216	5,402	32.2	44.6	1,750	4,945	1.4	4.4	10,359,620	13,065,523	1.7	4.3	6,935,152	9,463,400	1.8	4.5
$5,000 to $20,000	4,542	4,094	34.7	33.8	11,920	18,317	9.7	16.2	47,714,891	40,551,051	8.0	13.2	31,343,275	28,908,705	8.1	13.7
$20,000 to $100,000	3,127	2,047	23.9	16.9	32,640	34,003	26.5	30.9	138,402,721	88,944,772	23.2	28.9	89,955,251	61,112,627	23.3	29.0
$100,000 to $500,000	1,013	514	7.7	4.3	41,821	46,324	34.0	41.0	203,567,319	100,802,347	34.1	32.8	132,110,447	87,695,322	34.2	41.6
$500,000 to $1,000,000	138	40	1.1	0.3	17,137		13.9		89,454,441	27,415,557	15.0	8.9	59,494,298		15.4	
$1,000,000 and over	53	18	0.4	0.1	17,737	8,632	14.4	7.6	108,104,236	36,551,611	18.1	11.9	66,757,631	23,697,575	17.3	11.2
PRINTING AND PUBLISHING, MUSIC	160	180	100.0	100.0	899	873	100.0	100.0	14,592,177	7,271,266	100.0	100.0	12,468,396	6,224,636	100.0	100.0
Less than $5,000	46	71	28.8	39.4	2	15	0.2	1.7	110,226	150,609	0.8	2.1	97,646	140,432	0.8	2.3
$5,000 to $20,000	41	45	25.6	25.0	32	75	3.5	8.6	455,242	450,427	3.1	6.2	359,772	410,326	2.9	6.6
$20,000 to $100,000	38	46	23.7	25.6	82	173	9.2	19.8	1,756,253	2,372,863	12.0	32.6	1,383,011	2,127,283	11.1	34.2
$100,000 to $500,000	20	18	18.1	10.0	391	610	43.5	69.9	6,483,324	4,207,367	44.4	59.1	5,184,847	3,546,595	41.6	57.0
$500,000 and over	6		3.8		392		43.6		5,793,132		39.7		5,443,120		43.7	
PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS	17,362	19,317	100.0	100.0	120,381	114,375	100.0	100.0	924,152,878	495,905,048	100.0	100.0	623,767,691	366,823,730	100.0	100.0
Less than $5,000	7,472	11,142	43.0	57.7	5,270	13,374	4.4	11.7	20,024,337	27,631,219	2.2	5.6	15,486,712	22,783,258	2.5	6.2
$5,000 to $20,000	6,340	5,533	36.5	28.6	15,915	20,344	13.2	17.8	61,499,459	51,317,416	6.7	10.3	47,542,141	42,297,720	7.6	11.5
$20,000 to $100,000	2,429	1,940	14.0	10.0	20,774	22,180	17.2	19.4	105,595,017	82,109,202	11.4	16.6	81,746,205	66,132,178	13.1	18.0
$100,000 to $500,000	829	538	4.8	2.8	26,201	33,155	21.7	29.0	179,020,650	109,578,913	19.4	22.1	132,788,556	125,109,125	21.3	34.1
$500,000 to $1,000,000	137	86	0.8	0.4	10,233		8.5		94,186,006	60,572,174	10.2	12.2	64,447,204		10.3	
$1,000,000 and over	155	78	0.9	0.4	41,979	25,322	35.1	22.1	463,826,509	164,697,024	50.2	33.2	281,756,873	110,501,449	45.2	30.1
BOOKBINDING AND BLANK-BOOK MAKING	1,113	1,124	100.0	100.0	20,361	21,693	100.0	100.0	66,020,677	38,104,368	100.0	100.0	42,785,506	24,770,161	100.0	100.0
Less than $5,000	248	399	22.3	35.5	235	743	1.2	3.4	683,104	1,070,879	1.0	2.8	536,643	894,173	1.3	3.6
$5,000 to $20,000	431	414	38.9	36.8	2,163	3,300	10.6	15.2	4,801,125	4,249,843	7.4	11.2	3,862,703	3,329,346	9.0	13.4
$20,000 to $100,000	312	233	28.0	20.7	5,172	6,458	25.4	29.8	13,564,105	9,964,163	20.5	26.1	9,433,980	6,798,330	22.0	27.4
$100,000 to $500,000	95	65	8.5	5.8	5,886	11,192	28.9	51.5	20,449,337	12,251,470	31.0	32.2	12,774,709	13,748,312	29.9	55.5
$500,000 and over	27	13	2.4	1.2	6,905		33.9		26,463,006	10,568,013	40.1	27.7	16,177,471		37.8	
ENGRAVING, STEEL AND COPPER PLATE, INCLUDING PLATE PRINTING	421	399	100.0	100.0	7,014	6,859	100.0	100.0	24,209,154	13,786,385	100.0	100.0	17,228,407	9,871,877	100.0	100.0
Less than $5,000	90	136	21.4	34.1	36	158	0.5	2.3	251,046	343,179	1.0	2.5	220,717	294,116	1.3	3.0
$5,000 to $20,000	149	154	35.4	38.6	624	1,070	8.9	15.6	1,655,036	1,724,581	6.8	12.5	1,289,623	1,341,439	7.5	13.6
$20,000 to $100,000	139	86	33.0	21.6	2,072	2,071	29.5	30.2	5,771,603	3,403,287	23.8	24.7	4,334,922	2,551,161	25.2	25.8
$100,000 to $500,000	36	20	8.6	5.0	1,917	3,560	27.3	51.9	6,994,048	4,031,555	28.9	29.2	4,979,789	5,685,161	28.9	57.6
$500,000 and over	7	3	1.7	0.8	2,365		33.7		9,537,421	4,283,783	39.4	31.1	6,403,356		37.2	
LITHOGRAPHING	331	336	100.0	100.0	15,618	15,171	100.0	100.0	73,151,115	39,135,073	100.0	100.0	45,432,898	25,118,792	100.0	100.0
Less than $5,000	41	51	12.4	15.2	7	30	(1)	0.2	92,412	95,213	0.1	0.2	85,270	82,712	0.2	0.3
$5,000 to $20,000	44	66	13.3	19.6	137	331	0.9	2.2	488,244	745,808	0.7	1.9	375,349	568,769	0.8	2.3
$20,000 to $100,000	95	121	28.7	36.0	1,306	2,468	8.4	16.3	4,965,740	6,213,136	6.8	15.9	3,227,637	3,933,958	7.1	15.7
$100,000 to $500,000	113	86	34.1	25.6	5,407	8,969	34.6	59.1	25,151,740	18,449,306	34.4	47.1	15,135,945	14,892,936	33.3	59.3
$500,000 to $1,000,000	24	7	7.3	2.1	3,360		21.5		16,642,294	4,459,256	22.8	11.4	10,305,739		22.7	
$1,000,000 and over	14	5	4.2	1.5	5,401	3,373	34.6	22.2	25,810,685	9,173,104	35.3	23.4	16,302,958	5,640,417	35.9	22.5

TABLE 9.—CHARACTER OF OWNERSHIP FOR EACH OF THE SIX BRANCHES OF THE INDUSTRY, 1919 AND 1914, AND FOR COMBINED INDUSTRIES, FOR STATES: 1919.

INDUSTRY AND STATE.	NUMBER OF ESTABLISHMENTS 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.		
	Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
United States:																	
1919	17,676	8,947	5,853	287,278	46,738	215,081	25,459	16.3	74.9	8.9	$1,699,789,229	$204,495,041	$1,359,663,580	$135,630,608	12.0	80.0	8.0
1914	19,086	8,589	5,796	272,092	55,774	188,873	27,445	20.5	69.4	10.1	901,534,801	136,850,328	686,696,324	77,988,149	15.2	76.2	8.6
Printing and publishing, book and job:																	
1919	7,458	3,367	2,264	123,005	20,663	90,486	11,856	16.8	73.6	9.6	597,663,228	92,086,652	445,041,406	60,535,170	15.4	74.5	10.1
1914	7,090	2,880	2,145	113,121	22,715	78,365	12,041	20.1	69.3	10.6	307,330,861	54,760,532	219,984,491	32,585,838	17.8	71.6	10.6
Printing and publishing, music:																	
1919	63	76	21	899	133	760	6	14.8	84.5	0.7	14,592,177	1,187,026	12,100,708	1,304,443	8.1	82.9	8.9
1914	85	70	25	873	120	610	143	13.7	69.9	16.4	7,271,266	1,124,839	5,335,895	810,532	15.5	73.4	11.1
Printing and publishing, newspapers and periodicals:																	
1919	9,262	4,856	3,244	120,381	20,139	90,688	9,554	16.7	75.3	7.9	924,152,878	93,990,148	768,916,217	61,246,513	10.2	83.2	6.6
1914	10,992	5,016	3,309	114,375	25,998	77,693	10,684	22.7	67.9	9.3	495,905,948	70,710,425	388,126,392	37,069,131	14.3	78.3	7.5
Bookbinding and blank-book making:																	
1919	586	291	236	20,361	4,034	13,727	2,600	19.8	67.4	12.8	66,020,677	11,381,293	47,427,127	7,212,257	17.2	71.8	10.9
1914	624	289	211	21,693	5,413	13,673	2,607	25.0	63.0	12.0	38,104,368	7,249,974	27,109,950	3,744,444	19.0	71.1	9.8
Engraving, steel and copper plate, including plate printing:																	
1919	226	132	63	7,014	1,174	5,021	819	16.7	71.6	11.7	24,209,154	3,138,514	18,063,803	3,006,837	13.0	74.6	12.4
1914	196	125	78	6,859	782	5,152	925	11.4	75.1	13.5	13,786,385	1,284,850	10,918,433	1,583,102	9.3	79.2	11.5
Lithographing:																	
1919	81	225	25	15,618	595	14,399	624	3.8	92.2	4.0	73,151,115	2,711,408	68,114,319	2,325,388	3.7	93.1	3.2
1914	99	209	28	15,171	746	13,380	1,045	4.9	88.2	6.9	39,135,973	1,719,708	35,221,163	2,195,102	4.4	90.0	5.6
Alabama	126	60	51	1,253	231	913	109	18.4	72.9	8.7	7,286,113	802,741	6,050,117	433,255	11.0	83.1	5.9
California	855	321	328	10,047	1,868	6,814	1,365	18.6	67.8	13.6	61,815,272	9,182,428	44,379,865	8,252,979	14.9	71.8	13.3
Colorado	292	102	70	2,306	457	1,699	150	19.8	73.7	6.5	12,612,870	1,803,492	10,122,138	687,240	14.3	80.3	5.4
Connecticut	260	94	58	3,021	627	2,181	213	20.8	72.2	7.1	14,035,915	2,949,377	10,163,119	923,419	21.0	72.4	6.6
District of Columbia	79	60	47	2,154	234	1,753	167	10.9	81.4	7.7	16,859,238	1,011,857	12,815,736	3,031,645	6.0	76.0	18.0
Georgia	214	109	95	2,844	565	2,008	271	19.9	70.6	9.5	14,129,694	2,273,060	10,636,379	1,220,255	16.1	75.3	8.6
Illinois	1,295	940	412	36,537	3,808	31,139	1,590	10.4	85.2	4.4	219,330,711	17,671,430	189,908,308	11,750,973	8.1	86.6	5.4
Indiana	453	232	180	6,772	1,346	4,522	904	19.9	66.8	13.3	30,612,318	4,350,997	20,501,397	5,759,944	14.2	67.0	18.8
Iowa	619	171	207	4,808	1,276	2,892	640	26.5	60.1	13.3	26,806,486	4,870,113	19,198,665	2,737,708	18.2	71.6	10.2
Kansas	542	62	134	3,043	1,836	842	365	60.3	27.7	12.0	12,716,832	7,527,195	3,622,991	1,566,646	59.2	28.5	12.3
Kentucky	186	116	71	2,850	427	2,246	177	15.0	78.8	6.2	11,734,539	1,236,033	9,894,388	604,118	10.5	84.3	5.1
Louisiana	138	85	47	1,581	298	1,131	152	18.8	71.5	9.6	8,109,761	943,808	6,652,002	513,951	11.6	82.0	6.3
Maryland	169	128	88	4,391	446	3,038	907	10.2	69.2	20.7	23,835,004	1,566,631	18,123,480	4,144,893	6.6	76.0	17.4
Massachusetts	712	436	179	18,247	2,737	13,243	2,267	15.0	72.6	12.4	104,551,284	9,370,471	79,818,861	15,361,952	9.0	76.3	14.7
Michigan	553	286	205	7,880	1,271	5,864	745	16.1	74.4	9.5	46,828,716	4,986,603	37,942,118	3,899,935	10.6	81.0	8.3
Minnesota	577	253	173	6,319	1,091	4,699	529	17.3	74.4	8.4	33,479,797	4,206,045	26,579,288	2,694,464	12.6	79.4	8.0
Missouri	729	343	238	11,465	2,182	8,476	807	19.0	73.9	7.1	61,249,545	11,749,090	45,676,818	3,823,637	19.3	74.6	6.2
Nebraska	478	91	125	2,531	656	1,642	233	25.9	64.9	9.2	15,321,689	3,038,091	10,917,397	1,366,201	19.8	71.3	8.9
New Jersey	461	197	114	5,356	917	4,019	420	17.1	75.0	7.8	24,217,733	3,810,838	18,592,882	1,814,013	15.7	76.8	7.5
New York	2,225	1,823	783	67,491	8,421	54,829	4,241	12.5	81.2	6.3	478,898,471	41,401,110	413,534,166	23,963,195	8.6	86.4	5.0
Ohio	845	578	357	19,174	2,530	15,057	1,587	13.2	78.5	8.3	112,029,131	11,268,633	92,665,080	8,095,418	10.1	82.7	7.2
Oklahoma	317	92	101	1,931	459	1,263	209	23.8	65.4	10.8	10,241,286	2,010,285	7,132,424	1,098,577	19.6	69.6	10.7
Oregon	200	90	68	1,595	264	1,195	136	16.6	74.9	8.5	10,154,778	1,443,638	8,019,696	691,444	14.2	79.0	6.8
Pennsylvania	1,414	565	478	26,456	4,885	18,369	3,202	18.5	69.4	12.1	165,344,144	24,726,894	126,546,173	14,071,077	14.9	76.5	8.5
Rhode Island	89	31	35	1,650	227	1,259	164	13.8	76.3	9.9	7,326,052	801,258	5,986,632	538,162	10.9	81.7	7.3
Tennessee	193	96	77	2,967	477	2,152	338	16.1	72.5	11.4	15,832,846	1,966,693	11,120,619	2,745,534	12.4	70.2	17.3
Texas	657	194	236	5,594	1,337	3,540	717	23.9	63.3	12.8	32,686,733	5,586,596	23,726,274	3,373,868	17.1	72.6	10.3
Virginia	206	109	65	2,719	546	1,790	383	20.1	65.8	14.1	13,162,355	2,031,960	9,411,969	1,688,426	15.7	71.5	12.8
Washington	326	145	98	2,453	505	1,825	123	20.6	74.4	5.0	17,348,530	2,662,377	13,746,944	939,209	15.3	79.2	5.4
Wisconsin	468	240	134	5,838	932	4,253	653	16.0	72.9	11.2	26,466,905	3,384,964	21,518,579	1,563,363	12.8	81.3	5.9

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	132,874	98,672	62,048	362,123	329,210	297,763	100.0	100.0	100.0
Owned	4,987	7,889	9,460	64,723	86,406	93,806	17.9	26.2	31.5
Steam [1]	443	710	1,090	46,727	57,583	59,334	12.9	17.5	19.9
Engines	422	(2)	(2)	45,578	(2)	(2)	12.6	.....	.....
Turbines	21	(2)	(2)	1,149	(2)	(2)	0.3	.....	.....
Internal-combustion engines	4,357	6,849	7,755	17,132	27,435	32,152	4.7	8.3	10.8
Water wheels, turbines, and motors	187	330	615	864	1,388	2,320	0.2	0.4	0.8
Rented	127,887	90,783	52,588	297,400	242,804	203,957	82.1	73.8	68.5
Electric	127,887	90,783	52,588	296,401	240,697	197,692	81.8	73.1	66.4
Other	.....	.....	.....	999	2,107	6,265	0.3	0.7	2.1
Electric	137,468	99,988	60,731	331,500	277,206	229,312	100.0	100.0	100.0
Rented	127,887	90,783	52,588	296,401	240,697	197,692	89.4	86.8	86.2
Generated by establishments reporting	9,581	9,205	8,143	35,099	36,509	31,620	10.6	13.2	13.8

[1] Figures for horsepower include for 1909 the amount reported under the head of "Other" owned power.

[2] Not reported separately.

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

STATE.	Census year.	COAL. Anthracite (tons, 2,240 lbs.).	COAL. Bituminous (tons, 2,000 lbs.).	Coke, (tons, 2,000 lbs.).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
United States	1919	179,403	370,398	7,048	73,553	28,401	2,567,301
	1914	165,903	351,395	4,830	52,849	(1)	2,270,571
Alabama	1919	49	1,337	157	61	301	5,111
	1914	131	1,265	62	507	.....	21,333
Arizona	1919	.....	80	.....	.....	100	6,987
	1914	8	84	.....	97	.....	4,491
Arkansas	1919	80	673	.....	149	454	18,499
	1914	73	411	.....	644	.....	11,474
California	1919	44	417	4	23,823	1,903	224,999
	1914	69	371	2	10,288	.....	80,781
Colorado	1919	48	5,377	52	65	379	20,528
	1914	123	4,910	28	375	.....	30,628
Connecticut	1919	3,713	2,975	60	75	457	26,878
	1914	2,719	3,260	38	91	.....	19,871
Delaware	1919	317	305	.....	8	23	1,048
	1914	496	302	.....	65	.....	1,201
District of Columbia	1919	865	1,810	.....	3	61	15,887
	1914	1,164	2,595	1	31	.....	24,992
Florida	1919	207	196	95	86	437	6,018
	1914	287	280	29	828	.....	4,988
Georgia	1919	135	1,623	16	142	615	32,012
	1914	399	1,609	23	688	.....	12,442
Idaho	1919	49	1,082	15	4	103	622
	1914	28	767	40	129	.....	1,719
Illinois	1919	1,663	86,652	274	1,397	3,987	130,983
	1914	5,586	72,908	333	1,375	.....	108,935
Indiana	1919	342	16,443	223	340	697	52,483
	1914	599	17,409	144	912	.....	57,987
Iowa	1919	945	15,177	187	244	1,144	45,815
	1914	589	16,399	267	1,965	.....	21,038
Kansas	1919	1,248	3,843	18	380	646	47,453
	1914	128	2,960	38	1,074	.....	72,429
Kentucky	1919	28	5,309	1,291	76	453	23,924
	1914	55	5,817	10	576	.....	16,230
Louisiana	1919	22	268	42	40	300	25,202
	1914	51	473	7	392	.....	21,316
Maine	1919	1,143	1,682	35	55	143	5,678
	1914	1,488	1,421	13	101	.....	2,379
Maryland	1919	1,447	7,474	.....	110	478	13,270
	1914	2,697	5,501	33	145	.....	15,738
Massachusetts	1919	7,764	22,886	111	10,426	118	89,025
	1914	9,405	24,803	410	441	.....	124,822
Michigan	1919	1,086	16,669	347	1,149	1,242	35,490
	1914	1,807	15,979	432	1,262	.....	51,493
Minnesota	1919	1,890	10,813	178	79	1,420	38,646
	1914	2,459	8,679	208	830	.....	25,211
Mississippi	1919	31	428	4	39	418	1,384
	1914	32	606	5	363	.....	2,590
Missouri	1919	492	21,150	921	17,325	1,599	77,425
	1914	572	26,535	45	13,548	.....	65,551
Montana	1919	46	600	.....	41	330	2,342
	1914	69	1,945	1	484	.....	6,543
Nebraska	1919	340	7,379	42	116	775	23,187
	1914	446	6,597	20	858	.....	15,543
Nevada	1919	10	166	3	1	85	5,456
	1914	21	105	5	147	.....	251
New Hampshire	1919	564	970	1	.....	16	1,711
	1914	500	597	24	11	.....	2,583
New Jersey	1919	7,935	2,634	1,511	20	160	31,177
	1914	8,314	7,002	17	332	.....	47,092
New Mexico	1919	63	502	.....	4	227	722
	1914	20	104	.....	198	.....	1,094
New York	1919	91,897	38,067	220	1,520	1,014	314,585
	1914	71,523	29,217	611	1,541	.....	375,747
North Carolina	1919	141	2,007	21	50	336	3,838
	1914	208	2,200	32	526	.....	8,256
North Dakota	1919	297	3,108	21	45	574	2,560
	1914	707	1,912	45	782	.....	1,508
Ohio	1919	322	35,823	204	335	661	375,222
	1914	895	40,519	714	889	.....	409,403
Oklahoma	1919	51	1,421	1	74	580	91,389
	1914	118	1,050	10	898	.....	66,831
Oregon	1919	27	455	20	549	213	16,785
	1914	25	478	.....	1,465	.....	13,194
Pennsylvania	1919	40,920	14,203	59	90	490	479,825
	1914	44,917	14,908	51	868	.....	275,761
Rhode Island	1919	735	798	66	13,113	53	11,130
	1914	1,663	2,669	20	16	.....	7,494
South Carolina	1919	87	1,340	10	40	477	29,211
	1914	498	973	5	356	.....	1,816
South Dakota	1919	273	3,022	15	17	802	2,136
	1914	583	2,462	28	873	.....	1,165
Tennessee	1919	124	7,585	114	19	242	7,355
	1914	21	5,061	510	245	.....	11,914
Texas	1919	422	3,936	43	879	1,952	54,041
	1914	244	2,064	30	3,374	.....	75,873
Utah	1919	4	1,544	.....	.....	94	3,255
	1914	372	1,042	5	60	.....	5,379
Vermont	1919	663	363	40	8	28	1,006
	1914	700	93	18	47	.....	3,546
Virginia	1919	603	5,024	103	57	300	6,256
	1914	1,144	3,671	98	325	.....	12,232
Washington	1919	18	1,743	29	391	290	23,347
	1914	24	1,335	17	762	.....	14,830
West Virginia	1919	10	688	.....	.....	121	87,372
	1914	.....	549	.....	158	.....	76,312
Wisconsin	1919	1,228	8,716	494	81	804	37,048
	1914	1,849	71,112	392	823	.....	24,951
Wyoming	1919	15	735	1	27	299	1,888
	1914	77	460	.....	77	.....	1,784

[1] Included in figures for fuel oils.

SPECIAL STATISTICS.

Comparative statistics, industry proper.—Table 12 shows the statistics for printing and publishing, book and job; music; and newspapers and periodicals for 1919, 1914, and 1909. The three classifications mentioned are designated in this report as "the industry proper."

In Table 13 the value of "job printing" and of "electrotyping, engraving, etc.," shown in Table 14, are segregated into various groups, by geographic divisions and states; but only where the proper combinations can be made do the totals in the two tables agree.

TABLE 12.—COMPARATIVE STATISTICS, INDUSTRY PROPER, BY CHARACTER OF PRODUCTS: 1919, 1914, AND 1909.

PRODUCT.	1919	1914	1909	PER CENT OF INCREASE.[1]		
				1909-1919	1914-1919	1909-1914
Number of establishments	30,611	31,612	29,757	2.9	−3.2	6.2
Book and job	13,080	12,115	10,708	22.2	8.0	13.1
Music	160	180	178	−10.1	−11.1	1.1
Newspapers and periodicals	17,362	19,317	18,871	−8.0	−10.1	2.4
Total value	$1,536,498,283	$810,508,075	$662,501,059	131.9	89.6	22.3
Publications:						
Newspapers and periodicals	806,305,760	419,209,701	337,596,288	138.8	92.3	24.2
Subscriptions and sales	278,006,382	163,577,090	135,063,043	105.8	70.0	21.1
Advertising	528,299,378	255,632,611	202,533,245	160.8	106.7	26.2
Newspapers	566,321,409	283,588,966	232,993,094	143.1	99.7	21.7
Subscriptions and sales	192,819,519	99,541,860	84,438,702	128.4	93.7	17.9
Advertising	373,501,890	184,047,106	148,554,392	151.4	102.9	23.9
Periodicals other than newspapers	239,984,351	135,620,735	104,603,194	129.4	77.0	29.7
Subscriptions and sales	85,186,863	64,035,230	50,624,341	68.3	33.0	26.5
Advertising	154,797,488	71,585,505	53,978,853	186.8	116.2	32.6
Ready prints (patent insides and outsides)	2,010,506	1,965,214	2,293,077	−12.3	2.3	−14.3
Publications—Contd.						
Books and pamphlets—						
Published, or printed and published	$132,699,383	$68,587,778	$62,930,394	110.9	93.5	9.0
Printed for publication by others	32,861,475	19,049,651	10,209,509	221.9	72.5	86.6
Sheet music and books of music—						
Published, or printed and published	12,509,981	6,803,491	5,510,698	127.0	83.9	23.5
Printed for publication by others	3,766,908	822,585	1,000,966	276.3	357.9	−17.8
Other products for sale and in execution of orders—						
Job printing	465,419,994	249,730,932	204,154,096	128.0	86.4	22.3
Machine composition for others	12,487,551	5,682,098	(2)	.....	119.8	.....
Bookbinding and blank books	23,911,103	15,097,109	18,810,392	27.1	58.4	−19.7
Electrotyping, engraving, lithographing, etc.	11,337,829	9,698,641	8,201,398	38.2	16.9	18.3
All other products	33,097,793	13,860,875	11,885,141	178.5	138.8	16.6

[1] A minus sign (−) denotes decrease.

[2] Included in "Job printing."

Statistics, by geographic divisions and states, industry proper.—Table 13 shows details as to the value of products, for each of the three branches of the industry proper, for 1919. In receipts from subscriptions and sales of newspapers the Middle Atlantic division led, with 35.1 per cent. East North Central was second, with 24.8 per cent, and the West North Central was third, with 10.5 per cent. These were also the ranking divisions in newspaper advertising, having 28 per cent, 23.8 per cent, and 12.2 per cent, respectively.

The Middle Atlantic division ranked first in receipts from the printing and publishing, or publishing only, of books and pamphlets; the East North Central was second, and New England third.

TABLE 13.—INDUSTRY PROPER, BY GEOGRAPHIC DIVISIONS AND STATES: 1919.

DIVISION AND STATE.	Number of establishments.	Total value.	NEWSPAPERS. Printed and published, or published, by establishments reporting. Subscriptions and sales.	NEWSPAPERS. Printed and published, or published, by establishments reporting. Advertising.	PERIODICALS (OTHER THAN NEWSPAPERS). Printed and published, or published, by establishments reporting. Subscriptions and sales.	PERIODICALS (OTHER THAN NEWSPAPERS). Printed and published, or published, by establishments reporting. Advertising.	NEWSPAPERS AND PERIODICALS. Printed for publication by others.	BOOKS AND PAMPHLETS. Printed and published, or published, by establishments reporting.	BOOKS AND PAMPHLETS. Printed for publication by others.
UNITED STATES	30,611	[1] $1,536,408,283	$192,819,519	$373,501,890	$85,186,863	$154,797,488	$22,913,267	$132,699,383	$32,861,475
NEW ENGLAND	2,125	120,827,728	16,290,604	31,936,011	5,505,427	4,497,948	1,393,964	20,454,027	3,525,836
Maine	166	5,755,370	624,242	1,311,994	1,059,542	1,171,824	24,059	31,825	49,276
New Hampshire	128	2,454,938	343,616	707,797	28,541	37,451	325,537	15,880	199,256
Vermont	106	1,715,263	259,142	441,367	20,079	41,401	52,002	35,970	57,530
Massachusetts	1,195	90,136,994	12,485,975	22,527,505	4,155,310	2,941,863	895,755	19,410,977	2,086,766
Rhode Island	141	7,004,948	797,608	2,611,697	40,567	183,770	15,528	11,064	538,211
Connecticut	389	13,760,215	1,780,021	4,335,651	201,448	121,639	81,083	948,311	594,797
MIDDLE ATLANTIC	7,166	586,602,681	67,624,532	104,449,925	48,945,140	100,197,072	10,123,177	73,511,914	15,298,809
New York	4,179	411,077,645	49,535,807	63,889,825	38,662,218	62,221,442	8,775,043	61,263,522	12,639,815
New Jersey	718	21,972,904	2,026,481	7,310,624	368,479	153,614	632,314	1,358,473	733,147
Pennsylvania	2,269	153,552,132	16,062,244	33,249,476	9,914,443	37,822,016	715,820	10,889,919	1,925,847
EAST NORTH CENTRAL	6,781	394,586,034	47,834,755	88,821,237	15,826,936	28,378,617	6,214,987	26,979,339	9,357,960
Ohio	1,676	98,216,156	10,533,968	28,236,258	6,846,756	8,291,073	1,055,699	4,542,168	704,459
Indiana	841	29,943,217	4,011,292	9,965,256	1,623,978	1,119,467	588,557	671,576	407,985
Illinois	2,470	201,044,228	24,240,370	30,469,318	5,741,570	16,500,979	3,958,802	19,653,227	7,668,097
Michigan	1,004	42,772,195	5,461,753	13,558,379	1,097,632	1,338,348	410,362	1,047,353	429,860
Wisconsin	790	22,610,238	3,587,372	6,592,026	517,000	1,128,750	201,567	1,065,015	147,698
WEST NORTH CENTRAL	5,298	149,797,139	20,244,335	45,454,327	4,996,426	11,049,751	1,810,952	5,079,671	1,378,706
Minnesota	978	33,083,394	4,480,091	9,039,831	685,031	2,320,553	464,956	1,936,151	458,568
Iowa	982	25,642,724	3,479,150	7,811,242	1,294,366	4,271,279	419,086	306,883	84,328
Missouri	1,241	56,177,572	6,903,708	16,096,502	1,303,637	2,155,561	360,946	2,315,442	668,320
North Dakota	318	3,225,027	639,926	1,171,017	93,677	18,725	3,777	2,500	8,490
South Dakota	358	3,881,027	633,516	1,280,476	85,508	503,941	5,953	7,020	11,895
Nebraska	688	15,085,433	2,251,176	5,342,148	610,882	405,256	441,104	445,357	43,309
Kansas	733	12,701,062	1,856,768	4,113,111	922,425	1,374,436	115,130	66,318	103,886
SOUTH ATLANTIC	2,318	85,366,410	11,088,685	28,250,246	5,361,379	3,478,374	745,158	2,494,115	1,237,098
Delaware	56	1,433,207	189,443	601,453	13,532	19,323	10,079	.....	3,181
Maryland	353	20,065,229	2,094,455	5,553,850	327,231	733,241	229,784	434,434	320,723
District of Columbia	109	15,872,531	1,545,307	4,690,044	4,028,279	1,129,886	288,489	401,353	430,106
Virginia	372	13,038,715	1,322,966	3,081,212	342,407	201,700	25,047	1,448,826	107,003
West Virginia	224	4,837,019	867,282	1,821,833	40,325	40,265	8,211	22,837	135,337
North Carolina	319	6,404,177	1,175,141	2,486,254	138,303	110,514	24,697	68,865	33,445
South Carolina	174	4,004,634	676,520	1,707,667	129,652	41,086	29,569	6,442	114,316
Georgia	414	14,092,432	2,388,259	5,229,915	278,235	1,046,071	109,715	59,378	41,439
Florida	237	5,618,466	829,303	2,387,418	63,355	156,288	19,567	51,980	51,498
EAST SOUTH CENTRAL	1,151	35,497,200	4,862,632	11,187,972	1,992,811	1,504,078	224,074	1,495,127	391,036
Kentucky	360	10,605,320	1,518,393	3,338,047	353,011	296,523	40,319	36,688	50,671
Tennessee	366	15,832,846	1,916,271	4,303,994	1,471,897	601,162	77,033	1,441,110	261,145
Alabama	232	7,049,538	1,124,075	2,822,628	164,133	633,272	80,001	10,504	57,399
Mississippi	193	2,009,496	303,893	723,303	3,770	3,121	26,121	6,825	21,821
WEST SOUTH CENTRAL	2,136	55,184,441	7,623,504	21,737,439	875,131	1,766,051	346,911	636,765	288,429
Arkansas	295	4,762,567	784,794	1,840,995	82,654	81,091	57,956	10,990	37,383
Louisiana	259	7,921,800	1,255,697	3,081,096	90,560	222,541	82,734	15,915	96,202
Oklahoma	507	10,212,272	1,384,644	4,463,481	150,372	499,469	62,432	61,430	97,081
Texas	1,075	32,287,802	4,198,369	12,351,867	551,536	963,550	143,789	548,520	57,763
MOUNTAIN	1,313	27,795,688	4,576,930	11,489,002	316,961	384,421	423,706	266,317	382,511
Montana	247	4,762,589	912,005	1,984,675	33,382	40,544	24,199	1,680	18,038
Idaho	159	2,175,151	390,280	814,910	57,365	63,860	4,708	4,258	27,670
Wyoming	92	1,227,208	194,464	577,219	15,642	23,995	2,510	2,150	7,480
Colorado	453	11,519,208	1,621,675	4,701,610	143,068	168,385	329,900	99,241	246,904
New Mexico	87	900,536	149,954	393,213	2,313	8,469	3,079	12,239	17,600
Arizona	84	2,086,395	311,814	1,058,420	32,088	23,945	28,826	.....	19,484
Utah	152	4,513,809	885,374	1,706,635	33,103	55,223	29,384	145,499	29,950
Nevada	39	610,792	111,364	252,320	.....	.....	1,040	1,250	15,385
PACIFIC	2,323	80,750,962	12,673,542	30,475,731	1,366,652	3,540,576	1,630,338	1,782,108	1,001,090
Washington	548	16,672,169	2,919,094	7,029,343	157,170	783,924	554,108	122,511	172,094
Oregon	346	9,804,207	1,435,855	3,035,282	202,749	525,642	178,045	35,074	57,112
California	1,429	54,274,586	8,318,593	19,511,106	1,006,733	2,231,010	898,185	1,624,523	771,884

[1] In addition, printing and publishing, etc., to the value of $5,617,801, was reported by establishments in other industries.

TABLE 13.—INDUSTRY PROPER, BY GEOGRAPHIC DIVISIONS AND STATES: 1919—Continued.

DIVISION AND STATE.	SHEET MUSIC AND BOOKS OF MUSIC.		Engravings, lithographs, etc., printed for publication by others.	Ready prints (patent insides and outsides) for publication by others.	Stereotyped plates for use by others.	Job printing, not elsewhere included.	Machine composition done for others.	Bookbinding.	Blank books.	Electrotyping, engraving, etc.	All other products.
	Printed and published, or published, by establishments reporting.	Printed for publication by others.									
UNITED STATES	$12,509,981	$3,766,908	$9,621,607	$2,010,506	$2,292,512	$442,506,727	$12,487,551	$16,957,313	$6,953,790	$1,716,222	$30,805,281
NEW ENGLAND	1,642,327	49,545	533,104	42,865	76,338	30,229,486	663,112	2,520,684	139,639	258,388	1,058,423
Maine			15,655			1,366,277	15,917	36,120	26,150	5,282	17,207
New Hampshire						774,281	2,013	11,034			9,532
Vermont					500	774,072	7,934	9,625	10,500		5,141
Massachusetts	1,642,327	49,265	175,909	42,865	75,838	20,317,144	457,691	2,014,730	12,349	241,553	603,172
Rhode Island			341,540			1,849,417	8,000	273,731	8,346		325,529
Connecticut		280				5,148,295	171,557	175,444	82,294	11,553	107,842
MIDDLE ATLANTIC	8,970,877	2,813,908	2,360,452	153,502	623,989	125,920,166	5,629,589	4,910,371	2,590,328	686,150	11,792,780
New York	8,622,244	1,602,150	1,683,793	102,963	403,107	81,979,764	4,799,282	4,026,135	1,141,068	550,992	9,178,475
New Jersey	3,704	3,067	7,244	55	9,519	8,866,973	134,316	277,478	9,441	127	77,848
Pennsylvania	344,929	1,208,691	669,415	50,484	211,363	35,073,429	695,991	606,758	1,439,819	135,031	2,536,457
EAST NORTH CENTRAL	1,436,018	826,630	2,036,030	444,862	704,429	141,587,098	3,257,629	5,917,512	2,278,073	583,252	12,100,670
Ohio	434,624	330,768	1,143,621	79,815	123,565	31,764,355	720,713	882,092	1,148,890	110,064	1,267,277
Indiana	17,298		120,876	91,665	64,129	9,793,448	422,752	166,387	205,006		673,665
Illinois	975,400	375,800	197,765	105,223	448,276	75,253,026	1,876,766	4,318,242	850,835	401,968	8,008,574
Michigan	8,696	117,865	265,893	68,390	37,568	16,607,055	84,830	433,687	39,464	46,948	1,718,112
Wisconsin		2,197	307,875	99,769	30,891	8,169,214	152,568	117,104	33,878	24,272	433,072
WEST NORTH CENTRAL	296,211	33,907	1,882,815	745,951	391,835	51,289,095	1,363,955	1,171,904	641,605	101,495	1,864,198
Minnesota		951	561,233	122,784	84,270	11,241,483	499,733	671,652	56,804	92,087	366,316
Iowa	2,208		55,971	174,250	62,005	7,081,013	89,998	75,879	37,926		397,145
Missouri	285,303	32,956	1,002,327	194,842	111,942	22,300,071	558,654	214,464	445,983		626,914
North Dakota				64,417	35,064	1,176,920	6,780	150	25		3,559
South Dakota			2,622	25,836	19,242	1,206,656	3,243	24,182	53,614		18,483
Nebraska	8,700		150,649	104,661	49,929	4,684,207	152,984	69,777	29,140	8,662	287,492
Kansas			110,013	59,161	29,383	3,598,745	52,568	115,800	18,283	746	164,289
SOUTH ATLANTIC	24,000	1,560	1,108,445	92,130	149,447	28,547,175	228,272	548,753	572,938	25,580	1,413,055
Delaware						506,196					
Maryland	11,000	120	557,081	37,524	71,232	7,999,959	31,274	227,675	473,219		962,427
District of Columbia						3,303,766	51,250				3,451
Virginia	13,000	1,440	233,513			5,144,606	66,701	104,190	23,292		322,812
West Virginia			52,156	600		1,773,604	150	45,177	26,678		2,514
North Carolina			9,462	30,457	34,621	2,272,559	17	1,712	1,832		16,238
South Carolina			59,644			1,028,194		129,121	42,109	12,830	27,475
Georgia			193,250	23,549	43,594	4,509,495	37,284	39,330	5,658	12,750	74,510
Florida			3,339			2,008,796	41,596	1,548	150		3,628
EAST SOUTH CENTRAL		40,000	214,701	86,242	59,255	12,775,059	191,471	171,969	100,125	3,523	197,125
Kentucky						4,873,140	24,935	9,889			93,704
Tennessee		40,000	214,701	58,356	39,199	5,027,634	134,819	144,813	71,808		25,304
Alabama				27,886	20,056	1,956,713	31,647	14,267	25,317	3,523	78,117
Mississippi						917,572	70	3,000			
WEST SOUTH CENTRAL	72,433	668	342,900	247,207	119,502	19,292,236	282,597	312,217	326,051	5,000	908,740
Arkansas	15,588		200	51,810	27,239	1,338,815	12,120	17,103	25,135		378,784
Louisiana	1,680	668	5,240			2,720,115	51,276	113,085	25,360		159,622
Oklahoma			27,735	91,847	33,706	3,223,698	42,278	19,303	44,005		7,791
Texas	55,165		309,785	100,550	58,557	12,009,608	176,923	162,726	231,551	5,000	362,543
MOUNTAIN			392,855	163,731	55,541	8,479,235	118,054	465,621	81,130		199,673
Montana			12,730	51,294	960	1,517,131	38,829	17,884	47,344		61,894
Idaho						748,394	3,000	30,737	29,897		12
Wyoming					510	391,691	1,135	7,000	3,000		412
Colorado			103,806	75,968	34,413	3,466,179	42,321	351,225	258		134,255
New Mexico						296,844		15,325			1,500
Arizona						604,018	7,550	250			
Utah			276,319	36,469	19,658	1,225,545	25,219	43,200	631		1,600
Nevada						229,433					
PACIFIC	68,115	690	750,245	34,016	112,176	24,387,177	752,872	938,282	223,901	52,834	1,260,617
Washington	7,869	50	41,394	13,258	6,810	4,390,462	149,739	130,957	133,843	13,013	46,530
Oregon			110,425		36,287	3,241,677	166,506	35,034	43,016		101,473
California	60,246	640	598,426	20,758	69,079	16,755,038	436,627	772,291	47,012	39,821	1,112,614

Printing and publishing, book and job.—Table 14 gives the statistics in considerable detail for the book and job branch of the industry for the leading states: 1919, 1914, and 1909.

New York was first in value of books and pamphlets printed and published and published only, with 43.8 per cent of the total; Massachusetts being second, with 18.3 per cent; and Illinois third, with 16.4 per cent. In 1914 Illinois was second and Massachusetts third. In job printing New York was first, with 19.5 per cent of the total for the United States, Illinois second, with 18.2 per cent, and Pennsylvania third, with 7.9 per cent—the same order as in 1914. During the five years, 1914–1919, New York showed the greatest absolute increase in value of books and pamphlets printed and published, or published only, $17,769,724; and Illinois the greatest in job printing, $37,065,368.

TABLE 14.—COMPARATIVE SUMMARY, BOOK AND JOB, BY STATES: 1919, 1914, AND 1909.

STATE.	Census year.	Total value of products.	Newspapers and periodicals printed for publication by others.	BOOKS AND PAMPHLETS. Printed and published or published only.	BOOKS AND PAMPHLETS. Printed for publication by others.	Music, printed and published, published only, or printed for publication by others; engravings, lithographs, ready prints, and plate matter.	Job printing, not elsewhere included.	Machine composition done for others.	Bookbinding.*	Blank books.	Electrotyping, engraving, etc.	All other products.
United States	1919	$597,663,228	$19,106,326	$93,618,836	$30,385,972	$14,076,483	$382,422,718	$9,985,228	$15,131,776	$6,658,071	$1,421,684	$23,956,134
	1914	307,330,861	7,497,590	49,595,482	17,662,613	6,665,123	196,682,104	5,270,808	9,498,144	3,772,649	3,451,780	7,324,508
	1909	250,925,934	6,681,624	44,394,621	9,160,643	5,053,128	157,099,380	.....	12,241,819	4,748,250	3,943,591	7,593,578
California	1919	19,871,377	836,549	588,042	712,730	732,701	14,351,737	430,918	775,745	44,472	39,821	1,358,563
	1914	9,885,477	187,684	802,031	207,474	231,841	7,393,594	261,716	504,420	55,030	143,909	97,778
	1909	7,438,072	218,417	453,172	132,616	73,776	5,812,574	.....	478,979	79,918	91,243	97,377
Illinois	1919	110,886,458	3,112,353	15,379,396	7,660,892	2,916,453	69,607,298	1,856,429	3,497,471	846,435	297,812	5,711,919
	1914	54,625,954	359,811	7,479,963	8,184,261	1,017,379	32,541,930	923,919	1,550,256	586,127	926,755	1,055,553
	1909	39,474,143	465,027	7,783,151	581,038	518,685	25,306,538	.....	2,243,465	614,592	927,565	1,034,082
Indiana	1919	10,741,232	450,299	565,410	387,660	276,020	7,807,360	288,528	165,775	139,077	.....	655,403
	1914	6,237,228	166,039	633,950	69,895	76,598	4,116,330	160,221	247,144	217,692	99,800	455,559
	1909	5,680,867	21,190	813,031	164,009	47,073	3,608,386	.....	389,111	209,800	296,573	131,594
Maryland	1919	10,690,650	99,991	396,409	308,518	665,957	7,528,505	43,053	227,155	472,954	.....	948,168
	1914	5,546,639	39,499	316,502	497,351	277,868	3,680,889	50,208	256,732	192,905	2,201	232,394
	1909	3,657,154	77,511	444,131	192,000	500	2,318,131	.....	231,929	58,640	172,636	161,676
Massachusetts	1919	41,626,859	661,689	17,126,097	1,971,473	263,258	18,548,172	411,571	2,013,030	7,299	241,553	382,717
	1914	20,245,246	336,759	6,507,223	1,494,866	70,234	10,226,954	272,711	973,272	20,916	250,423	91,888
	1909	17,138,951	320,126	5,158,126	1,334,841	125,753	8,604,920	.....	1,215,935	18,883	220,873	130,494
Michigan	1919	17,075,925	371,495	933,295	358,265	360,701	14,040,089	557,172	433,662	22,647	46,948	533,651
	1914	9,380,560	74,300	428,910	260,444	400,042	7,016,854	308,507	201,764	23,050	335,800	231,889
	1909	6,185,479	139,373	494,438	92,288	192,958	4,762,349	.....	130,397	54,128	166,429	153,119
Minnesota	1919	12,994,804	383,173	1,867,229	437,760	693,844	8,336,129	485,151	478,866	43,675	.....	268,977
	1914	7,652,223	99,333	1,861,259	166,701	246,438	4,674,802	246,687	160,535	82,939	47,679	125,859
	1909	4,602,128	85,168	235,471	99,280	276,545	3,469,377	.....	188,667	163,994	29,145	54,481
Missouri	1919	25,880,461	315,231	866,798	503,240	1,328,357	20,429,656	443,404	198,661	439,827	.....	1,265,287
	1914	12,434,192	155,218	611,452	322,851	524,472	9,490,658	322,175	138,678	383,529	39,876	445,283
	1909	12,249,660	99,577	658,011	185,708	478,692	9,214,400	.....	259,710	632,541	186,958	524,964
New Jersey	1919	9,569,344	555,970	.....	666,919	6,617	7,201,593	119,447	277,018	9,441	.....	732,339
	1914	4,201,465	106,829	34,136	830,884	317	3,223,971	38,281	8,296	15,073	30	24,648
	1909	3,655,413	10,816	219,670	62,573	3,049	3,054,911	.....	165,724	48,972	29,602	60,096
New York	1919	149,123,075	8,134,568	40,983,983	11,612,157	2,194,185	74,498,718	2,717,141	3,616,769	1,134,683	530,940	3,788,891
	1914	78,841,201	4,372,296	23,214,259	2,771,244	1,519,528	40,885,335	1,292,488	2,437,708	357,802	598,870	1,391,731
	1909	69,706,292	3,722,464	19,196,562	3,391,799	1,191,072	35,220,938	.....	3,317,799	641,119	504,793	2,509,846
Ohio	1919	39,201,684	910,016	3,487,196	719,338	1,732,932	28,720,554	625,443	760,911	1,140,042	61,609	1,033,833
	1914	19,915,250	225,048	1,631,240	195,897	418,797	15,253,054	267,595	615,926	431,404	167,342	708,947
	1909	14,987,412	327,614	2,812,093	553,460	462,390	9,533,896	.....	466,769	307,916	279,512	303,762
Pennsylvania	1919	46,152,747	555,396	8,307,940	1,472,240	1,169,606	30,079,260	390,440	598,972	1,393,797	133,911	2,051,185
	1914	25,285,844	250,830	4,288,249	881,672	204,000	17,743,360	186,595	427,224	487,164	271,627	545,093
	1909	21,810,516	311,449	4,122,762	1,018,603	250,514	14,107,336	.....	920,126	408,740	157,941	504,045
Texas	1919	12,233,688	105,659	522,526	40,112	453,226	10,221,704	169,321	160,446	228,805	3,000	328,889
	1914	4,711,163	45,830	233,925	35,231	180,291	3,405,884	134,824	204,126	168,105	85,035	157,903
	1909	4,116,397	15,614	285,562	48,769	146,364	2,587,550	.....	199,865	264,114	270,034	292,525
Wisconsin	1919	7,970,336	74,187	230,065	64,072	433,131	6,885,147	139,401	39,256	33,098	.....	62,979
	1914	4,239,891	69,270	252,766	109,786	229,750	3,343,323	60,210	71,814	15,871	51,105	35,966
	1909	2,959,012	10,917	126,383	131,621	38,752	2,420,892	.....	67,348	15,333	42,900	95,956
All other states	1919	83,043,688	2,530,850	2,355,540	3,380,587	1,740,405	64,238,796	1,307,809	1,888,039	701,819	66,090	4,833,753
	1914	44,038,498	918,835	1,299,617	1,085,056	1,264,568	33,626,136	744,641	1,610,249	735,042	431,328	1,724,026
	1909	37,279,438	847,361	1,592,058	1,181,248	1,240,105	27,059,263	.....	2,016,095	1,220,560	567,387	1,539,461

Comparative summary, books and pamphlets.—Table 15 shows the number of the leading issues of books and pamphlets, by character of publication, 1919, 1914, and 1909.

The increases during the five-year period 1914–1919 are pronounced. Educational books advanced 47 per cent in number of copies, and juvenile books 49 per cent, while works on medicine and hygiene went forward 479.3 per cent. Copies of histories were more numerous in 1919 than in 1914 by 155.4 per cent; but fiction declined, by reason, perhaps, of the fiction periodicals,

TABLE 15.—BOOKS AND PAMPHLETS, NUMBER: 1919, 1914, AND 1909.

CHARACTER.	NUMBER OF COPIES PRINTED.			PER CENT OF TOTAL.		
	1919	1914	1909	1919	1914	1909
Total	252,068,816	175,166,698	161,361,844	100.0	100.0	100.0
Education	75,075,335	51,069,521	41,636,847	29.8	29.2	25.8
Fiction	24,317,643	39,598,501	46,942,399	9.6	22.6	29.1
History	6,280,483	2,458,912	2,923,187	2.5	1.4	1.8
Juvenile	24,434,912	16,399,881	10,184,030	9.7	9.4	6.3
Law	2,254,861	1,701,602	1,496,194	0.9	1.0	0.9
Medicine and hygiene	13,539,464	2,337,312	1,519,480	5.4	1.3	0.9
Philosophy	538,775	189,996	265,077	0.2	0.1	0.2
Poetry and drama	2,082,568	1,926,892	1,980,824	1.1	1.1	1.2
Religion and theology (including Bibles)	36,496,230	24,411,502	23,608,230	14.5	13.9	14.6
Scientific and similar associations	1,149,946	1,279,427	1,258,562	0.5	0.7	0.8
Works of reference	15,832,195	11,032,385	7,799,590	6.3	6.3	4.8
All others	49,466,404	22,760,767	21,747,424	19.6	13.0	13.5

In comparing the figures of the censuses, it must be remembered that the totals include pamphlets as well as books, and that the number of pamphlets may increase from census to census in greater proportion than books, due, in part, to the high cost of materials and the consequent lack of demand for certain kinds of cloth-bound literature.

Printing and publishing, music.—Table 16 shows, by states, the value of products of establishments engaged chiefly in music printing and publishing, and music publishing, and those engaged wholly in music printing for others, 1919, 1914, and 1909. New York continued to lead, as at previous censuses, in total volume of output, with 67.5 per cent of the total, as compared with 49.9 per cent in 1914; in per cent of increase, however, Massachusetts led.

TABLE 16.—COMPARATIVE SUMMARY, MUSIC, BY LEADING STATES: 1919, 1914, AND 1909.

STATE.	TOTAL.			PER CENT OF INCREASE.[1]			SHEET MUSIC AND BOOKS OF MUSIC.						ALL OTHER PRODUCTS.[3]		
							Printed and published, or published, by establishments reporting.			Printed by music houses for publication by others.[2]					
	1919	1914	1909	1909-1919	1914-1919	1909-1914	1919	1914	1909	1919	1914	1909	1919	1914	1909
United States	$14,592,177	$7,271,266	$5,575,903	161.7	100.7	30.4	$12,509,981	$6,088,746	$4,581,342	$1,923,546	$712,509	$848,038	$158,650	$469,951	$146,523
Illinois	975,400	1,042,794	946,517	3.1	−6.5	10.2	975,400	879,905	889,466	.....	98,524	33,981	.....	64,365	23,070
Massachusetts	1,642,327	530,264	352,312	366.2	209.7	50.5	1,642,327	530,264	352,312	.....	.....	.....	.....	.....	.....
New York	9,844,268	3,631,522	3,110,433	216.5	171.1	16.8	8,622,244	3,051,953	2,583,342	1,222,024	567,117	412,781	.....	12,452	114,310
Ohio	434,624	484,344	384,537	13.0	−10.3	26.0	434,624	409,544	309,605	.....	.....	74,932	.....	74,800	.....
Pennsylvania	344,929	364,194	375,823	−8.2	−5.3	−3.1	344,929	310,320	261,917	.....	.....	112,099	.....	53,874	1,807
All other states [4]	1,350,029	1,218,148	406,281	232.4	10.9	199.8	490,457	906,760	184,700	701,522	46,928	214,245	158,650	264,460	7,336

[1] A minus sign (−) denotes decrease.
[2] To avoid disclosing the operations of individual establishments in 1919, receipts for music "Printed by music houses for publication by others" and for "All other products" reported in Illinois, Massachusetts, Ohio, and Pennsylvania are excluded from the figures given for those states and are included with those for "All other states"; in 1914 the same applies only to Massachusetts.
[3] Includes, for 1919, job printing to the value of $135,692, bookbinding to the value of $18,984, and machine composition to the value of $3,974; for 1914, periodicals to the value of $93,177, books and pamphlets to the value of $21,921, electrotyping, engraving, lithographing, and stereotyped plates to the value of $115,557, job printing to the value of $19,356, and other products to the value of $210,940; for 1909, books and pamphlets to the value of $58,748, job printing to the value of $6,764, bookbinding and blank books to the value of $37,219, and other products to the value of $43,792.
[4] Includes, for 1919, Arkansas, California, Indiana, Iowa, Louisiana, Maryland, Michigan, Missouri, Nebraska, Texas, and Virginia.

Comparative summary, newspapers and periodicals, by value of products.—Table 17 shows in detail the value of products of establishments engaged primarily in printing and publishing, or publishing only, of newspapers and periodicals for 1919, 1914, and 1909.

The great advance in values shown elsewhere as an aftermath of the World War is shown also in this table. The total increase for the five-year period 1914–1919 was $428,246,930, or 86.4 per cent. During this five-year period the book and job part of the various establishments increased 55.4 per cent, and the "all other" 35.6 per cent. The newspapers and periodicals rose by 92.5 per cent, advertising showing the greatest gain. The decrease in ready prints and stereotyped plates is indicative of a greater activity in newspapers wholly set in offices where published.

Comparative summary, newspapers and periodicals, by character of publications.—Table 18 shows the number of newspapers and periodicals, by character, for states: 1919, 1914, and 1909.

In number of publications, for "news, politics, and family reading," Illinois was first in 1919 as in 1914, with New York second, and Texas third. New York led in periodicals classified as "general literature," Illinois following. "Labor" was another classification in which New York led, Ohio being second. Pennsylvania was first in "Religious" periodicals, Illinois ranking second. The far-away leader in "Society, art, music, and fashion" periodicals was New York, Illinois being a distant second. In "Trade journals," likewise, New York was first and Illinois second.

TABLE 17.—COMPARATIVE SUMMARY, NEWSPAPERS AND PERIODICALS, BY VALUE OF PRODUCTS: 1919, 1914, AND 1909.

KIND.	1919		1914	1909	PER CENT OF INCREASE.[1]		
	Value.	Per cent of total.	Value.	Value.	1909–1919	1914–1919	1909–1914
Total	$921,152,878	100.0	$495,905,948	$406,090,122	127.6	86.4	22.1
Newspapers and periodicals	806,305,760	87.2	418,848,707	337,549,528	138.9	92.5	24.1
Advertising	528,299,378	57.2	255,421,144	202,527,925	160.8	106.8	26.1
Subscriptions and sales	278,006,382	30.1	163,427,563	135,021,603	105.9	70.1	21.0
Book and job printing	105,023,077	11.4	67,599,014	62,022,414	69.3	55.4	9.0
Books and pamphlets	37,066,164	4.0	20,357,413	19,516,591	89.9	82.1	4.3
Sheet music and books of music	1,115,880	0.1	638,393	903,989	23.4	74.8	−29.4
Engravings, lithographs, etc	811,597	0.1	301,118	374,230	116.9	169.5	−19.5
Ready prints	68,593	(2)	252,131	744,497	−90.8	−72.8	−66.1
Stereotyped plates	40,646	(2)	160,260	74,202	−45.2	−74.6	116.0
Job printing, not elsewhere included	65,920,197	7.1	45,889,699	40,408,905	63.1	43.6	13.6
All other products or work	12,824,041	1.4	9,458,227	6,518,180	96.7	35.6	45.1
Bookbinding	1,844,846	0.2	1,439,831	1,340,131	37.7	28.1	7.4
Blank books	323,635	(2)	380,599	442,973	−26.9	−15.0	−14.1
Electrotyping, engraving, etc	261,904	(2)	904,250	471,676	−43.8	−70.7	91.7
Machine composition	349,440	(2)	411,230	(3)	.....	−15.0	.....
Miscellaneous	10,041,216	1.1	6,322,317	4,263,400	135.5	58.8	48.3

[1] A minus sign (−) denotes decrease. [2] Less than one-tenth of 1 per cent. [3] Not reported separately.

TABLE 18.—COMPARATIVE SUMMARY, NEWSPAPERS AND PERIODICALS, BY LEADING STATES: 1919, 1914, AND 1909.

CHARACTER OF PUBLICATION, AND STATE.	NUMBER.		
	1919	1914	1909
NEWS, POLITICS, AND FAMILY READING.			
United States	15,746	17,574	17,098
California	690	705	674
Illinois	996	1,094	1,169
Indiana	550	655	718
Iowa	731	838	891
Kansas	605	656	679
Massachusetts	339	367	326
Michigan	525	600	634
Minnesota	653	660	643
Missouri	680	779	797
Nebraska	541	577	558
New York	966	1,075	1,080
Ohio	706	815	882
Oklahoma	454	562	573
Pennsylvania	781	937	1,013
South Dakota	343	369	384
Texas	797	898	857
Washington	297	356	322
Wisconsin	501	558	596
All other states	4,591	5,073	4,902
AGRICULTURE, HORTICULTURE, DAIRYING, STOCK RAISING, ETC.			
United States	334	346	316
Illinois	30	35	36
Iowa	21	12	21
New York	32	34	28
Ohio	9	10	7
Pennsylvania	14	13	12
All other states	219	242	212
COLLEGE AND SCHOOL PERIODICALS.			
United States	415	303	271
Illinois	21	14	28
Massachusetts	35	24	17
New York	37	34	26
Pennsylvania	28	35	20
Texas	10	10	13
All other states	284	186	158
COMMERCE, FINANCE, INSURANCE, RAILROADS, ETC.			
United States	294	323	264
Illinois	25	35	23
Michigan	7	11	5
New York	90	86	91
Pennsylvania	20	27	24
All other states	152	164	121
EDUCATION AND HISTORY.			
United States	184	231	202
Illinois	20	27	33
Massachusetts	16	21	18
New York	33	51	37
Pennsylvania	10	19	15
All other states	105	113	99
FRATERNAL.			
United States	314	312	[1] 419
Illinois	36	32	40
Indiana	11	10	17
Iowa	12	5	10
Massachusetts	11	13	22
Nebraska	11	6	10
New York	25	30	37
Ohio	23	15	30
All other states	185	201	244
GENERAL LITERATURE.			
United States	220	284	340
Illinois	24	28	36
Iowa	7	2	6
Kansas	1	4	5
Maine	2	6	10
Massachusetts	9	15	18
Missouri	10	7	14
New York	88	116	112
Ohio	8	17	14
Pennsylvania	8	10	17
All other states	63	79	108
LABOR.			
United States	182	163	(3)
California	10	13	.....
Illinois	17	13	.....
Massachusetts	2	8	.....
Michigan	3	7	.....
Missouri	10	12	.....
New York	23	12	.....
Ohio	19	13	.....
Pennsylvania	10	15	.....
All other states	88	70	.....
LAW.			
United States	59	65	56
Illinois	3	5	10
Massachusetts	1	2	3
Michigan	5	4	4
Missouri	6	3	4
New York	12	8	8
All other states	32	43	27
MEDICINE AND SURGERY.			
United States	185	178	197
Illinois	26	17	20
Michigan	6	7	11
Missouri	14	13	19
New York	42	42	42
Pennsylvania	19	16	18
All other states	78	83	87
REFORM AND SOCIAL SCIENCE.			
United States	85	179	(3)
California	9	17	.....
Illinois	6	13	.....
Massachusetts	6	7	.....
Missouri	3	8	.....
New York	19	44	.....
Ohio	5	30	.....
Pennsylvania	6	11	.....
All other states	31	49	.....
RELIGIOUS.			
United States	1,162	1,412	1,251
Illinois	131	153	123
Massachusetts	63	76	55
New York	119	148	135
Ohio	116	140	142
Pennsylvania	173	276	252
Tennessee	85	75	53
All other states	475	544	491
SCIENCE AND MECHANICS.			
United States	246	135	139
District of Columbia	9	9	4
Illinois	24	21	26
New York	104	46	52
Pennsylvania	19	12	20
All other states	90	47	37
SOCIETY, ART, MUSIC, AND FASHION.			
United States	227	212	164
Illinois	25	14	10
Massachusetts	14	7	9
New York	114	95	75
Pennsylvania	9	16	12
All other states	65	80	58
TRADE JOURNALS.			
United States	767	873	685
Illinois	127	134	102
Massachusetts	29	46	25
Michigan	13	18	15
Missouri	32	36	37
New York	231	285	191
Ohio	51	46	42
Pennsylvania	57	69	62
All other states	227	239	211
MISCELLANEOUS.			
United States	69	164	139
Illinois	3	22	17
Massachusetts	4	6	9
New York	19	22	39
All other states	43	114	74

[1] Includes a number of labor publications.
[2] Included in "Fraternal."
[3] Included in other classifications, principally "Religious," "Medicine and surgery," "Law," "Education and history," and "Miscellaneous."

Newspapers and periodicals, number and circulation per issue.—Table 19 shows the number and aggregate circulation per issue of the daily and Sunday newspapers, and of the weekly, monthly, and other publications, 1919, 1914, and 1909.

Number and character of periodicals, by states.—Table 20 gives the number of periodicals, by character of the publication, by states, for 1919.

TABLE 19.—NEWSPAPERS AND PERIODICALS, PRINCIPAL CLASSES, BY NUMBER AND CIRCULATION: 1919, 1914, AND 1909.

CLASS.	1919	1914	1909	PER CENT OF INCREASE.[1]			PER CENT DISTRIBUTION.		
				1909–1919	1914–1919	1909–1914	1919	1914	1909
All classes:									
Number	20,489	22,754	22,141	−7.5	−10.0	2.8	100.0	100.0	100.0
Aggregate circulation per issue	222,481,983	205,594,907	164,463,040	35.3	8.2	25.0	100.0	100.0	100.0
Daily:									
Number	2,441	2,580	2,600	−6.1	−5.4	−0.8	11.9	11.3	11.7
Aggregate circulation per issue	33,028,630	28,777,454	24,211,977	36.4	14.8	18.9	14.8	14.0	14.7
Sunday:									
Number	604	571	520	16.2	5.8	9.8	2.9	2.5	2.3
Aggregate circulation per issue	19,368,913	16,479,943	13,347,282	45.1	17.5	23.5	8.7	8.0	8.1
Triweekly:									
Number	93	84	73	27.4	10.7	15.1	0.5	0.4	0.3
Aggregate circulation per issue	492,286	549,495	335,389	46.8	−10.4	63.8	0.2	0.3	0.2
Semiweekly:									
Number	452	583	635	−28.8	−22.5	−8.2	2.2	2.6	2.9
Aggregate circulation per issue	2,020,165	2,483,629	2,312,919	−12.7	−18.7	7.4	0.9	1.2	1.4
Weekly:									
Number	13,375	15,172	15,097	−11.4	−11.8	0.5	65.3	66.7	68.2
Aggregate circulation per issue	51,902,121	50,336,963	40,822,965	27.1	3.1	23.3	23.3	24.5	24.8
Monthly:									
Number	2,647	2,822	2,491	6.3	−6.2	13.3	12.9	12.4	11.3
Aggregate circulation per issue	91,681,807	79,190,838	63,280,535	44.9	15.8	25.1	41.2	38.5	38.5
Quarterly:									
Number	489	500	361	35.5	−2.2	38.5	2.4	2.2	1.6
Aggregate circulation per issue	18,920,544	18,853,901	16,058,099	17.8	0.4	17.4	8.5	9.2	9.8
All other classes:									
Number	388	442	364	6.6	−12.2	21.4	1.9	1.9	1.6
Aggregate circulation per issue	5,067,517	8,922,684	4,093,874	23.8	−43.2	118.0	2.3	4.3	2.5

[1] A minus sign (−) denotes decrease.

TABLE 20.—PERIODICALS, BY CHARACTER OF PUBLICATION AND BY LEADING STATES: 1919.

CHARACTER OF PUBLICATION, AND STATE.	Number.
AERONAUTICS.	
United States	4
New York	4
AGRICULTURE, HORTICULTURE, STOCK AND POULTRY RAISING, ETC.	
United States	334
Alabama	3
Arizona	4
California	14
Colorado	4
District of Columbia	3
Florida	3
Georgia	4
Illinois	39
Indiana	14
Iowa	21
Kansas	9
Kentucky	5
Louisiana	3
Maine	3
Maryland	5
Massachusetts	10
Michigan	13
Minnesota	15
Missouri	16
Montana	8
Nebraska	10
New Hampshire	3
New Jersey	4
New York	32
Oklahoma	3
Ohio	9
Oregon	11
Pennsylvania	14
South Dakota	7
Texas	13
Utah	4
Virginia	3
Washington	4
Wisconsin	5
All other states	16
ARCHITECTURE AND BUILDING.	
United States	47
California	3
Georgia	3
Illinois	5
New York	18
Ohio	4
Pennsylvania	3
All other states	11
ART, MUSIC, AND DRAMA.	
United States	63
Illinois	7
Massachusetts	9
New York	22
Ohio	6
All other states	19
AUTOMOBILES, MOTOR BOATS, GAS ENGINES, ETC.	
United States	57
California	3
New York	20
Ohio	7
Pennsylvania	6
Rhode Island	4
Wisconsin	5
All other states	12
BLIND (IN RAISED TYPE).	
United States	5
All states	5
BOOK REVIEWS, LIBRARY ECONOMY, ETC.	
United States	6
All states	6
BUSINESS THEORY AND OFFICE ECONOMY.	
United States	16
Illinois	5
New York	6
All other states	5
COLLEGE AND SCHOOL PERIODICALS.	
United States	415
Alabama	3
Arkansas	5
California	12
Colorado	4
Connecticut	13
District of Columbia	5
Georgia	3
Illinois	21
Indiana	7
Iowa	11
Kansas	16
Kentucky	8
Louisiana	4
Maryland	8
Massachusetts	35
Michigan	14
Minnesota	11
Mississippi	3
Missouri	17
Nebraska	15
New Hampshire	4
New Jersey	7
New York	37
North Carolina	5
Ohio	22
Oregon	3
Pennsylvania	28
South Carolina	10
South Dakota	5
Tennessee	11
Texas	10
Utah	5
COLLEGE AND SCHOOL PERIODICALS—continued.	
Vermont	3
Virginia	9
Washington	9
West Virginia	3
Wisconsin	14
All other states	15
COMMERCE, FINANCE, INSURANCE, ETC.	
United States	178
California	10
Colorado	4
Connecticut	3
Georgia	3
Illinois	14
Indiana	4
Iowa	8
Massachusetts	14
Michigan	3
Missouri	5
Nebraska	4
New Jersey	3
New York	57
Oklahoma	4
Ohio	5
Oregon	4
Pennsylvania	14
Texas	3
All other states	16
DOMESTIC ECONOMY, COOKERY, ETC.	
United States	13
New York	4
All other states	9

TABLE 20.—PERIODICALS, BY CHARACTER OF PUBLICATION AND BY LEADING STATES: 1919—Continued.

CHARACTER OF PUBLICATION, AND STATE.	Number.
EDUCATION, PHILOLOGY, AND LITERARY TECHNIQUE.	
United States	119
District of Columbia	4
Illinois	18
Iowa	3
Maryland	6
Massachusetts	12
Missouri	3
New York	21
Ohio	6
Pennsylvania	5
Tennessee	3
Wisconsin	8
All other states	30
ENGINEERING.	
United States	62
Illinois	8
New York	40
All other states	14
FICTION (WHOLLY).	
United States	46
California	3
Illinois	4
New York	34
All other states	5
FRATERNAL ORDERS, CLUBS, AND SOCIETIES.	
United States	314
Arkansas	4
California	20
Colorado	4
Connecticut	4
District of Columbia	5
Illinois	36
Indiana	11
Iowa	12
Kansas	5
Kentucky	3
Louisiana	4
Massachusetts	11
Michigan	11
Minnesota	14
Missouri	11
Nebraska	11
New Jersey	7
New York	25
Ohio	23
Oregon	4
Pennsylvania	30
Texas	12
Virginia	4
Washington	6
West Virginia	4
Wisconsin	13
All other states	20
HEALTH, HYGIENE, AND NURSING.	
United States	35
District of Columbia	4
Massachusetts	5
Michigan	3
New York	13
Pennsylvania	3
All other states	7
HISTORY AND GENEALOGY.	
United States	27
Massachusetts	3
New York	5
Pennsylvania	4
All other states	15
JUVENILE, BOY SCOUTS, ETC.	
United States	35
Indiana	4
Iowa	4
Missouri	4
Nebraska	4
New York	7
Pennsylvania	3
All other states	9
LABOR (BY LABOR ORGANIZATIONS).	
United States	182
California	10
District of Columbia	6
Illinois	17
Indiana	19
Kansas	5
Kentucky	5
Maryland	3
Michigan	3
Minnesota	3
Missouri	10
Nebraska	3
New Jersey	5
New York	23
North Carolina	3
Oklahoma	3
Ohio	19
Oregon	3
Pennsylvania	10
Tennessee	4
Texas	6
Washington	3
All other states	19
LAW.	
United States	59
Illinois	3
Michigan	5
Missouri	6
New York	12
Ohio	5
Pennsylvania	16
All other states	12
MEDICINE, SURGERY, AND DENTISTRY.	
United States	150
California	5
Illinois	24
Kentucky	4
Louisiana	3
Maryland	4
Michigan	3
Missouri	14
Nebraska	3
New Jersey	3
New York	29
Ohio	6
Pennsylvania	16
Tennessee	3
Texas	9
All other states	24
MILITARY AND NAVAL AFFAIRS.	
United States	20
District of Columbia	6
New York	3
Virginia	4
All other states	7
MOTION PICTURES.	
United States	20
New York	9
Pennsylvania	3
All other states	8
NEWS SUMMARIES, GENERAL LITERATURE, AND FAMILY READING.	
United States	154
California	11
Illinois	19
Iowa	3
Massachusetts	8
Minnesota	6
Missouri	5
New York	55
Ohio	4
Pennsylvania	9
Texas	5
All other states	29
RACE PAPERS, INDIAN, NEGRO, ETC.	
United States	32
New York	4
Ohio	3
All other states	25
RELIGION.	
United States	1,162
Alabama	4
Arkansas	9
California	36
Colorado	6
Connecticut	8
District of Columbia	13
Florida	5
Georgia	14
Illinois	131
Indiana	34
Iowa	35
Kansas	10
Kentucky	11
Louisiana	4
Maryland	12
Massachusetts	63
Michigan	20
Minnesota	29
Mississippi	4
Missouri	65
Nebraska	11
New Jersey	10
New York	119
North Carolina	22
Oklahoma	5
Ohio	116
Oregon	10
Pennsylvania	173
South Carolina	18
South Dakota	3
Tennessee	85
Texas	12
Utah	10
Virginia	18
Washington	7
Wisconsin	19
All other states	11
SCIENCE AND PHILOSOPHY.	
United States	73
California	5
District of Columbia	4
Illinois	9
Maryland	12
Massachusetts	3
Minnesota	3
New Jersey	2
New York	21
Pennsylvania	8
All other states	6
SOCIETY, FASHION, BEAUTY CULTURE, ETC.	
United States	71
New York	53
All other states	18
SOCIOLOGY, ECONOMICS, AND POLITICAL THEORY.	
United States	85
California	9
Illinois	6
Massachusetts	6
Missouri	3
New Jersey	3
New York	19
North Carolina	4
Ohio	5
Pennsylvania	6
Wisconsin	4
All other states	20
SPORTS, GAMES, AND AMUSEMENTS.	
United States	73
California	5
Illinois	14
Massachusetts	3
Missouri	3
New York	30
Ohio	6
Pennsylvania	3
All other states	9
TRADE JOURNALS, NOT ELSEWHERE SPECIFIED.	
United States	767
California	51
Colorado	10
Connecticut	4
District of Columbia	9
Florida	3
Georgia	20
Illinois	127
Indiana	8
Iowa	4
Kansas	4
Louisiana	10
Maryland	4
Massachusetts	29
Michigan	13
Minnesota	17
Missouri	32
Nebraska	7
New York	231
North Carolina	3
Oklahoma	4
Ohio	51
Oregon	12
Pennsylvania	57
Rhode Island	3
Texas	13
Washington	14
Wisconsin	12
All other states	15
TRANSPORTATION, RAILROADS, WATERWAYS, ETC.	
United States	70
Illinois	5
Massachusetts	3
Michigan	4
Missouri	8
New York	20
Ohio	4
Pennsylvania	3
Washington	5
All other states	18
TECHNOLOGY.	
United States	3
All states	3
TRAVEL, DESCRIPTION, OUT-OF-DOORS, ETC.	
United States	30
California	6
New York	7
Pennsylvania	3
All other states	14
MISCELLANEOUS.	
United States	69
California	5
Illinois	3
Indiana	4
Massachusetts	4
Minnesota	3
Missouri	5
Nebraska	3
New York	19
Ohio	7
Pennsylvania	4
All other states	12

Daily newspapers, number of morning and evening.—Table 21 shows separately the number of the morning and evening papers, by geographic divisions and by states: 1919, 1914, and 1909. The Middle Atlantic division had the largest number of morning issues in 1919, and the East North Central the largest number of evening editions. New York led among the states in morning editions, while Pennsylvania was first in evening. Pennsylvania and California tied for second place in morning editions and New York and Ohio in evening.

TABLE 21.—DAILY NEWSPAPERS, MORNING AND EVENING, BY GEOGRAPHIC DIVISIONS AND STATES: 1919, 1914, AND 1909.

DIVISION AND STATE.	TOTAL.			MORNING.			EVENING.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909
UNITED STATES	2,441	2,580	2,600	720	794	760	1,721	1,786	1,840
NEW ENGLAND	169	179	172	41	41	45	128	138	127
Maine	12	15	14	5	7	7	7	8	7
Massachusetts	84	93	86	18	18	15	66	75	71
Rhode Island	12	12	12	3	2	4	9	10	8
Connecticut	36	36	38	8	9	11	28	27	27
New Hampshire and Vermont	25	23	22	7	5	8	18	18	14
MIDDLE ATLANTIC	455	504	508	155	165	166	300	339	342
New York	214	234	231	86	88	84	128	146	147
New Jersey	40	46	54	11	13	19	29	33	35
Pennsylvania	201	224	223	58	64	63	143	160	160
EAST NORTH CENTRAL	601	671	702	144	160	156	457	511	546
Ohio	165	181	184	37	44	37	128	137	147
Indiana	138	160	172	31	38	38	107	122	134
Illinois	168	184	194	50	47	51	118	137	143
Michigan	73	80	87	17	19	20	56	61	67
Wisconsin	57	66	65	9	12	10	48	54	55
WEST NORTH CENTRAL	322	339	344	88	102	77	234	237	267
Minnesota	50	51	42	12	17	10	38	34	32
Iowa	58	68	68	13	18	15	45	50	53
Missouri	81	89	91	21	30	20	60	59	71
Nebraska	29	34	34	15	11	11	14	23	23
Kansas	70	69	78	17	17	12	53	52	66
North Dakota and South Dakota	34	28	31	10	9	9	24	19	22
SOUTH ATLANTIC	204	198	186	72	84	75	132	114	111
Maryland	18	19	18	7	9	9	11	10	9
Virginia	31	32	32	13	13	13	18	19	19
SOUTH ATLANTIC—Con.									
West Virginia	31	33	34	10	11	11	21	22	23
North Carolina	33	29	31	9	12	9	24	17	22
South Carolina	17	16	13	7	8	5	10	8	8
Georgia	30	29	27	10	12	14	20	17	13
Florida	35	26	19	11	11	7	24	15	12
Delaware and District of Columbia	9	14	12	5	8	7	4	6	5
EAST SOUTH CENTRAL	88	91	95	26	34	39	62	57	56
Kentucky	32	33	35	12	16	16	20	17	19
Tennessee	18	17	16	6	8	7	12	9	9
Alabama	24	24	26	5	5	11	19	19	15
Mississippi	14	17	18	3	5	5	11	12	13
WEST SOUTH CENTRAL	226	218	218	65	60	53	161	158	165
Arkansas	32	33	29	11	7	6	21	26	23
Louisiana	17	19	23	5	7	6	12	12	17
Oklahoma	62	59	67	11	11	15	51	48	52
Texas	115	107	99	38	35	26	77	72	73
MOUNTAIN	133	125	137	49	51	54	84	74	83
Montana	22	21	17	11	10	6	11	11	11
Colorado	44	44	53	14	18	19	30	26	34
Arizona	20	16	19	8	7	8	12	9	11
Nevada	7	11	15	4	3	7	3	8	8
Idaho, Wyoming, New Mexico, and Utah	40	33	33	12	13	14	28	20	19
PACIFIC	243	255	238	80	97	95	163	158	143
Washington	42	43	41	14	17	17	28	26	24
Oregon	33	34	31	8	12	13	25	22	18
California	168	178	166	58	68	65	110	110	101

Daily newspapers in leading cities.—Table 22 shows for 12 of the important cities in the United States the average circulation per issue of the morning and the evening papers, and per cent of increase from census to census, 1919, 1914, and 1909. The 12 leading cities combined, which are arranged in the order of their population, reported 54.4 per cent of the morning circulation in the United States in 1919, and 37.6 per cent of the evening. Their evening circulation in that year formed 52.9 per cent of the total daily circulation of the 12 cities, and represented an increase of 9.8 per cent for the period 1914–1919, as compared with 8.2 per cent for the morning circulation. New York City was first, with 32 per cent of the total evening circulation in the 12 cities, and 34.4 per cent of the morning, Chicago being second.

TABLE 22.—MORNING AND EVENING NEWSPAPERS IN CITIES OF 500,000 INHABITANTS IN 1920—CIRCULATION: 1919, 1914, AND 1909.

CITY.[1]	AVERAGE CIRCULATION PER ISSUE.												PER CENT OF TOTAL.					
	Morning.						Evening.						Morning.			Evening.		
	1919	1914	1909	Per cent of increase.[2] 1909–1919	1914–1919	1909–1914	1919	1914	1909	Per cent of increase.[2] 1909–1919	1914–1919	1909–1914	1919	1914	1909	1919	1914	1909
United States	12,582,841	11,692,368	9,605,694	31.0	7.6	21.7	20,445,789	17,085,086	14,606,283	40.0	19.7	17.0	38.1	40.6	39.7	61.9	59.4	60.3
Total for 12 cities	6,844,050	6,327,481	5,217,877	31.2	8.2	21.3	7,678,660	6,990,762	6,561,118	17.0	9.8	6.5	47.1	47.5	44.3	52.9	52.5	55.7
New York, N. Y.	2,352,944	2,393,961	1,806,820	30.2	−1.7	32.5	2,453,547	2,121,609	2,284,102	7.4	15.6	−7.1	49.0	53.0	44.2	51.0	47.0	55.8
Chicago, Ill.	1,319,038	813,528	755,083	74.5	62.1	7.7	1,238,839	1,234,474	1,053,642	17.6	0.4	17.2	51.6	39.7	41.8	48.4	60.3	58.2
Philadelphia, Pa.	626,966	797,813	753,309	−16.8	−21.4	5.9	744,994	545,003	780,288	−4.5	36.7	−30.2	45.7	59.4	49.1	54.3	40.6	50.9
Detroit, Mich.	191,349	124,801	70,595	171.1	53.3	76.8	354,574	295,049	213,485	66.1	20.2	38.2	35.1	29.7	24.9	64.9	70.3	75.1
Cleveland, Ohio	199,312	222,137	158,920	25.4	−10.3	39.8	492,838	355,147	244,231	101.8	38.8	45.4	28.8	38.5	39.4	71.2	61.5	60.6
St. Louis, Mo.	358,354	287,548	284,816	25.8	24.6	1.0	351,071	326,790	341,419	2.8	7.4	−4.3	50.5	46.8	45.5	49.5	53.2	54.5
Boston, Mass.	731,519	709,878	560,663	30.5	3.0	26.6	717,241	828,054	739,406	−3.0	−13.4	12.0	50.5	46.2	43.1	49.5	53.8	56.9
Baltimore, Md.	159,993	183,322	164,447	−2.7	−12.7	11.5	234,442	174,778	120,553	94.5	34.1	45.0	40.6	51.2	57.7	59.4	48.8	42.3
Pittsburgh, Pa.	224,627	220,301	211,131	6.4	1.9	4.4	380,024	345,219	326,802	16.3	10.1	5.6	37.1	39.0	39.2	62.9	61.0	60.8
Los Angeles, Calif.	205,558	190,533	81,900	151.0	7.9	132.6	225,905	205,154	81,070	178.7	10.1	153.1	47.6	48.2	50.3	52.4	51.[illegible]	49.7
Buffalo, N. Y.	136,012	108,922	89,239	52.4	24.9	22.1	240,496	273,534	221,892	8.4	−12.1	23.3	36.1	28.5	28.7	63.9	71.[illegible]	71.3
San Francisco, Calif.	338,384	274,647	280,354	20.7	23.2	−2.0	244,689	285,951	154,228	58.7	−14.4	85.4	58.0	49.0	64.5	42.0	51.[illegible]	35.5

[1] Cities listed according to their rank in population.

[2] A minus sign (−) denotes decrease.

Daily newspapers, by geographic divisions and states.—Table 23 shows the average circulation of daily newspapers, morning and evening, exclusive of Sundays, by geographic divisions and by states, with per cent that the morning and the evening circulation was of the total, 1919 and 1914.

The evening issues maintained their supremacy in circulation in 1919, as in 1914, and their percentage of the total circulation increased from 59.4 in 1914 to 61.9 in 1919. The Middle Atlantic division was first in both morning and evening circulation, and the East North Central was second. New York led the states, with about one-fourth of the total for the morning, and nearly one-fifth for the evening circulation. Pennsylvania was second in morning and Illinois in evening circulation.

TABLE 23.—MORNING AND EVENING DAILIES, EXCEPT SUNDAYS: 1919 AND 1914.

DIVISION AND STATE.	AVERAGE CIRCULATION PER ISSUE, EXCLUSIVE OF SUNDAY EDITIONS.											
	Total.				Morning.		Evening.		Per cent which circulation of morning and evening editions represents of total.			
	1919	Per cent of total, 1919.	1914	Per cent of increase,[1] 1914–1919.	1919	1914	1919	1914	1919		1914	
									Morning.	Evening.	Morning.	Evening.
UNITED STATES	33,028,630	100.0	28,777,454	14.8	12,582,841	11,692,368	20,445,789	17,085,086	38.1	61.9	40.6	59.4
NEW ENGLAND	2,877,433	8.7	2,711,635	6.1	1,078,244	990,774	1,799,189	1,720,861	37.5	62.5	36.5	63.5
Maine	122,076	0.4	117,842	3.6	52,652	64,094	69,424	53,748	43.1	56.9	54.4	45.6
Massachusetts	2,085,287	6.3	2,060,313	1.2	854,217	793,403	1,231,070	1,266,940	41.0	59.0	38.5	61.5
Rhode Island	191,762	0.6	148,895	28.8	37,967	23,429	153,795	125,466	19.8	80.2	15.7	84.3
Connecticut	351,200	1.1	275,773	27.4	94,403	73,612	256,797	202,161	26.9	73.1	26.7	73.3
New Hampshire and Vermont	127,108	0.4	108,782	16.8	39,005	36,236	88,103	72,546	30.7	69.3	33.3	66.7
MIDDLE ATLANTIC	10,548,423	31.9	9,278,023	13.7	4,361,566	4,198,662	6,186,857	5,079,361	41.3	58.7	45.3	54.7
New York	6,919,325	20.9	5,874,207	17.8	3,111,151	2,756,251	3,808,174	3,117,956	45.0	55.0	46.9	53.1
New Jersey	581,851	1.8	451,681	28.8	96,000	88,469	485,851	363,212	16.5	83.5	19.6	80.4
Pennsylvania	3,047,247	9.2	2,952,135	3.2	1,154,415	1,353,942	1,892,832	1,598,193	37.9	62.1	45.9	54.1
EAST NORTH CENTRAL	8,275,024	25.1	7,286,844	13.6	2,711,833	2,587,532	5,563,191	4,699,312	32.8	67.2	35.5	64.5
Ohio	2,497,955	7.6	2,484,548	0.5	504,883	995,999	1,933,072	1,488,549	22.6	77.4	40.1	59.9
Indiana	909,953	2.8	777,435	17.0	312,339	259,870	597,614	517,565	34.3	65.7	33.4	66.6
Illinois	3,241,254	9.8	2,620,661	23.7	1,481,980	981,351	1,759,274	1,639,310	45.7	54.3	37.4	62.6
Michigan	1,020,649	3.1	888,981	14.8	274,911	244,762	745,738	644,219	26.9	73.1	27.5	72.5
Wisconsin	605,213	1.8	515,219	17.5	77,720	105,550	527,493	409,669	12.8	87.2	20.5	79.5
WEST NORTH CENTRAL	3,890,214	11.8	3,373,427	15.3	1,393,610	1,275,760	2,496,604	2,097,667	35.8	64.2	37.8	62.2
Minnesota	692,276	2.1	655,070	5.7	183,019	233,443	509,257	421,627	26.4	73.6	35.6	64.4
Iowa	717,607	2.2	587,268	22.2	185,352	153,185	532,255	434,083	25.8	74.2	26.1	73.9
Missouri	1,608,606	4.9	1,432,219	12.3	672,797	622,759	935,809	809,460	41.8	58.2	43.5	56.5
Nebraska	371,309	1.1	329,840	12.6	146,361	109,658	224,948	220,182	39.4	60.6	33.2	66.8
Kansas	333,573	1.0	267,463	24.7	140,284	109,438	193,289	158,025	42.1	57.9	40.9	59.1
North and South Dakota	166,843	0.5	101,567	64.3	65,797	47,277	101,046	54,290	39.4	60.6	46.5	53.5
SOUTH ATLANTIC	1,894,105	5.7	1,565,078	21.0	815,300	737,092	1,078,805	827,986	43.0	57.0	47.1	52.9
Maryland	438,635	1.3	400,680	9.5	173,908	198,620	264,727	202,060	39.6	60.4	49.6	50.4
Virginia	257,207	0.8	233,975	9.9	97,477	105,354	159,730	128,621	37.9	62.1	45.0	55.0
West Virginia	156,050	0.5	123,722	26.1	77,110	60,948	78,940	62,774	49.4	50.6	49.3	50.7
North Carolina	179,406	0.5	120,823	48.5	95,217	73,802	84,189	47,021	53.1	46.9	61.1	38.9
South Carolina	116,722	0.4	83,885	39.1	65,176	52,570	51,546	31,315	55.8	44.2	62.7	37.3
Georgia	298,728	0.9	265,416	12.6	121,177	104,581	177,551	160,835	40.6	59.4	39.4	60.6
Florida	165,824	0.5	119,102	39.2	84,280	63,616	81,544	55,486	50.8	49.2	53.4	46.6
Delaware and District of Columbia	281,533	0.9	217,475	29.5	100,955	77,601	180,578	139,874	35.9	64.1	35.7	64.3
EAST SOUTH CENTRAL	990,290	3.0	845,080	17.2	417,524	347,634	572,766	497,446	42.2	57.8	41.1	58.9
Kentucky	315,851	1.0	311,019	1.6	145,660	128,851	170,191	182,168	46.1	53.9	41.4	58.6
Tennessee	387,329	1.2	301,583	28.4	166,940	146,818	220,389	154,765	43.1	56.9	48.7	51.3
Alabama	230,630	0.7	186,686	23.5	78,552	56,111	152,078	130,575	34.1	65.9	30.1	69.9
Mississippi	56,480	0.2	45,792	23.3	26,372	15,854	30,108	29,938	46.7	53.3	34.6	65.4
WEST SOUTH CENTRAL	1,447,230	4.4	1,080,050	34.0	594,117	458,838	853,113	621,212	41.1	58.9	42.5	57.5
Arkansas	127,985	0.4	87,614	46.1	71,015	43,699	56,970	43,915	55.5	44.5	49.9	50.1
Louisiana	233,160	0.7	139,686	66.9	91,728	70,287	141,432	69,399	39.3	60.7	50.3	49.7
Oklahoma	347,673	1.1	242,305	43.5	130,409	78,553	217,264	163,752	37.5	62.5	32.4	67.6
Texas	738,412	2.2	610,445	21.0	300,965	266,299	437,447	344,146	40.8	59.2	43.6	56.4
MOUNTAIN	747,166	2.3	539,917	38.4	285,292	238,223	461,874	301,694	38.2	61.8	44.1	55.9
Montana	111,518	0.3	87,113	28.0	67,121	50,774	44,397	36,339	60.2	39.8	58.3	41.7
Colorado	287,982	0.9	249,465	15.4	66,187	83,012	221,795	166,453	23.0	77.0	33.3	66.7
Arizona	56,995	0.2	32,875	73.4	28,237	16,852	28,758	16,023	49.5	50.5	51.3	48.7
Nevada	14,810	0.1	15,179	−2.4	7,448	6,476	7,362	8,703	50.3	49.7	42.7	57.3
Idaho, Wyoming, New Mexico, and Utah	275,861	0.8	155,285	77.6	116,299	81,109	159,562	74,176	42.2	57.8	52.2	47.8
PACIFIC	2,358,745	7.1	2,097,400	12.5	925,355	857,853	1,433,390	1,239,547	39.2	60.8	40.9	59.1
Washington	518,628	1.6	456,489	13.6	141,032	146,251	376,696	310,238	27.4	72.6	32.0	68.0
Oregon	293,204	0.9	218,449	34.2	90,870	77,626	202,334	140,823	31.0	69.0	35.5	64.5
California	1,546,913	4.7	1,422,462	8.7	692,553	633,976	854,360	788,486	44.8	55.2	44.6	55.4

[1] A minus sign (—) denotes decrease.

Dailies in foreign languages, by states.—Table 24 shows the number and combined circulation of foreign daily newspapers, by leading states, with per cent of increase, 1919, 1914, and 1909. New York had the largest number and circulation of foreign-language dailies in 1919, as at previous censuses, Illinois ranking second and California third in number; but Ohio was third in circulation in 1919. From 1914 to 1919 there was a decrease in the number of foreign-language dailies and a slight increase in their circulation.

TABLE 24.—DAILY NEWSPAPERS IN FOREIGN LANGUAGES, BY LEADING STATES: 1919, 1914, AND 1909.

STATE.	NUMBER.			AVERAGE COMBINED CIRCULATION.					
	1919	1914	1909	1919	1914	1909	Per cent of increase.[1]		
							1909-1919	1914-1919	1909-1914
United States	151	160	137	2,710,265	2,598,827	1,786,281	51.7	4.3	45.5
California	16	16	13	150,986	81,655	48,633	210.5	84.9	67.9
Illinois	27	25	21	617,256	343,988	271,500	127.4	79.6	26.6
Indiana	1	3	5	3,128	19,687	17,766	−82.4	−84.1	10.8
Massachusetts	12	6	5	78,386	26,547	16,200	383.9	195.3	63.9
Michigan	5	5	5	66,000	39,247	18,975	247.8	68.2	106.8
Missouri	2	3	6	46,269	41,512	141,151	−67.2	11.5	−70.6
New York	41	40	35	1,258,704	1,509,093	968,340	30.0	−16.6	55.8
Ohio	12	12	11	189,728	130,965	89,665	111.6	44.9	46.1
Pennsylvania	7	11	8	75,997	151,745	75,649	0.5	−49.9	100.6
Wisconsin	6	6	6	89,650	106,801	58,433	53.4	−16.1	82.8
All other states	25	33	22	134,161	147,887	79,969	67.8	−9.3	84.9

[1] A minus sign (−) denotes decrease.

Dailies in foreign languages, by circulation.—Table 25 shows the circulation of each of the leading foreign-language dailies, by language in which published, with per cent of increase, 1919, 1914, and 1909. About one-fourth of the total daily circulation in 1919 was Yiddish. In 1914 German occupied first place. Polish shows the greatest absolute gain in circulation during the five years 1914–1919, and Chinese the greatest percentage of gain.

TABLE 25.—FOREIGN-LANGUAGE DAILIES—AVERAGE CIRCULATION PER ISSUE: 1919, 1914, AND 1909.

LANGUAGE.	AVERAGE COMBINED CIRCULATION PER ISSUE.						LANGUAGE.	AVERAGE COMBINED CIRCULATION PER ISSUE.					
	1919	1914	1909	Per cent of increase.[1]				1919	1914	1909	Per cent of increase.[1]		
				1909-1919	1914-1919	1909-1914					1909-1919	1914-1919	1909-1914
Total	2,710,265	2,598,827	1,786,281	51.7	4.3	45.5	Italian	270,445	269,674	160,300	68.7	0.3	68.2
							Japanese	47,815	39,961	24,603	94.3	19.7	62.4
Bohemian	66,226	73,688	52,143	27.0	−10.1	41.3	Polish	366,161	207,380	88,937	305.0	73.7	133.2
Chinese	76,950	16,569	9,500	710.0	364.4	74.4	Spanish	44,714	28,150	3,400	1,215.1	58.8	727.9
French	73,494	52,660	40,230	82.7	39.6	30.9	Yiddish	676,145	762,910	524,900	28.8	−11.4	45.3
German	[2] 384,996	823,062	753,116	−48.9	−53.2	9.3	All other languages [3]	622,510	221,528	74,852	731.7	181.0	196.0
Hungarian	86,800	103,245	54,300	59.9	−15.9	90.1							

[1] A minus sign (−) denotes decrease.
[2] Includes English-and-German.
[3] Includes, for 1919, Albanian, Arabic, Armenian, Bulgarian, Croatian, Finnish, Greek, Lithuanian, Norwegian-and-Danish, Portuguese, Rumanian, Russian, Serbian, Slovak, Slovenian; for 1914, Arabic, Bulgarian, Croatian, Finnish, Greek, Lithuanian, Norwegian-and-Danish, Russian, Serbian, Slovak, and Slovenian or Slovenic; for 1909, Arabic, Croatian, Norwegian-and-Danish, Finnish, Greek, Japanese-and-English, Slovak, and Slovenian.

Sunday newspapers, by geographic divisions and states.—Table 26 shows the number and circulation of the Sunday newspapers, by geographic divisions and states, with per cent of increase, 1919, 1914, and 1909. From 1914 to 1919 the increase in number of Sunday newspapers was 5.8 per cent, compared with 9.8 per cent, 1909–1914. In circulation, 1914–1919, the increase was 17.5 per cent, compared with 23.5 per cent, 1909–1914.

Although not shown in this table, of the 604 Sunday papers published in 1919, 71 with an aggregate circulation of 1,530,819 were printed in languages other than English. Eighteen with a circulation of 297,231 were in German; 10 with a circulation of 600,469 in Yiddish; and 8 with a circulation of 236,085 in Italian.

TABLE 26.—SUNDAY NEWSPAPERS, NUMBER AND CIRCULATION: 1919, 1914, AND 1909.

DIVISION AND STATE.	NUMBER.			AVERAGE COMBINED CIRCULATION PER ISSUE.						
	1919	1914	1909	1919	Per cent of total, 1919.	1914	1909	Per cent of increase.[1]		
								1909–1919	1914–1919	1909–1914
UNITED STATES	604	571	520	19,368,913	100.0	16,479,943	13,347,282	45.1	17.5	23.5
NEW ENGLAND	30	34	29	1,653,607	8.5	1,439,928	1,267,440	30.5	14.8	13.6
Massachusetts	17	21	15	1,444,846	7.5	1,271,453	1,122,049	28.8	13.6	13.3
Connecticut	8	8	10	119,765	0.6	100,581	86,261	38.8	19.1	16.6
Maine and Rhode Island [2]	5	5	4	88,996	0.5	67,894	59,130	50.5	31.1	14.8
MIDDLE ATLANTIC	92	101	81	6,227,902	32.2	5,761,587	4,509,679	38.1	8.1	27.8
New York	54	55	48	4,469,074	23.1	3,917,088	2,957,727	51.1	14.1	32.4
New Jersey	9	7	6	146,713	0.8	83,995	70,670	107.6	74.7	18.9
Pennsylvania	29	39	27	1,612,115	8.3	1,760,504	1,481,282	8.8	−8.4	18.9
EAST NORTH CENTRAL	109	116	106	4,001,786	20.7	3,269,351	2,855,912	40.1	22.4	14.5
Ohio	29	28	25	1,087,733	5.6	830,219	645,869	68.4	31.0	28.5
Indiana	18	18	20	276,880	1.4	254,126	206,176	34.3	9.0	23.3
Illinois	41	48	38	1,886,084	9.7	1,635,121	1,616,506	16.7	15.3	1.2
Michigan	14	14	15	507,916	2.6	342,163	256,583	98.0	48.4	33.4
Wisconsin	7	8	8	243,173	1.3	207,722	130,778	85.9	17.1	58.8
WEST NORTH CENTRAL	69	65	64	2,361,954	12.2	2,004,978	1,649,780	43.2	17.8	21.5
Minnesota	9	7	7	444,523	2.3	369,912	237,205	87.4	20.2	55.9
Iowa	14	14	14	266,152	1.4	200,666	169,678	56.9	32.6	18.3
Missouri	18	23	21	1,205,673	6.2	1,131,459	978,377	23.2	6.6	15.6
Nebraska	9	12	8	255,702	1.3	187,287	129,050	98.1	36.5	45.1
Kansas	11	5	6	128,997	0.7	86,727	88,044	46.5	48.7	−1.5
North Dakota and South Dakota [2]	8	4	8	60,907	0.3	28,927	47,426	28.4	110.6	−39.0
SOUTH ATLANTIC	75	65	55	1,471,480	7.6	1,100,039	751,231	95.9	33.8	46.4
Maryland	3	4	5	339,196	1.8	265,817	182,582	85.8	27.6	45.6
Virginia	11	9	8	179,338	0.9	117,531	79,258	126.3	52.6	48.3
West Virginia	9	9	7	73,561	0.4	56,143	44,939	63.7	31.0	24.9
North Carolina	11	12	7	116,753	0.6	87,833	39,281	197.2	32.9	123.6
South Carolina	9	7	4	79,606	0.4	63,783	32,447	145.3	24.8	96.6
Georgia	14	10	13	335,912	1.7	259,108	172,039	95.3	29.6	50.6
Florida	13	9	6	89,177	0.5	83,171	48,539	83.7	7.2	71.3
Delaware and District of Columbia [2]	5	5	5	257,937	1.3	166,653	152,146	69.5	54.8	9.5
EAST SOUTH CENTRAL	32	34	35	631,304	3.3	437,205	414,052	52.5	44.4	5.6
Kentucky	11	9	12	169,396	0.9	88,246	115,855	46.2	92.0	−23.8
Tennessee	6	6	7	241,792	1.2	171,558	183,196	32.0	40.9	−6.4
Alabama	10	12	9	182,761	0.9	144,830	78,679	132.3	26.2	84.1
Mississippi	5	7	7	37,355	0.2	32,571	36,322	2.8	14.7	−10.3
WEST SOUTH CENTRAL	79	56	56	1,079,974	5.6	821,241	583,028	85.2	31.5	40.9
Arkansas	7	5	7	83,685	0.4	63,967	50,593	65.4	30.8	26.4
Louisiana	6	7	8	247,556	1.3	178,168	152,920	61.9	38.9	16.5
Oklahoma	20	12	11	187,199	1.0	117,158	77,326	142.1	59.8	51.5
Texas	46	32	30	561,534	2.9	461,948	302,189	85.8	21.6	52.9
MOUNTAIN	48	44	39	551,994	2.8	445,670	362,439	52.3	23.9	23.0
Montana	10	7	7	88,093	0.5	60,321	48,088	83.2	46.0	25.4
Idaho	7	8	3	44,251	0.2	34,566	13,864	219.2	28.0	149.3
Colorado	11	11	13	252,981	1.3	214,916	223,008	13.4	17.7	−3.6
Arizona	9	8	9	32,126	0.2	18,244	17,400	84.6	76.1	4.9
Utah	3	3	3	106,076	0.5	92,580	45,428	133.5	14.6	103.8
Wyoming, New Mexico, and Nevada [2]	8	7	4	28,467	0.1	25,043	14,651	94.3	13.7	70.9
PACIFIC	70	56	55	1,388,012	7.2	1,199,944	953,721	45.6	15.7	25.8
Washington	13	12	13	288,724	1.5	276,212	243,663	18.5	4.5	13.4
Oregon	11	7	6	191,330	1.0	146,975	93,142	105.4	30.2	57.8
California	46	37	36	908,858	4.7	776,757	616,916	47.3	17.0	25.9

[1] A minus sign (−) denotes decrease.

[2] Can not be shown separately without disclosing the circulation of individual papers.

Sunday newspapers in 12 cities.—Table 27 shows the number and circulation of Sunday newspapers in 12 of the principal cities in the United States, with per cent of increase, 1919, 1914, and 1909. Nearly three-fifths of the total Sunday circulation of the United States was reported from these 12 cities in 1919.

New York city led with a little more than one-third of the total for the 12 cities; Chicago was second with about one-seventh; and Boston third with a little more than one-ninth. From 1914 to 1919 New York city showed the largest actual increase in circulation, 587,244, and Detroit showed the largest per cent of increase, 74.9 per cent.

TABLE 27.—SUNDAY NEWSPAPERS IN CITIES OF 500,000 INHABITANTS IN 1920—NUMBER AND CIRCULATION: 1919, 1914, AND 1909.

CITY.[1]	NUMBER.			AVERAGE CIRCULATION PER ISSUE.					
							Per cent of increase.[2]		
	1919	1914	1909	1919	1914	1909	1909-1919	1914-1919	1909-1914
United States	604	571	520	19,368,913	16,479,943	13,347,282	45.1	17.5	23.5
Total for 12 cities	114	112	110	11,167,236	9,530,743	8,642,183	29.2	17.2	10.3
New York, N. Y.	35	31	32	3,752,383	3,165,139	2,744,990	36.7	18.6	15.3
Chicago, Ill.	20	20	15	1,665,740	1,454,637	1,473,597	13.0	14.5	−1.3
Philadelphia, Pa.	13	18	13	1,035,307	1,015,984	1,052,052	−1.6	1.9	−3.4
Detroit, Mich.	5	3	4	425,443	243,259	142,976	197.6	74.9	70.1
Cleveland, Ohio	3	4	5	448,544	280,195	186,340	140.7	60.1	50.4
St. Louis, Mo.	6	6	7	696,156	677,320	670,101	3.9	2.8	1.1
Boston, Mass.	6	4	4	1,275,814	1,095,956	992,332	28.6	16.4	10.4
Baltimore, Md.	3	4	6	339,196	265,817	184,378	84.0	27.6	44.2
Pittsburgh, Pa.	6	6	6	465,917	410,054	385,305	20.9	13.6	6.4
Los Angeles, Calif.	5	4	4	296,358	298,755	208,500	42.1	−0.8	43.3
Buffalo, N. Y.	5	5	7	349,068	253,678	241,876	44.3	37.6	4.9
San Francisco, Calif.	7	7	7	417,310	369,949	359,736	16.0	12.8	2.8

[1] Cities listed according to their rank in population.

[2] A minus sign (−) denotes decrease.

Weekly newspapers and periodicals, number and circulation, by geographic divisions and states.—Table 28 gives, by geographic divisions and states, the combined figures for number and circulation of weekly newspapers and periodicals, with per cent of increase, 1919, 1914, and 1909.

TABLE 28.—WEEKLY NEWSPAPERS AND PERIODICALS, NUMBER AND CIRCULATION, BY GEOGRAPHIC DIVISIONS AND STATES: 1919, 1914, AND 1909.

DIVISION AND STATE.	NUMBER.			AVERAGE COMBINED CIRCULATION PER ISSUE.					
	1919	1914	1909	1919	1914	1909	Per cent of increase.[1]		
							1909-1919	1914-1919	1909-1914
UNITED STATES	13,375	15,172	15,097	51,902,121	50,336,963	40,822,965	27.1	3.1	23.3
NEW ENGLAND	539	609	590	1,894,228	3,105,093	2,500,606	−24.2	−39.0	24.2
Maine	54	73	87	96,205	162,139	186,616	−48.4	−40.7	−13.1
New Hampshire	54	60	66	72,024	109,806	141,287	−49.0	−34.4	−22.3
Vermont	56	59	67	64,288	82,103	92,355	−30.4	−21.7	−11.1
Massachusetts	284	322	271	1,493,362	2,552,499	1,911,486	−21.9	−41.5	33.5
Rhode Island	16	22	21	25,450	48,928	34,013	−25.2	−48.0	43.9
Connecticut	75	73	78	142,899	149,618	134,849	6.0	−4.5	11.0
MIDDLE ATLANTIC	1,785	2,040	2,060	21,941,158	16,409,602	12,458,495	76.1	33.7	31.7
New York	902	1,006	975	15,433,740	9,872,226	6,756,243	128.4	56.3	46.1
New Jersey	230	246	247	353,006	391,044	383,231	−7.9	−9.7	2.0
Pennsylvania	653	788	847	6,154,412	6,146,332	5,319,021	15.7	0.1	15.6
EAST NORTH CENTRAL	2,699	3,096	3,272	12,536,262	12,386,409	10,466,986	19.8	1.2	18.3
Ohio	543	641	699	3,282,812	3,110,883	2,913,730	12.7	5.5	6.8
Indiana	407	485	517	1,495,279	1,291,735	781,866	91.2	15.8	65.2
Illinois	866	967	1,018	5,551,012	6,216,667	5,098,590	10.8	−10.7	24.1
Michigan	443	517	526	1,194,022	793,176	750,298	47.1	39.2	5.7
Wisconsin	440	486	512	1,103,137	973,948	1,012,502	9.0	13.3	−3.8
WEST NORTH CENTRAL	3,554	3,872	3,925	7,710,362	9,902,113	7,575,538	1.8	−22.1	30.7
Minnesota	616	620	614	1,685,983	1,790,818	1,269,856	32.8	−5.9	41.0
Iowa	657	738	784	1,190,932	1,459,849	1,419,709	−16.1	−18.4	2.8
Missouri	611	721	731	2,258,690	3,542,326	1,871,585	20.7	−36.2	89.3
North Dakota	295	315	310	305,704	265,981	259,675	17.7	14.9	2.4
South Dakota	320	347	360	260,289	268,243	277,127	−6.1	−3.0	−3.2
Nebraska	515	538	521	924,630	916,257	1,074,554	−14.0	0.9	−14.7
Kansas	540	593	605	1,084,134	1,658,630	1,403,032	−22.7	−34.6	18.2
SOUTH ATLANTIC	995	1,129	1,116	2,643,104	2,156,791	2,067,315	27.9	22.6	4.3
Delaware	26	24	23	38,932	29,632	25,950	50.0	31.4	14.2
Maryland	104	125	120	205,373	161,045	185,554	10.7	27.5	−13.2
District of Columbia	18	17	15	1,049,440	301,330	185,246	466.5	248.3	62.7
Virginia	151	165	161	356,735	429,016	392,106	−9.0	−16.8	9.4
West Virginia	136	153	156	175,592	222,504	187,822	−6.5	−21.1	18.5
North Carolina	147	172	178	240,158	329,922	395,682	−39.3	−27.2	−16.6
South Carolina	85	91	90	159,398	148,597	133,240	19.6	7.3	11.5
Georgia	201	241	246	262,075	363,121	423,897	−38.2	−27.8	−14.3
Florida	127	141	127	155,461	171,615	137,818	12.8	−9.4	24.5
EAST SOUTH CENTRAL	632	788	810	1,430,524	1,924,940	1,905,125	−24.9	−25.7	1.0
Kentucky	185	221	226	346,491	348,342	481,957	−28.1	−0.5	−27.7
Tennessee	182	224	223	580,548	923,117	923,431	−37.1	−37.1	(2)
Alabama	127	174	179	392,023	491,616	278,245	40.9	−20.3	76.7
Mississippi	138	169	182	111,462	161,865	221,492	−49.7	−31.1	−26.9
WEST SOUTH CENTRAL	1,346	1,659	1,602	1,606,124	2,047,776	1,894,359	−15.2	−21.6	8.1
Arkansas	217	243	234	243,723	273,078	241,413	1.0	−10.7	13.1
Louisiana	117	157	141	125,262	148,987	176,193	−28.9	−15.9	−15.4
Oklahoma	376	497	499	342,745	500,335	512,229	−33.1	−31.5	−2.3
Texas	636	762	728	894,394	1,125,376	964,524	−7.3	−20.5	16.7
MOUNTAIN	900	942	774	828,395	1,095,355	742,136	11.6	−24.4	47.6
Montana	201	203	161	186,262	292,746	92,027	102.3	−36.4	218.1
Idaho	124	134	108	99,832	102,226	91,134	9.5	−2.3	12.2
Wyoming	72	67	55	60,551	51,847	39,227	54.4	16.8	32.2
Colorado	283	293	278	279,544	430,727	338,092	−17.3	−35.1	27.4
New Mexico	81	90	86	69,273	69,802	62,826	10.3	−0.8	11.1
Arizona	47	46	41	35,257	41,420	24,675	42.9	−14.9	67.9
Utah	71	82	65	83,791	91,339	71,542	17.1	−8.3	27.7
Nevada	21	27	40	13,945	15,248	22,613	−38.3	−8.5	−32.6
PACIFIC	925	1,037	939	1,311,904	1,308,884	1,212,405	8.2	0.2	8.0
Washington	255	307	268	313,718	276,979	252,396	24.3	13.3	9.7
Oregon	174	201	176	281,324	349,363	220,585	22.5	−19.5	52.2
California	496	529	495	716,862	682,542	730,424	−1.9	5.0	−6.6

[1] A minus sign (−) denotes decrease.

[2] Decrease of less than one-tenth of 1 per cent.

Weekly newspapers and periodicals, number and circulation, by leading states.—Table 29 gives the total number and the circulation per issue of weekly periodicals and of weekly newspapers for leading states, with per cent of increase, 1919, 1914, and 1909. During the five-year period 1914–1919, the circulation of periodicals

increased 9.4 per cent, while that of newspapers decreased 5.1 per cent. During the same five-year period, of the 19 states shown in the table, the circulation of periodicals decreased in 13, and the circulation of newspapers in 10. In the circulation of periodicals, New York led, with an increase of 6,040,994, or 75.8 per cent; while in the circulation of newspapers, Illinois was first with an increase of 219,161, or 9. 8 per cent.

TABLE 29.—WEEKLY PERIODICALS AND NEWSPAPERS—NUMBER AND CIRCULATION, BY LEADING STATES: 1919, 1914, AND 1909.

STATE.	NUMBER OF WEEKLY.—						AVERAGE COMBINED CIRCULATION PER ISSUE.											
	Periodicals.			Newspapers.			Periodicals.						Newspapers.					
										Per cent of increase.[1]						Per cent of increase.[1]		
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1909-1919	1914-1919	1909-1914	1919	1914	1909	1909-1919	1914-1919	1909-1914
United States	1,230	1,379	1,194	12,145	13,793	13,903	31,161,570	28,486,357	19,876,630	56.8	9.4	43.3	20,740,551	21,850,606	20,946,335	−1.0	−5.1	4.3
California	57	75	61	439	454	434	370,848	275,208	254,521	45.7	34.8	8.1	346,014	407,334	475,903	−27.3	−15.1	−14.4
Illinois	117	145	121	749	822	897	3,097,392	3,982,208	3,159,772	−2.0	−22.2	26.0	2,453,620	2,234,459	1,848,818	32.7	9.8	20.9
Indiana	31	34	19	376	451	498	797,820	714,990	206,060	287.2	11.6	247.0	697,459	576,745	575,806	21.1	20.9	0.2
Iowa	28	23	27	629	715	757	505,920	250,975	565,962	−10.6	101.6	−55.7	685,012	1,208,874	853,747	−19.8	−43.3	41.6
Kansas	24	19	21	516	574	584	286,145	191,772	212,705	34.5	49.2	−9.8	797,989	1,466,867	1,190,327	−33.0	−45.6	23.2
Kentucky	12	14	22	173	207	204	70,136	94,828	188,350	−62.8	−26.0	−49.7	276,355	253,514	293,607	−5.9	9.0	−13.7
Massachusetts	53	77	54	231	245	217	516,835	2,124,440	1,483,153	−65.2	−75.7	43.2	976,527	428,059	428,333	128.0	128.1	−0.1
Michigan	17	37	26	426	480	500	130,877	208,887	171,602	−23.7	−37.3	21.7	973,145	584,289	578,696	68.2	66.6	1.0
Minnesota	36	25	27	580	595	587	528,142	646,651	161,665	226.7	−18.3	300.0	1,157,841	1,144,167	1,108,191	4.5	1.2	3.2
Missouri	48	66	58	563	655	673	1,115,642	2,084,215	583,358	91.2	−46.5	257.3	1,143,048	1,458,111	1,288,227	−11.3	−21.6	13.2
Nebraska	26	25	21	489	513	500	183,019	306,331	164,950	11.0	−40.3	85.7	741,611	609,926	909,604	−18.5	21.6	−32.9
New York	249	267	223	653	739	752	14,015,656	7,974,662	5,090,589	175.3	75.8	56.7	1,418,084	1,897,564	1,665,654	−14.9	−25.3	13.9
North Carolina	18	16	19	129	156	159	77,048	83,300	165,406	−53.4	−7.5	−49.6	163,110	246,622	230,276	−29.2	−33.9	7.1
Ohio	81	84	86	462	557	613	2,208,252	1,856,280	1,687,358	30.9	19.0	10.0	1,074,560	1,254,603	1,226,372	−12.4	−14.4	2.3
Pennsylvania	127	157	132	526	631	715	4,738,720	5,032,402	3,920,143	20.9	−5.8	28.4	1,415,692	1,113,930	1,398,878	1.2	27.1	−20.4
Tennessee	26	31	25	156	193	198	329,180	611,246	486,896	−32.4	−46.1	25.5	251,368	311,871	436,535	−42.4	−19.4	−28.6
Texas	23	32	28	613	730	700	238,084	259,381	207,450	14.8	−8.2	25.0	656,310	865,995	757,074	−13.3	−24.2	14.4
Virginia	18	23	15	133	142	146	196,720	236,765	193,367	1.7	−16.9	22.4	160,015	192,251	198,739	−19.5	−16.8	−3.3
Wisconsin	11	21	12	429	465	500	226,240	360,749	167,036	35.4	−37.3	116.0	876,897	613,199	845,466	3.7	43.0	−27.5
All other states	228	208	197	3,873	4,469	4,269	1,528,894	1,191,067	806,287	89.6	28.4	47.7	4,475,894	4,982,226	4,636,082	−3.5	−10.2	7.5

[1] A minus sign (−) denotes decrease.

Weekly periodicals, number and circulation, by character of publication.—Table 30 shows the number and circulation per issue of weekly periodicals, by character of publication, with per cent each class is of the total, 1919, 1914, and 1909. The circulation of religious weeklies led in 1914, but "General literature" took the lead in 1919. The decline in number of religious weeklies may be due to a change to less frequent issue—as quarterlies—and it is probable also that some religious publications classified as weeklies were included with books and pamphlets in 1919.

TABLE 30.—WEEKLY PERIODICALS—NUMBER AND CIRCULATION PER ISSUE, BY CHARACTER OF PUBLICATION: 1919, 1914, AND 1909.

CHARACTER.	NUMBER.			AVERAGE COMBINED CIRCULATION PER ISSUE.			PER CENT OF TOTAL.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909
Total	1,230	1,379	1,194	31,161,570	28,486,357	19,876,630	100.0	100.0	100.0
Agriculture, horticulture, dairying, stock raising, etc.	70	81	92	3,713,502	4,008,547	2,351,368	11.9	14.1	11.8
College and school	131	88	65	157,888	94,249	72,460	0.5	0.3	0.4
Commerce, finance, insurance, railroads, etc.	66	84	84	268,121	283,925	340,819	0.9	1.0	1.7
Education and history	24	18	14	1,112,240	1,043,466	397,962	3.6	3.7	2.0
Fraternal	33	31	69	549,667	275,190	454,930	1.8	1.0	2.3
General literature	[1] 77	56	52	12,853,816	7,701,592	5,799,136	41.2	27.0	29.2
Labor	87	84	(2)	557,901	355,990	(3)	1.8	1.2	(3)
Law	25	22	19	25,944	54,565	47,843	0.1	0.2	0.2
Medicine and surgery	13	8	7	381,921	119,487	105,811	1.2	0.4	0.5
Reform and social science	16	42	(3)	672,299	286,081	(3)	2.2	1.0	(3)
Religion	380	524	483	7,689,870	12,116,666	8,544,673	24.7	42.5	43.0
Science and mechanics	38	20	23	420,092	275,157	289,478	1.3	1.0	1.5
Society, art, music, fashion, etc.	57	55	49	1,776,911	555,543	269,945	5.7	2.0	1.4
Trade	195	227	195	893,425	1,104,976	1,041,735	2.9	3.9	5.2
Miscellaneous	12	30	42	87,973	211,103	160,470	0.3	0.7	0.8

[1] Includes a number of publications devoted to news comments and literary review.
[2] Included in "Fraternal."
[3] Included in other classifications, principally "General literature."

Weekly newspapers and periodicals in foreign languages.—Table 31 shows the combined circulation of weekly newspapers and periodicals, not including Sunday publications, published in the principal foreign languages, with per cent of increase and per cent of total circulation: 1919, 1914, and 1909.

TABLE 31.—WEEKLY NEWSPAPERS AND PERIODICALS IN FOREIGN LANGUAGES—AVERAGE COMBINED CIRCULATION, BY PRINCIPAL LANGUAGES: 1919, 1914, AND 1909.

LANGUAGE.	1919	1914	1909	PER CENT OF INCREASE.[1]			PER CENT OF TOTAL.		
				1909–1919	1914–1919	1909–1914	1919	1914	1909
United States	3,303,230	4,239,426	3,543,898	−6.8	−22.1	19.6	100.0	100.0	100.0
Bohemian	37,899	75,874	67,950	−44.2	−50.1	11.7	1.1	1.8	1.9
Croatian	61,100	41,600	7,000	772.9	38.9	528.6	1.8	1.0	0.2
Danish	62,196	53,526	65,950	−5.7	16.2	−18.8	1.9	1.3	1.9
Dutch	34,950	51,800	42,850	−18.4	−32.5	20.9	1.1	1.2	1.2
Finnish	30,675	15,860	30,950	−2.8	89.6	−48.8	0.9	0.4	0.9
French	34,692	75,157	66,283	−47.7	−53.8	13.4	1.1	1.8	1.9
German	939,574	1,438,888	1,668,369	−43.7	−34.7	−13.8	28.4	33.9	47.1
Hungarian	40,575	30,715	11,275	259.9	32.1	172.4	1.2	0.7	0.3
Italian	212,300	271,276	219,475	−3.3	−21.7	23.6	6.4	6.4	6.2
Lithuanian	48,305	93,265	30,100	60.5	−48.2	209.8	1.5	2.2	0.8
Norwegian	133,009	173,200	207,676	−36.0	−23.2	−16.6	4.0	4.1	5.9
Polish	346,565	383,722	288,820	20.0	−9.7	32.9	10.5	9.1	8.1
Portuguese	15,700	19,100	14,050	11.7	−17.8	35.9	0.5	0.5	0.4
Slovenian	32,300	3,185	11,035	192.7	914.1	−71.1	1.0	0.1	0.3
Spanish	70,173	173,974	82,235	−14.7	−59.7	111.6	2.1	4.1	2.3
Swedish	370,577	727,927	449,944	−17.6	−49.1	61.8	11.2	17.2	12.7
Yiddish	427,230	157,500	91,160	368.7	171.3	72.8	12.9	3.7	2.6
All other[2]	406,010	450,457	188,776	115.1	−9.9	138.6	12.3	10.6	5.3

[1] A minus sign (−) denotes decrease.
[2] Includes in 1919, Albanian, Arabic, Armenian, Bulgarian, Chinese, Czecho-Slovak, Esthonian, Flemish, Greek, Hebrew, Japanese, Lettish, Magyar, Russian, Ruthenian, Scandinavian, Serbian, Slovak, Ukranian, Welsh, Wendish, Norwegian-and-Danish, Russian-and-Slovak, Spanish-and-Yiddish, Turkish-and-Armenian, English-and-Greek, English-and-Japanese, English-and-Latin, English-and-Russian-and-Slovak and English-and-Slovak.

Weekly newspapers and periodicals in foreign languages, by states.—Table 32 shows the number and combined circulation of newspapers and periodicals in foreign languages, by leading states, with per cent of increase, 1919, 1914, and 1909.

TABLE 32.—WEEKLY NEWSPAPERS AND PERIODICALS IN FOREIGN LANGUAGES—NUMBER AND CIRCULATION, BY LEADING STATES: 1919, 1914, AND 1909.

STATE.	NUMBER.			AVERAGE COMBINED CIRCULATION PER ISSUE.					
							Per cent of increase.[1]		
	1919	1914	1909	1919	1914	1909	1909–1919	1914–1919	1909–1914
United States	659	868	875	3,303,230	4,239,426	3,543,898	−6.8	−22.1	19.6
California	35	31	30	48,870	59,300	36,178	35.1	−17.6	63.9
Colorado	12	17	14	15,983	52,175	54,385	−70.6	−69.4	−4.1
Connecticut	13	11	10	23,320	27,691	21,750	7.2	−15.8	27.3
Illinois	74	93	95	60,498	981,137	559,617	7.7	−38.6	75.3
Indiana	4	6	9	8,100	47,255	10,750	−24.7	−82.9	339.6
Iowa	21	35	42	44,941	105,850	108,583	−58.6	−57.5	−2.5
Kansas	6	13	11	11,275	19,255	18,567	−39.3	−41.4	3.7
Louisiana	8	11	7	4,647	10,061	22,000	−78.9	−53.8	−54.3
Maryland	3	6	9	5,900	6,430	20,336	−71.0	−8.2	−68.4
Massachusetts	27	35	29	106,774	133,742	94,106	13.5	−20.2	42.1
Michigan	18	32	30	60,159	78,205	72,957	−17.5	−23.1	7.2
Minnesota	35	45	43	266,769	349,430	357,589	−25.4	−23.7	−2.3
Missouri	16	24	26	63,235	205,922	111,218	−43.1	−69.3	85.2
Nebraska	17	33	34	332,027	236,471	374,112	−11.2	40.4	−36.8
New Jersey	20	30	32	21,595	60,232	61,407	−64.8	−64.1	−1.9
New Mexico	15	18	19	16,640	21,405	26,015	−36.0	−22.3	−17.7
New York	92	103	94	692,267	624,127	417,494	65.8	10.9	49.5
North Dakota	7	16	10	20,626	33,773	22,490	−8.3	−38.9	50.2
Ohio	44	62	69	169,417	327,352	369,814	−54.2	−48.2	−11.5
Oregon	7	9	5	45,695	49,182	32,900	38.9	−7.1	49.5
Pennsylvania	69	79	69	398,689	368,862	186,239	114.1	8.1	98.1
Rhode Island	5	4	3	8,600	19,900	5,400	59.3	−56.8	268.5
South Dakota	5	7	12	30,224	31,208	32,200	−6.1	−3.2	−3.1
Texas	26	40	41	69,950	93,195	77,321	−9.5	−24.9	20.5
Utah	7	8	4	9,000	9,400	4,900	83.7	−4.3	91.8
Washington	12	21	16	21,850	33,100	24,625	−11.3	−34.1	34.7
Wisconsin	44	53	73	190,369	211,312	358,819	−46.9	−9.9	−41.1
All other states[2]	17	26	39	13,810	43,394	62,126	−77.8	−68.2	−30.2

[1] A minus sign (−) denotes decrease.
[2] Includes, in 1919, Arizona, 2; Arkansas, 1; Delaware, 1; District of Columbia, 1; Florida, 1; Kentucky, 1; Maine, 1; New Hampshire, 2; Oklahoma, 2; Tennessee, 1; Vermont, 2; Virginia, 2.

Of the 27 states shown in the table, only three, Nebraska, New York, and Pennsylvania, show increased circulation from 1914 to 1919.

Publications other than daily, Sunday, and weekly.—Table 33 gives the number of publications, by periods of issue, other than daily, Sunday, and weekly, by geographic divisions and states, for 1919 and 1914.

TABLE 33.—SEMIWEEKLY, TRIWEEKLY, MONTHLY, QUARTERLY, AND ALL OTHER PUBLICATIONS EXCEPT DAILY, SUNDAY, AND WEEKLY—NUMBER, BY GEOGRAPHIC DIVISIONS AND STATES: 1919 AND 1914.

DIVISION AND STATE.	NUMBER OF PUBLICATIONS ISSUED—									
	Semi-weekly.		Tri-weekly.		Monthly.		Quarterly.		At all other periods except daily, Sunday, and weekly.	
	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914
UNITED STATES	452	583	93	84	2,647	2,822	489	500	388	442
NEW ENGLAND	16	26	10	6	165	173	49	49	24	30
Maine	2	5	3	1	6	13	1	2	.....	1
New Hampshire	2	3	2	2	5	5	.....	.....	3	.....
Vermont	.....	.....	.....	.....	4	7	1	1	1	.....
Massachusetts	5	7	3	3	119	118	44	44	14	24
Rhode Island	3	3	.....	.....	9	11	.....	1	.....	2
Connecticut	4	8	2	.....	22	19	3	1	6	3
MIDDLE ATLANTIC	51	86	10	19	832	919	159	185	98	122
New York	26	43	7	13	615	622	69	66	68	89
New Jersey	4	3	1	.....	26	33	5	6	8	9
Pennsylvania	21	40	2	6	191	264	85	113	22	24
EAST NORTH CENTRAL	105	150	17	20	684	697	141	133	88	106
Ohio	41	47	8	6	179	183	44	57	21	30
Indiana	17	27	1	2	68	62	12	13	7	8
Illinois	33	36	3	5	305	312	63	54	44	51
Michigan	6	21	5	7	72	84	11	4	6	9
Wisconsin	8	19	.....	.....	60	56	11	5	10	8
WEST NORTH CENTRAL	79	82	13	10	320	313	40	34	77	64
Minnesota	12	7	1	.....	63	65	5	3	11	13
Iowa	28	34	8	6	58	53	9	3	13	12
Missouri	14	11	3	1	113	110	20	23	35	26
North Dakota	3	2	.....	.....	10	10	.....	.....	.....	2
South Dakota	.....	3	.....	1	11	8	1	1	4	1
Nebraska	14	17	.....	2	43	37	3	3	6	7
Kansas	8	8	1	.....	22	30	2	1	8	3
SOUTH ATLANTIC	61	73	16	8	180	177	36	38	37	31
Delaware	.....	.....	.....	.....	4	9	.....	1	.....	.....
Maryland	2	2	1	1	25	16	11	11	11	4
District of Columbia	.....	.....	.....	1	45	34	8	5	7	6
Virginia	4	4	1	2	23	31	8	16	2	6
West Virginia	2	2	.....	.....	8	9	.....	.....	.....	1
North Carolina	30	28	.....	.....	17	18	5	3	4	7
South Carolina	3	17	12	1	15	8	3	.....	2	.....
Georgia	15	14	1	3	34	46	1	1	8	7
Florida	5	6	1	.....	9	6	.....	1	3	.....
EAST SOUTH CENTRAL	29	37	1	5	77	98	47	34	13	23
Kentucky	16	21	1	4	20	28	3	2	5	8
Tennessee	4	8	.....	.....	48	50	41	31	4	8
Alabama	5	2	.....	.....	6	7	2	.....	2	3
Mississippi	4	6	.....	1	3	13	1	1	2	4
WEST SOUTH CENTRAL	41	45	2	1	116	119	4	7	14	19
Arkansas	8	9	1	.....	14	10	1	5	3	1
Louisiana	5	4	.....	1	24	24	.....	.....	2	5
Oklahoma	5	3	1	.....	14	20	1	1	1	4
Texas	23	29	.....	.....	64	65	2	1	8	9
MOUNTAIN	28	28	12	6	72	85	2	4	10	15
Montana	3	4	.....	.....	10	11	.....	.....	2	2
Idaho	5	7	1	1	2	5	.....	.....	1	.....
Wyoming	4	6	.....	.....	2	4	.....	.....	.....	1
Colorado	5	4	1	1	30	35	.....	3	4	4
New Mexico	2	2	.....	.....	3	8	.....	1	.....	2
Arizona	3	.....	1	.....	6	3	.....	.....	2	3
Utah	6	5	3	1	19	19	2	.....	1	3
Nevada	.....	.....	6	3	.....	.....	.....	.....	.....	.....
PACIFIC	42	56	12	9	201	241	11	16	27	32
Washington	8	9	2	2	37	53	1	4	5	8
Oregon	9	12	2	2	32	22	1	6	3	5
California	25	35	8	5	132	166	9	6	19	19

Triweeklies and semiweeklies.—Table 34 gives the combined average circulation of the triweeklies and semiweeklies, by leading states, with per cent of total, 1919, 1914, and 1909. There was a decrease of 520,673, or 17.2 per cent, in the total combined circulation in 1919, as compared with 1914. Missouri was first in the combined circulation in 1919, New York second, and Texas third.

TABLE 34.—TRIWEEKLIES AND SEMIWEEKLIES—AVERAGE COMBINED CIRCULATION PER ISSUE, BY LEADING STATES: 1919, 1914, AND 1909.

STATE.	1919	1914	1909	PER CENT OF TOTAL.		
				1919	1914	1909
United States	2,512,451	3,033,124	2,648,308	100.0	100.0	100.0
California	36,622	39,209	44,856	1.5	1.3	1.7
Illinois	134,596	104,369	138,165	5.3	3.4	5.2
Indiana	22,571	40,176	51,978	0.9	1.3	2.0
Iowa	121,991	134,263	156,926	4.9	4.4	5.9
Kentucky	37,810	58,584	61,248	1.5	1.9	2.3
Massachusetts	17,485	26,550	23,225	0.7	0.9	0.9
Michigan	25,004	45,883	82,640	1.0	1.5	3.1
Minnesota	134,647	117,374	37,002	5.4	3.9	1.4
Missouri	404,235	108,326	353,481	16.1	3.6	13.3
Nebraska	34,246	38,219	31,085	1.4	1.3	1.2
New York	378,217	364,733	250,403	15.0	12.0	9.5
North Carolina	65,165	79,341	55,891	2.6	2.6	2.1
Ohio	94,711	185,140	131,896	3.8	6.1	5.0
Oregon	23,400	30,009	26,725	0.9	1.0	1.0
Pennsylvania	72,533	337,806	243,089	2.9	11.1	9.2
South Carolina	24,665	29,250	44,622	1.0	1.0	1.7
Texas	275,176	221,852	265,816	10.9	7.3	10.0
Washington	32,940	46,038	59,937	1.3	1.5	2.3
Wisconsin	67,221	130,414	42,708	2.7	4.3	1.6
All other states	509,216	895,588	546,645	20.3	29.5	20.6

Monthly publications.—Table 35 shows the average circulation per issue of the monthly publications, by leading states, with per cent of total, 1919, 1914, and 1909. There was an increase of 12,490,969, or 15.8 per cent, in the total circulation of the monthly publications during the five-year period 1914–1919. The circulation of New York publications greatly predominated, with 43.5 per cent of the total circulation in 1919 and 42.5 per cent in 1914.

Of the 27 states for which totals are shown in the table, 18 show increases from 1914 to 1919, and 9, decreases.

Quarterly publications.—Table 36 shows the average circulation per issue of the quarterly publications, by leading states, with per cent of total, 1919, 1914, and 1909. There was only a small increase in the total circulation of quarterlies from 1914 to 1919—66,643, or four-tenths of 1 per cent. Of the seven states for which the figures are presented, but two, Illinois and New York, showed a gain during the five-year period 1914–1919. The increase of circulation in Illinois was 321,760, or 8.4 per cent, and in New York 600,981, or 41.5 per cent.

TABLE 35.—MONTHLY PUBLICATIONS—AVERAGE CIRCULATION PER ISSUE, BY LEADING STATES: 1919, 1914, AND 1909.

STATE.	1919	1914	1909	PER CENT OF TOTAL.		
				1919	1914	1909
United States	91,681,807	79,190,838	63,280,535	100.0	100.0	100.0
Arkansas	25,900	100,700	136,750	(1)	0.1	0.2
California	876,878	1,122,367	619,900	1.0	1.4	1.0
Colorado	86,907	168,932	230,308	0.1	0.2	0.4
District of Columbia	2,900,546	1,037,184	518,784	3.2	1.3	0.8
Georgia	109,603	276,066	386,337	0.1	0.4	0.6
Illinois	11,279,045	10,242,371	9,492,099	12.3	12.9	15.0
Indiana	2,305,409	1,965,086	976,962	2.5	2.5	1.5
Iowa	2,334,376	2,256,097	1,490,861	2.5	2.9	2.4
Kansas	1,928,635	1,584,540	932,288	2.1	2.0	1.5
Kentucky	94,695	159,229	136,995	0.1	0.2	0.2
Maine	3,758,309	4,059,797	3,960,766	4.1	5.1	6.3
Massachusetts	2,886,640	2,153,439	2,789,665	3.2	2.7	4.4
Michigan	1,464,830	1,428,889	927,601	1.6	1.8	1.5
Minnesota	1,416,610	1,122,249	824,955	1.5	1.4	1.3
Missouri	2,258,270	1,755,852	2,265,275	2.5	2.2	3.6
Nebraska	1,404,849	1,354,598	684,513	1.5	1.7	1.1
New Jersey	594,493	543,247	156,862	0.6	0.7	0.2
New York	39,847,749	33,648,962	25,635,615	43.5	42.5	40.5
North Carolina	166,842	104,510	40,265	0.2	0.1	0.1
Ohio	6,082,211	5,591,906	2,685,470	6.6	7.0	4.2
Oregon	125,206	108,850	219,351	0.1	0.1	0.3
Pennsylvania	6,001,752	6,046,975	6,107,571	6.5	7.6	9.7
Tennessee	1,872,318	875,688	517,643	2.0	1.1	0.8
Texas	407,384	375,035	256,700	0.5	0.5	0.4
Virginia	178,559	232,195	183,605	0.2	0.3	0.3
Washington	106,938	256,479	161,624	0.1	0.3	0.3
Wisconsin	411,039	267,130	468,088	0.5	0.4	0.7
All other states	755,823	442,465	473,682	0.8	0.6	0.7

[1] Less than one-tenth of 1 per cent.

TABLE 36.—QUARTERLY PUBLICATIONS—AVERAGE CIRCULATION PER ISSUE, BY LEADING STATES: 1919, 1914, AND 1909.

STATE.	1919	1914	1909	PER CENT OF TOTAL.		
				1919	1914	1909
United States	18,920,544	18,853,901	16,058,099	100.0	100.0	100.0
Illinois	4,150,366	3,828,606	1,937,558	21.9	20.3	12.3
Massachusetts	1,056,934	1,361,467	1,401,844	5.6	7.2	8.7
Missouri	303,090	414,245	203,504	1.6	2.2	1.3
New York	2,048,000	1,447,019	2,437,289	10.8	7.7	15.2
Ohio	2,697,832	2,874,657	2,288,134	14.3	15.2	14.2
Pennsylvania	3,291,478	3,838,673	3,516,933	17.4	20.4	21.9
Tennessee	4,495,400	4,497,800	3,649,100	23.8	23.9	22.7
All other states	877,444	591,434	593,737	4.6	3.1	3.7

All other publications.—Table 37 shows, for the semimonthly and other issues not specifically covered by the several tables, the average circulation per issue, by leading states, with the per cent of total, 1919, 1914, and 1909. In this class of publications, New York led in 1919, with Missouri second, and Ohio third.

TABLE 37.—ALL OTHER PUBLICATIONS—AVERAGE CIRCULATION PER ISSUE, BY LEADING STATES: 1919, 1914, AND 1909.

STATE.	1919	1914	1909	PER CENT OF TOTAL.		
				1919	1914	1909
United States	5,067,517	8,922,684	4,093,874	100.0	100.0	100.0
Illinois	231,002	453,821	276,335	4.6	5.1	6.7
Iowa	196,250	209,830	110,010	3.9	2.4	2.7
Massachusetts	41,931	646,900	622,223	0.8	7.3	15.2
Minnesota	102,322	259,690	311,170	2.0	2.9	7.6
Missouri	526,096	713,906	280,795	10.4	8.0	6.9
New York	931,143	3,319,141	662,819	18.4	37.2	16.2
Ohio	357,948	720,244	545,279	7.1	8.1	13.3
Pennsylvania	185,142	448,317	82,134	3.7	5.0	2.0
Texas	83,400	37,226	58,281	1.6	0.4	1.4
Virginia	87,545	5,931	6,950	1.7	0.1	0.2
All other states	2,324,738	2,108,578	1,137,877	45.9	23.6	27.8

Foreign-language publications other than dailies and weeklies.—Table 38 shows the average combined circulation per issue of all foreign-language publications other than daily and weekly newspapers and periodicals (see Tables 25 and 32), by leading states, with per cent of increase, 1919, 1914, and 1909. The increase in the number of these publications for the United States was 44, or 11.7 per cent, and for circulation, 789,691, or 21.9 per cent.

TABLE 38.—TRIWEEKLY AND SEMIWEEKLY NEWSPAPERS AND PERIODICALS, AND MONTHLY, QUARTERLY, AND "ALL OTHER" PERIODICALS IN FOREIGN LANGUAGES—BY LEADING STATES: 1919, 1914, AND 1909.

STATE.	NUMBER.			AVERAGE COMBINED CIRCULATION PER ISSUE.			PER CENT OF INCREASE.[1]		
	1919	1914	1909	1919	1914	1909	1909-1919	1914-1919	1909-1914
United States	420	376	327	4,399,426	3,609,735	2,773,610	58.6	21.9	30.1
California	14	12	7	101,862	57,300	25,750	295.6	77.8	122.5
Illinois	73	45	47	668,771	448,402	421,826	58.5	49.1	6.3
Indiana	10	10	7	461,300	92,958	78,934	484.4	396.2	17.8
Iowa	17	11	15	159,252	122,144	152,049	4.7	30.4	−19.7
Massachusetts	21	15	13	168,608	438,523	264,732	−36.3	−61.6	65.6
Michigan	15	15	12	49,800	46,509	40,150	24.0	7.1	15.8
Minnesota	29	23	27	180,299	156,502	158,695	13.6	15.2	−1.4
Missouri	20	28	19	372,200	338,737	281,876	32.0	9.9	20.2
Nebraska	8	15	9	163,959	332,338	81,625	100.9	−50.7	307.2
New York	77	62	55	1,287,202	487,045	527,186	144.2	164.3	−7.6
Ohio	36	39	42	209,365	281,872	317,461	−34.1	−25.7	−11.2
Pennsylvania	29	29	14	265,060	420,564	89,935	194.7	−37.0	367.6
Wisconsin	18	25	27	154,413	215,768	209,065	−26.1	−27.8	2.2
All other states	53	47	33	157,335	173,013	124,326	26.6	−9.1	39.2

[1] A minus sign (−) denotes decrease.

GENERAL TABLES.

Table 39 gives, for 1919, 1914, and 1909, the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products for the six branches of the printing and publishing industry combined in selected states. In some states one or more branches of the industry have been omitted from the combination to avoid disclosure of individual operations. Table 40 presents, for 1919, the various totals for the United States, and by states, for each of the six branches of the industry, so far as they can be shown without the disclosure of individual operations.

TABLE 39.—COMPARATIVE SUMMARY, BY STATES: 1919, 1914, AND 1909.

STATE.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
United States	1919	32,476	287,278	362,123	$331,519	$571,510	$1,699,789
	1914	33,471	272,092	329,210	195,510	257,848	901,535
	1909	31,445	258,434	297,763	164,628	201,775	737,876
Alabama	1919	237	1,253	1,637	1,403	2,379	7,286
	1914	286	1,346	2,804	858	1,017	4,121
	1909	274	1,117	1,092	650	666	2,768
Arizona	1919	84	512	512	541	475	2,087
	1914	74	335	273	303	178	997
	1909	64	268	221	232	168	784
Arkansas	1919	294	1,102	1,367	1,081	1,447	4,747
	1914	307	892	1,032	570	647	2,342
	1909	295	981	846	538	536	2,082
California	1919	1,504	10,047	14,696	12,059	20,340	61,815
	1914	1,543	8,759	14,053	7,772	9,709	34,775
	1909	1,240	7,556	7,674	6,432	6,327	25,032
Colorado	1919	464	2,306	2,512	2,684	4,164	12,613
	1914	475	2,173	2,413	1,744	1,977	7,027
	1909	439	2,366	2,045	1,823	1,806	6,962
Connecticut	1919	412	3,021	4,150	3,244	4,540	14,036
	1914	364	2,838	3,618	1,932	2,195	7,713
	1909	363	2,878	3,425	1,737	1,769	6,370
Delaware	1919	56	370	457	399	417	1,433
	1914	54	360	420	198	211	676
	1909	48	288	305	129	138	480
District of Columbia	1919	186	2,154	2,746	2,690	4,548	16,859
	1914	156	1,671	2,065	1,239	1,648	6,242
	1909	156	1,565	1,703	1,101	1,095	4,900
Florida	1919	237	1,172	1,523	1,258	1,708	5,618
	1914	235	1,220	1,325	898	803	3,017
	1909	174	905	794	529	434	1,866
Georgia	1919	418	2,844	3,273	2,711	5,222	14,130
	1914	441	2,476	2,985	1,696	1,972	7,576
	1909	442	2,395	2,008	1,344	1,588	6,400
Idaho	1919	159	438	653	600	633	2,175
	1914	173	487	539	371	306	1,343
	1909	132	468	388	373	243	1,148
Illinois	1919	2,647	36,537	40,987	43,830	79,308	219,331
	1914	2,722	32,838	33,503	24,048	33,278	112,833
	1909	2,608	28,644	26,975	18,437	24,680	87,247
Indiana	1919	865	6,772	9,557	6,741	10,109	30,612
	1914	922	6,140	7,978	3,994	5,019	17,117
	1909	892	6,756	17,808	3,522	4,025	14,356
Iowa	1919	997	4,808	7,023	5,134	7,851	26,806
	1914	1,076	4,948	6,545	3,336	4,130	15,934
	1909	1,110	4,853	5,527	2,591	3,287	12,129
Kansas	1919	738	3,043	7,578	2,818	5,021	12,717
	1914	772	2,818	3,722	1,547	2,351	6,991
	1909	798	3,232	4,868	1,650	2,290	7,009
Kentucky	1919	373	2,850	3,674	2,686	3,614	11,735
	1914	414	3,028	3,025	1,968	1,965	6,984
	1909	431	3,135	2,945	1,690	1,645	6,454
Louisiana	1919	270	1,581	2,065	1,407	3,081	8,110
	1914	290	1,405	1,619	985	1,062	4,317
	1909	268	1,544	1,494	1,061	1,013	3,823
Maine	1919	175	1,599	1,943	1,293	2,401	5,932
	1914	204	1,772	1,760	955	1,210	3,717
	1909	195	1,651	1,565	779	1,102	3,438
Maryland	1919	385	4,391	5,540	4,937	9,115	23,835
	1914	368	4,173	7,013	2,652	3,715	11,263
	1909	371	3,386	3,694	1,965	2,464	8,360
Massachusetts	1919	1,327	18,247	21,129	20,805	34,906	104,551
	1914	1,344	18,170	20,295	13,266	16,818	56,195
	1909	1,279	17,532	47,629	11,684	12,881	47,445
Michigan	1919	1,045	7,880	11,587	9,590	15,536	46,829
	1914	1,113	8,166	13,033	5,602	7,498	24,953
	1909	1,045	7,219	7,651	4,000	4,934	17,348
Minnesota	1919	1,003	6,319	7,680	6,778	10,353	33,480
	1914	994	6,134	7,101	4,259	5,560	20,187
	1909	950	5,641	5,765	3,507	4,096	15,982
Mississippi	1919	193	595	698	514	551	2,009
	1914	219	663	643	371	314	1,267
	1909	225	736	496	387	300	1,308
Missouri	1919	1,310	11,465	14,135	11,955	23,132	61,250
	1914	1,353	10,571	14,330	7,391	9,571	33,173
	1909	1,322	10,790	10,472	6,610	8,627	29,651
Montana	1919	247	1,011	1,489	$1,344	$1,327	$4,763
	1914	238	900	908	929	700	2,795
	1909	135	691	679	685	403	2,111
Nebraska	1919	694	2,531	4,075	2,750	4,948	15,322
	1914	692	2,413	3,203	1,652	2,244	7,836
	1909	674	2,329	2,552	1,397	1,711	6,667
New Hampshire	1919	128	797	863	893	734	2,455
	1914	136	709	826	450	364	1,449
	1909	143	677	1,865	356	259	1,131
New Jersey	1919	772	5,356	6,280	6,283	8,651	24,218
	1914	732	5,433	7,124	4,036	4,251	14,083
	1909	684	5,451	5,636	3,624	3,472	12,333
New York	1919	4,831	67,491	73,421	85,357	152,528	478,898
	1914	4,806	64,020	66,802	49,008	68,915	257,269
	1909	4,426	63,120	53,973	43,559	56,494	216,946
North Carolina	1919	319	1,608	1,991	1,814	2,033	6,404
	1914	329	1,540	1,684	877	806	3,232
	1909	322	1,376	1,119	661	645	2,497
North Dakota	1919	318	660	1,278	781	851	3,225
	1914	351	752	1,212	547	455	2,220
	1909	330	788	948	533	440	1,910
Ohio	1919	1,780	19,174	27,268	21,665	38,317	112,029
	1914	1,783	18,070	24,308	12,800	17,070	55,609
	1909	1,655	15,756	18,417	9,355	11,904	41,657
Oklahoma	1919	510	1,931	2,659	2,332	3,049	10,241
	1914	624	1,619	2,288	1,022	923	4,024
	1909	598	1,698	1,664	1,044	1,004	3,989
Oregon	1919	358	1,595	2,584	2,195	3,006	10,155
	1914	377	1,556	2,230	1,407	1,563	6,011
	1909	324	1,459	1,927	1,448	1,103	5,041
Pennsylvania	1919	2,457	26,456	35,419	29,782	61,022	165,344
	1914	2,538	26,909	35,659	17,701	27,478	84,977
	1909	2,461	24,696	25,839	14,335	22,753	70,584
Rhode Island	1919	155	1,650	2,140	1,815	2,218	7,326
	1914	162	1,515	2,587	1,044	1,162	4,293
	1909	147	1,454	1,944	956	1,064	3,780
South Carolina	1919	174	1,022	1,257	971	1,204	4,005
	1914	166	893	937	531	452	1,985
	1909	161	834	603	412	340	1,601
South Dakota	1919	358	766	1,414	811	982	3,882
	1914	379	801	1,159	533	462	2,136
	1909	392	825	931	493	456	1,976
Tennessee	1919	366	2,907	4,735	2,891	5,472	15,833
	1914	437	2,665	2,892	1,871	2,328	8,201
	1909	413	2,914	2,965	1,701	1,954	7,173
Texas	1919	1,087	5,594	8,696	6,003	11,126	32,687
	1914	1,188	4,690	6,111	3,557	3,997	15,051
	1909	1,067	4,408	4,392	2,785	2,807	11,587
Utah	1919	156	1,218	1,669	1,138	1,416	4,581
	1914	166	872	1,246	741	880	2,780
	1909	122	967	1,357	685	723	2,405
Vermont	1919	106	615	697	478	488	1,715
	1914	111	651	784	409	297	1,243
	1909	115	666	625	326	250	1,039
Virginia	1919	380	2,719	2,986	2,817	4,536	13,162
	1914	396	2,790	2,881	1,596	2,067	7,070
	1909	369	2,555	2,210	1,307	1,405	5,370
Washington	1919	569	2,453	3,710	3,608	4,553	17,349
	1914	638	2,341	3,103	2,092	2,435	9,824
	1909	506	2,624	2,232	2,140	2,224	9,286
West Virginia	1919	222	1,339	1,947	1,395	1,582	4,837
	1914	239	1,188	1,835	703	635	2,376
	1909	235	1,255	1,560	634	541	1,992
Wisconsin	1919	842	5,838	7,442	5,932	9,090	26,467
	1914	829	5,653	6,527	3,473	4,847	14,455
	1909	833	5,360	5,293	2,913	3,386	11,861
Wyoming	1919	92	234	1,055	329	272	1,227
	1914	81	183	235	157	101	546
	1909	65	162	138	141	90	490
All other[1]	1919	176	947	1,126	977	1,254	3,668
	1914	174	546	572	419	262	1,310
	1909	147	463	1,444	367	233	1,109

[1] Includes one or more branches of the industry, omitted from certain states, to avoid disclosure of operations of individual establishments.

TABLE 40.—DETAILED STATEMENT, THE PRINTING

	STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male	Under 16. Female	Capital.
	PRINTING AND PUBLISHING, BOOK AND JOB.															
1	United States	13,089	171,199	12,185	10,571	12,016	12,522	123,005	De 133,741	Ja 119,117	134,379	97,732	33,433	2,401	813	*Dollars.* 405,554,984
2	Alabama	76	702	57	68	47	28	502	De 536	Ja 450	535	386	147	2	.....	1,288,246
3	Arizona	15	129	16	5	5	8	95	Ja [3] 98	Jy 90	94	77	16	1	.....	225,502
4	Arkansas	47	494	51	35	49	29	330	No 379	Ja 203	353	230	108	6	.....	1,205,735
5	California	661	5,535	708	320	363	326	3,818	De 4,166	Ja 3,560	4,151	3,035	1,047	60	9	13,287,543
6	Colorado	120	1,294	111	63	117	51	952	De 1,023	Se 838	1,032	767	238	26	1	2,383,417
7	Connecticut	255	2,232	249	138	83	162	1,600	De 1,705	Ja 1,520	1,720	1,211	423	65	21	4,860,850
8	Delaware	23	135	25	14	1	6	89	Se [3] 93	Je 85	94	51	39	4	.....	330,776
9	District of Columbia	102	1,278	108	76	32	28	1,034	De 1,175	Ja 968	1,253	942	302	8	1	3,169,845
10	Florida	77	495	68	38	41	17	331	De 375	Je 312	365	266	94	3	2	1,205,977
11	Georgia	152	1,582	163	96	120	84	1,110	De 1,207	Fe 1,048	1,210	815	361	31	3	3,246,420
12	Idaho	23	109	25	7	5	5	67	De 73	Ja [3] 63	78	62	13	3	.....	281,211
13	Illinois	1,240	28,861	1,021	1,540	2,290	2,371	21,639	De 23,474	Ap 20,284	23,775	17,386	5,518	514	357	70,260,836
14	Indiana	278	4,005	260	233	212	259	3,041	Oc [3] 3,176	Ja 2,778	3,197	2,075	933	101	88	7,979,717
15	Iowa	207	1,775	199	160	27	145	1,244	De 1,402	Ja 1,170	1,428	902	484	27	15	3,971,593
16	Kansas	143	977	108	58	55	72	624	De 668	Ap 598	663	440	218	4	1	2,194,319
17	Kentucky	108	1,520	89	89	74	73	1,195	De 1,340	My 945	1,343	872	453	12	6	3,027,428
18	Louisiana	109	1,129	91	112	83	48	795	De 855	Mh 760	853	608	163	22	.....	2,194,791
19	Maine	97	557	96	44	11	20	380	De 415	Fe 370	418	280	127	8	3	971,624
20	Maryland	210	3,003	188	190	211	171	2,243	De 2,411	Ap [3] 2,183	2,367	1,843	479	38	7	6,890,651
21	Massachusetts	708	11,102	705	598	890	1,275	7,634	De 8,217	Ja 7,141	8,261	5,866	2,125	220	50	31,978,693
22	Michigan	436	5,216	413	399	318	369	3,717	De 4,017	Ja 3,535	3,986	2,726	1,208	47	5	11,366,835
23	Minnesota	277	4,412	259	301	355	435	3,062	De 3,299	Ja 2,911	3,266	2,153	1,084	27	2	11,725,692
24	Mississippi	37	255	35	16	10	11	183	No 195	Fe 175	194	144	46	4	.....	458,142
25	Missouri	460	7,910	391	508	741	404	5,866	De 6,401	Ja 5,510	6,406	4,254	2,006	121	25	15,117,837
26	Montana	22	253	10	25	21	15	182	De 188	Fe 177	189	149	40	.....	.....	794,187
27	Nebraska	133	1,290	118	102	53	63	954	De 1,072	Ja 877	1,068	755	310	3	.....	3,977,421
28	Nevada	5	36	4	5	.....	.....	27	Oc 30	Fe [3] 25	28	24	4	.....	.....	69,481
29	New Hampshire	63	459	63	16	6	13	361	De 411	Ja 338	411	277	134	.....	.....	662,620
30	New Jersey	421	3,132	427	172	85	109	2,339	De 2,668	Ap 2,196	2,671	2,035	570	58	8	9,908,576
31	New Mexico	7	43	7	4	1	1	30	Se 35	Ap 27	29	19	10	.....	.....	73,679
32	New York	2,536	37,626	2,248	2,390	3,427	3,465	26,096	De 28,582	Oc 21,154	28,617	23,059	5,270	228	60	91,065,831
33	North Carolina	104	885	91	90	27	45	632	Oc [3] 655	Ap 616	663	493	156	13	1	1,550,129
34	North Dakota	17	149	17	12	10	7	103	De 115	Ja 94	114	85	23	6	.....	435,538
35	Ohio	871	11,213	709	695	597	707	8,505	De 9,346	Ja 7,837	9,364	6,466	2,820	62	7	25,482,824
36	Oklahoma	97	784	88	66	78	47	505	De 526	Ja 481	517	379	134	4	.....	1,348,566
37	Oregon	122	890	120	81	64	58	567	De 618	Mh 549	607	471	128	8	.....	2,090,450
38	Pennsylvania	1,289	14,198	1,384	766	804	783	10,461	De 11,148	Fe 9,977	11,303	7,028	2,974	347	54	36,720,672
39	Rhode Island	105	1,351	110	78	47	172	944	De 1,099	Ja 899	1,108	705	363	30	10	2,442,825
40	South Carolina	48	400	53	23	33	12	279	De 290	Ja [3] 269	293	220	65	8	.....	712,858
41	South Dakota	21	150	13	11	15	16	95	De 111	Jy 88	110	85	21	4	.....	363,827
42	Tennessee	146	2,242	124	128	633	80	1,277	No 1,380	Ja 1,160	1,384	979	391	10	4	3,639,428
43	Texas	308	3,254	324	184	338	150	2,258	Oc 2,434	Ja 2,120	2,428	1,814	585	25	4	7,370,359
44	Utah	51	544	50	36	65	20	373	Oc 487	Jy 346	403	311	76	15	1	786,196
45	Vermont	53	427	55	23	5	15	329	De 343	My 320	346	233	108	5	.....	793,932
46	Virginia	174	2,185	154	145	99	92	1,695	No 1,746	Fe 1,663	1,754	1,081	546	101	26	5,590,917
47	Washington	232	1,486	222	120	166	72	906	De 1,039	Se 749	1,017	748	240	22	7	3,105,521
48	West Virginia	71	536	60	33	29	27	387	No 402	Ja 366	398	255	93	41	9	998,009
49	Wisconsin	261	2,917	223	257	162	150	2,125	De 2,492	Ja 1,858	2,491	1,688	722	55	26	5,827,967
50	Wyoming	11	42	15	1	2	.....	24	Se 26	Ja [3] 23	24	13	9	2	.....	109,421
	PRINTING AND PUBLISHING, MUSIC.															
1	United States	100	2,022	107	198	843	575	899	De 956	Ja 840	952	744	200	7	1	8,006,122
2	California	4	8	3	.....	.....	.....	5	(4) 5	(4) 5	5	4	1	.....	.....	6,896
3	Illinois	26	241	18	22	24	66	111	De [3] 126	Ja 99	124	64	56	4	.....	677,430
4	Indiana	4	7	3	1	.....	.....	3	(4) 3	(4) 3	3	2	1	.....	.....	5,060
5	Massachusetts	15	325	13	17	75	78	142	No 146	Ja 135	142	116	26	.....	.....	1,190,277
6	Missouri	7	71	2	6	18	33	12	Oc 20	Se 2	17	8	9	.....	.....	488,244
7	New York	61	1,637	34	116	674	356	457	De 490	Mh 411	490	408	81	1	.....	4,642,297
8	Ohio	11	84	9	12	34	15	14	Jy 16	Ja 12	11	9	2	.....	.....	423,634
9	Pennsylvania	17	197	12	15	16	26	128	Oc 139	Jy 110	133	114	16	2	1	431,942
10	All other states [5]	15	52	13	9	2	1	27	.....	.....	27	19	8	.....	.....	140,842

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

AND PUBLISHING INDUSTRY, BY STATES: 1919.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.							
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.						Electric horsepower generated in establishments reporting.
											Owned.						
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).	Steam turbines.	Internal-combustion engines.	Water power.[1]	Rented.[2]		
PRINTING AND PUBLISHING, BOOK AND JOB.																	
Dollars. 35,072,491	*Dollars.* 30,648,149	*Dollars.* 141,476,243	*Dollars.* 32,243,303	*Dollars.* 11,689,552	*Dollars.* 8,163,494	*Dollars.* 206,081,695	*Dollars.* 4,985,479	*Dollars.* 597,663,228	*Dollars.* 386,596,054	131,961	13,337	528	3,095	75	114,926	9,396	1
176,938	71,056	481,819	19,470	44,894	21,054	749,899	18,757	1,994,661	1,226,005	395	.....	.....	.....	.....	395	3	2
10,992	13,247	114,508	.....	10,962	4,499	98,409	3,993	371,885	269,483	91	.....	.....	.....	.....	91	.....	3
100,052	85,670	316,670	8,351	26,102	34,086	476,550	15,910	1,341,816	849,356	395	.....	.....	4	.....	391	.....	4
850,510	829,882	4,387,233	586,228	426,277	228,834	7,663,580	114,750	19,871,377	12,093,047	4,368	75	.....	19	.....	4,274	1	5
213,752	181,497	1,117,478	88,510	100,113	77,495	1,304,864	63,990	3,985,230	2,616,376	785	60	.....	.....	.....	725	163	6
334,725	247,826	1,674,471	182,683	102,766	82,448	2,140,023	72,954	6,246,748	4,033,771	1,590	132	.....	65	15	1,378	.....	7
33,288	7,136	86,824	23,526	7,317	3,876	127,352	5,139	352,607	220,116	125	.....	.....	15	.....	110	.....	8
252,806	70,937	1,182,500	47,642	64,222	127,041	1,384,560	40,990	3,974,976	2,549,426	854	.....	.....	8	.....	846	.....	9
88,058	61,321	342,110	17,054	32,304	50,114	594,534	13,740	1,517,625	909,351	469	.....	.....	18	.....	451	.....	10
239,881	204,013	1,099,436	30,319	89,462	43,493	1,710,219	37,398	4,409,104	2,661,487	1,081	16	.....	19	.....	1,046	.....	11
12,991	11,309	81,256	15	11,628	7,090	105,248	3,114	321,564	213,202	111	.....	.....	.....	.....	111	.....	12
6,124,489	6,236,738	27,380,468	5,527,964	1,965,897	1,424,260	41,675,229	815,520	110,886,458	68,395,709	23,065	4,136	442	94	.....	18,393	3,784	13
651,554	461,040	2,790,208	360,204	174,074	136,939	4,119,008	102,028	10,741,232	6,520,196	3,167	810	.....	54	.....	2,303	486	14
378,306	279,907	1,176,730	35,909	114,813	38,088	1,844,838	59,022	5,209,560	3,305,700	1,440	.....	.....	29	.....	1,411	1	15
151,184	149,441	595,826	46,483	62,196	51,112	992,468	26,293	2,926,415	1,907,654	677	5	.....	32	.....	640	2	16
266,268	185,543	1,054,293	54,597	51,164	78,163	1,457,356	44,518	4,421,926	2,920,052	1,181	10	.....	5	.....	1,166	5	17
286,813	128,951	721,079	83,001	67,400	45,468	1,097,486	33,917	2,940,703	1,809,300	772	.....	.....	2	.....	770	.....	18
83,481	33,079	344,755	17,827	26,341	10,804	405,854	17,763	1,193,897	770,280	655	4	.....	37	1	613	.....	19
702,699	439,667	2,492,302	521,391	138,575	240,430	3,973,485	92,072	10,690,650	6,625,093	2,453	571	.....	128	.....	1,754	836	20
2,061,109	2,649,370	8,245,090	3,735,861	674,254	598,515	12,606,733	328,352	41,626,859	28,691,774	8,212	1,973	.....	50	2	6,187	1,555	21
1,146,866	990,327	4,681,124	562,319	372,228	253,518	6,318,942	152,854	17,675,925	11,204,129	4,261	540	46	22	.....	3,653	433	22
829,001	844,441	3,088,185	480,288	263,684	214,192	4,232,697	117,952	12,994,804	8,644,155	3,050	100	.....	2	.....	2,948	8	23
36,159	18,064	172,587	14,103	11,409	6,311	226,172	7,597	661,719	427,950	187	.....	.....	5	.....	182	.....	24
1,787,349	1,439,194	6,236,986	694,285	434,756	531,813	9,020,897	217,587	25,880,461	16,641,977	6,194	870	.....	24	.....	5,300	150	25
63,470	34,575	223,458	373	17,186	20,892	268,004	8,564	849,810	573,242	183	.....	.....	.....	.....	183	.....	26
302,960	138,556	1,054,201	199,188	99,123	45,567	1,814,399	51,087	4,897,424	3,031,938	1,230	27	.....	4	.....	1,199	6	27
13,617	.....	30,342	960	2,895	2,225	41,391	1,282	143,161	100,488	75	.....	.....	.....	.....	75	.....	28
53,004	21,231	339,958	1,904	19,084	18,287	265,061	11,890	1,030,955	754,004	341	.....	.....	2	8	331	.....	29
584,305	217,456	2,622,432	116,313	171,834	153,755	3,702,852	125,926	9,569,344	5,740,566	2,532	562	.....	145	.....	1,825	200	30
6,330	1,560	30,578	100	2,636	1,150	28,025	1,573	96,637	67,039	20	.....	.....	.....	.....	20	.....	31
9,153,281	8,551,325	34,246,976	14,997,237	3,494,841	1,526,385	44,310,039	1,117,227	149,123,975	103,696,709	26,568	657	.....	455	25	25,431	129	32
201,433	58,199	572,118	31,615	41,977	26,103	716,310	25,250	2,063,446	1,321,886	508	.....	.....	9	.....	499	.....	33
31,709	18,450	106,814	6,811	12,030	3,072	204,655	12,580	539,158	321,923	144	.....	.....	2	.....	142	1	34
2,128,365	1,360,392	9,097,772	1,007,485	657,841	571,483	14,862,138	319,782	39,201,684	24,019,764	9,628	770	.....	812	1	8,045	382	35
222,363	346,041	593,569	35,964	69,821	19,839	833,043	24,862	2,507,449	1,649,544	513	.....	.....	3	2	508	2	36
247,676	146,484	724,532	23,952	76,145	54,691	1,233,513	23,858	3,395,859	2,138,488	793	.....	.....	.....	1	792	.....	37
2,387,955	1,943,981	11,160,613	1,355,029	888,396	605,967	16,883,029	404,461	46,152,747	28,865,257	11,315	1,753	.....	853	6	8,703	1,214	38
284,235	122,905	898,894	25,375	61,973	90,802	1,152,906	32,086	3,233,117	2,048,125	805	.....	.....	3	1	801	.....	39
56,052	49,705	255,703	3,001	12,441	29,206	300,652	8,973	869,683	560,058	281	.....	.....	.....	.....	281	.....	40
31,223	22,515	119,073	1,908	16,111	10,562	124,838	5,852	415,958	285,268	141	.....	.....	3	.....	138	.....	41
399,810	395,017	1,250,758	76,611	109,140	128,469	2,079,986	89,807	5,604,176	3,434,383	2,538	1	40	4	.....	2,493	5	42
594,840	662,754	2,305,204	286,823	201,814	208,416	4,736,313	78,250	12,233,688	7,419,125	2,309	.....	.....	17	1	2,291	1	43
87,197	85,294	382,184	13,960	31,963	10,817	507,223	16,022	1,384,249	861,004	314	.....	.....	.....	.....	314	.....	44
47,567	14,016	258,402	5,817	14,999	6,701	255,433	12,172	820,736	553,131	338	25	.....	10	11	292	.....	45
400,151	171,320	1,617,355	684,835	93,402	139,568	2,847,700	70,773	7,028,143	4,609,670	1,404	150	.....	9	.....	1,245	21	46
310,047	252,014	1,192,789	120,771	134,006	64,861	1,475,340	35,325	4,710,048	3,199,383	1,041	.....	.....	2	.....	1,039	.....	47
73,903	59,171	464,830	8,491	36,104	18,780	513,841	13,051	1,434,478	907,586	378	.....	.....	44	1	333	6	48
619,927	332,252	2,026,103	98,000	145,806	94,279	3,048,621	87,170	7,970,336	4,834,545	2,943	90	.....	77	.....	2,776	1	49
1,800	2,380	20,539	2,570	5,086	1,274	49,980	1,446	148,765	97,339	41	.....	.....	9	.....	32	1	50
PRINTING AND PUBLISHING, MUSIC.																	
1,029,874	2,017,366	926,988	2,713,899	206,554	345,745	2,097,144	26,637	14,592,177	12,468,396	634	.....	.....	12	.....	622	.....	1
.....	180	7,200	19,234	1,790	158	11,036	180	60,246	49,030	7	.....	.....	.....	.....	7	.....	2
82,583	93,053	112,172	157,121	20,495	36,253	375,920	3,287	1,211,810	832,603	74	.....	.....	.....	.....	74	.....	3
900	.....	2,778	7,131	1,662	18	410	66	17,298	16,822	2	.....	.....	2	.....	.....	.....	4
73,407	162,813	123,371	546,107	46,437	46,562	303,183	3,850	1,703,990	1,401,957	147	.....	.....	.....	.....	147	.....	5
40,092	97,502	11,230	6,641	3,992	1,391	31,765	787	285,303	252,751	10	.....	.....	.....	.....	10	.....	6
772,266	1,573,391	563,889	1,692,241	196,297	241,963	994,658	15,655	9,844,268	8,833,955	288	.....	.....	.....	.....	288	.....	7
21,974	44,364	9,662	128,061	8,326	5,155	61,682	247	447,037	385,108	10	.....	.....	.....	.....	10	.....	8
29,327	42,057	59,396	124,629	12,032	10,307	195,047	864	732,462	536,551	36	.....	.....	.....	.....	36	.....	9
9,325	4,006	37,290	32,734	5,523	3,938	123,443	1,701	284,763	159,619	60	.....	.....	10	.....	50	.....	10

[1] Same number reported throughout the year.
[2] All other states embrace: Arkansas, 1 establishment; Iowa, 1; Louisiana, 1; Maryland, 1; Michigan, 3; Nebraska, 1; New Jersey, 2; Texas, 2; Virginia, 1; Washington, 2.

TABLE 40.—DETAILED STATEMENT, THE PRINTING

	STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male	Under 16. Female	Capital.
	PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS.															
1	United States	17,362	228,630	14,570	16,290	45,102	32,287	120,381	De 125,967	Ja 115,926	126,219	100,559	21,129	4,244	287	Dollars. 614,045,344
2	Alabama	156	1,471	150	115	361	148	697	De 735	Ja 668	733	645	47	40	1	3,406,284
3	Arizona	69	732	52	48	169	46	417	De 452	Ja 397	453	406	26	21	.....	1,070,324
4	Arkansas	247	1,280	273	88	93	54	772	No 811	Ja 744	818	645	158	13	2	2,290,362
5	California	764	10,028	691	601	2,589	1,377	4,770	No 5,101	Ap 4,590	5,061	4,371	330	360	.....	23,729,018
6	Colorado	333	2,155	313	139	433	191	1,079	Se 1,106	Fe 1,048	1,126	958	111	56	1	5,336,465
7	Connecticut	134	2,354	79	205	465	276	1,329	De 1,421	Ja 1,242	1,441	1,173	198	65	5	6,576,634
8	Delaware	33	398	24	26	34	33	281	De [3] 293	Ja 264	294	242	48	4	.....	1,165,029
9	District of Columbia	67	2,183	20	160	519	676	808	Se 851	Ja 735	849	705	125	16	3	5,745,257
10	Florida	160	1,412	135	142	179	115	841	De 942	Jy 805	889	721	131	36	1	3,778,417
11	Georgia	262	3,124	223	296	664	222	1,719	De 1,810	Ap 1,647	1,803	1,476	193	134	.....	4,858,052
12	Idaho	136	676	123	50	89	43	371	De 414	Mh 339	415	327	61	26	1	1,556,602
13	Illinois	1,204	19,604	891	1,544	3,612	3,437	10,120	De 10,395	Ja 9,963	10,579	8,037	1,847	607	88	54,099,750
14	Indiana	559	5,957	500	454	871	621	3,511	Oc 3,599	Ja 3,396	3,646	2,817	783	44	2	10,931,688
15	Iowa	774	6,303	826	437	1,050	698	3,352	De 3,764	Ja 3,176	3,501	2,530	812	150	9	15,545,132
16	Kansas	590	3,709	611	205	222	257	2,414	De 2,513	Ja 2,336	2,579	1,578	910	88	3	6,971,867
17	Kentucky	252	2,298	235	217	375	199	1,272	No 1,325	Ja 1,238	1,311	1,091	191	26	3	5,325,551
18	Louisiana	149	1,532	144	106	436	135	711	De 760	Ja 657	759	585	82	90	2	3,321,746
19	Maine	69	1,510	39	83	110	124	1,154	Mh 1,221	Au 1,056	1,179	655	516	7	1	2,792,096
20	Maryland	142	2,495	89	140	603	266	1,397	De 1,422	Ja 1,361	1,423	1,287	111	23	2	4,970,311
21	Massachusetts	412	10,405	188	635	2,072	1,625	5,885	De 6,105	Ja 5,650	6,155	5,077	861	207	10	22,964,151
22	Michigan	565	6,643	483	1,021	1,142	821	3,176	De 3,365	Ja 3,032	3,392	2,723	596	66	7	14,562,346
23	Minnesota	701	5,713	641	408	914	692	3,058	No 3,230	Ja 2,941	3,235	2,484	683	60	8	14,794,809
24	Mississippi	156	683	173	50	26	22	412	De 429	Ja 400	431	319	75	36	1	1,110,634
25	Missouri	774	8,095	714	538	1,566	1,004	4,183	De 4,417	Ja 3,868	4,331	3,397	754	211	19	15,273,683
26	Montana	225	1,336	192	92	134	89	829	No 861	Fe 799	855	712	87	56	.....	2,841,772
27	Nebraska	554	2,961	544	176	420	299	1,522	No 1,610	Ja 1,451	1,611	1,185	354	70	2	6,219,318
28	Nevada	34	158	29	15	4	7	103	De 107	Ja [3] 101	106	84	5	17	.....	352,289
29	New Hampshire	65	630	48	47	46	53	436	De 453	Je 421	426	288	102	36	.....	958,268
30	New Jersey	295	3,708	211	274	555	316	2,352	De 2,396	Jy 2,284	2,404	2,118	251	34	1	8,378,261
31	New Mexico	80	400	76	34	14	19	257	De 264	Ja 248	264	206	26	32	.....	812,236
32	New York	1,582	49,584	792	3,241	12,956	9,431	23,164	De 24,338	Oc 21,304	24,370	19,822	4,264	245	39	150,435,954
33	North Carolina	215	1,602	165	193	186	82	976	No 1,018	Fe 944	1,016	822	106	84	4	2,664,943
34	North Dakota	301	1,040	253	84	75	71	557	De 583	Fe 534	595	460	101	28	6	2,739,607
35	Ohio	794	13,708	586	790	2,403	2,302	7,627	De 8,069	Ja 7,241	8,114	6,667	1,368	72	7	37,353,788
36	Oklahoma	410	2,673	416	167	477	198	1,415	Oc 1,503	Fe 1,335	1,501	1,244	232	23	2	5,124,641
37	Oregon	224	1,857	205	130	374	219	929	De 999	Fe 877	1,011	877	114	19	1	3,493,299
38	Pennsylvania	963	22,461	750	1,460	4,304	3,616	12,331	No 12,697	Ja 11,684	12,557	9,995	2,161	388	13	101,030,354
39	Rhode Island	36	965	24	58	191	90	602	No 632	Fe 564	641	578	55	8	.....	3,296,189
40	South Carolina	126	1,187	85	118	163	78	743	De 782	Ja 712	769	584	90	94	1	2,880,607
41	South Dakota	337	1,260	328	64	90	107	671	No 729	Fe 641	732	490	179	60	3	3,263,251
42	Tennessee	220	2,781	190	217	428	256	1,690	De 1,786	Ja 1,570	1,788	1,300	327	160	1	7,612,775
43	Texas	765	6,153	809	463	1,316	438	3,127	No 3,350	Ja 2,983	3,319	2,822	343	146	8	12,535,954
44	Utah	101	1,236	63	93	172	83	825	De 836	Je 817	836	744	69	21	2	1,412,337
45	Vermont	53	465	41	36	39	63	286	De 291	Fe 280	272	190	77	5	.....	777,538
46	Virginia	197	1,758	172	146	318	158	964	De [3] 1,001	Fe 921	1,016	846	112	50	8	5,131,285
47	Washington	316	2,985	274	213	719	375	1,404	De 1,523	Fe 1,301	1,521	1,373	116	29	3	7,867,758
48	West Virginia	151	1,453	168	86	173	74	952	No 975	Fe 921	971	765	195	9	2	2,724,023
49	Wisconsin	529	5,077	453	354	922	668	2,080	De 2,795	Ja 2,611	2,822	1,946	721	141	14	11,166,421
50	Wyoming	81	372	79	31	20	23	210	De 243	Fe 181	249	192	25	31	1	796,263
	BOOKBINDING AND BLANK-BOOK MAKING.															
1	United States	1,113	25,287	1,111	1,001	1,576	1,238	20,361	De 21,775	Ja 19,354	22,946	10,694	11,564	368	320	43,041,207
2	California	40	839	48	26	80	62	623	De 708	Ja 547	708	343	362	2	1	1,736,721
3	Colorado	4	42	9	.....	1	1	31	Ap [3] 33	Ja 27	31	15	16	.....	.....	47,738
4	Connecticut	16	91	17	3	.....	5	66	De 73	Se 60	73	34	36	3	.....	104,729
5	District of Columbia	6	84	9	1	1	2	71	Jy 77	Ja 65	74	40	32	2	.....	76,399
6	Georgia	4	21	6	.....	.....	.....	15	No 20	Ja [3] 12	19	10	9	.....	.....	24,336
7	Illinois	113	2,872	98	137	130	112	2,395	De 2,576	Ja 2,164	2,614	1,351	1,113	66	84	4,703,224
8	Indiana	14	88	10	9	.....	1	68	Oc 76	Mh 64	74	38	33	1	2	107,870
9	Iowa	12	160	12	9	37	17	85	De 91	Se 80	92	48	42	1	1	115,431
10	Kansas	5	11	6	.....	.....	.....	5	No [3] 7	Ja [3] 4	6	1	5	.....	.....	8,209
11	Louisiana	7	54	8	6	.....	.....	40	My 44	Ja [3] 29	43	27	16	.....	.....	50,153
12	Maine	9	84	13	5	.....	1	65	De 70	Mh 60	71	35	35	1	.....	87,537
13	Maryland	15	206	20	5	5	4	172	Ja 179	Je 161	177	84	81	8	4	395,879
14	Massachusetts	94	3,334	83	97	116	102	2,936	De 3,097	Ja 2,709	3,112	1,446	1,461	129	76	5,016,995
15	Michigan	24	687	19	43	81	62	482	De 556	Je 445	557	268	279	8	2	1,422,432
16	Minnesota	18	151	23	5	2	2	119	Au 123	Se [3] 115	127	57	68	1	1	176,665

[1] Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).
[2] Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

AND PUBLISHING INDUSTRY, BY STATES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.							
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.							Electric horsepower generated in establishments reporting.
											Owned.						
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).	Steam turbines.	Internal-combustion engines.	Water power.[1]	Rented.[2]		
PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS.																	
Dollars. 50,343,115	*Dollars.* 93,507,413	*Dollars.* 144,348,173	*Dollars.* 50,776,040	*Dollars.* 10,038,270	*Dollars.* 20,163,412	*Dollars.* 293,181,862	*Dollars.* 7,203,325	*Dollars.* 924,152,878	*Dollars.* 623,767,691	194,361	24,699	367	13,277	784	155,234	17,743	1
378,171	461,846	869,882	70,487	32,444	135,640	1,507,980	44,231	5,054,877	3,502,666	1,201	.....	.....	133	6	1,062	2	2
143,398	211,330	426,210	32,799	29,655	20,557	345,533	26,726	1,714,510	1,342,251	421	.....	.....	101	.....	320	51	3
191,277	148,477	769,668	51,469	59,191	76,686	908,949	45,345	3,405,163	2,450,869	972	7	.....	204	.....	761	3	4
1,775,903	4,485,486	5,922,396	1,127,546	484,626	515,475	9,446,955	230,062	34,342,963	24,665,946	8,373	445	.....	81	34	7,813	400	5
427,056	710,289	1,321,725	324,435	83,362	126,873	2,242,550	72,661	7,533,978	5,218,767	1,518	30	.....	162	2	1,324	7	6
547,273	863,763	1,486,886	224,508	71,973	144,885	2,120,457	119,389	7,513,467	5,273,621	2,489	320	.....	27	9	2,124	34	7
66,391	67,575	312,358	19,876	31,095	21,654	268,824	16,046	1,080,600	795,730	332	20	.....	23	.....	289	.....	8
683,497	1,423,694	1,166,320	2,567,489	57,294	278,749	2,754,828	43,930	11,897,555	9,098,797	1,679	385	.....	.....	.....	1,294	.....	9
321,260	307,041	915,491	89,239	51,806	103,565	1,042,512	57,117	4,100,841	3,001,212	1,054	.....	.....	217	.....	837	17	10
787,546	896,507	1,595,152	354,135	96,426	152,776	3,387,245	80,423	9,683,328	6,215,660	2,189	14	.....	235	2	1,938	1	11
102,715	150,286	518,532	12,512	38,425	20,495	491,265	32,909	1,853,587	1,329,413	542	.....	.....	37	.....	505	.....	12
5,594,915	9,534,888	11,407,047	6,265,024	1,087,750	2,176,112	29,440,143	544,779	88,945,960	58,961,038	14,037	2,667	.....	531	6	10,833	2,248	13
1,110,505	1,477,048	3,718,805	839,240	175,457	344,108	5,475,746	212,089	19,184,687	13,496,852	6,178	69	5	406	.....	5,698	73	14
1,222,800	1,658,300	3,749,063	470,076	245,771	355,805	5,162,464	303,934	20,439,956	14,964,558	5,353	499	4	445	8	4,397	355	15
445,914	506,038	2,219,400	173,624	114,777	101,029	3,877,492	121,035	9,774,647	5,776,120	6,897	61	.....	505	3	6,328	167	16
509,002	524,594	1,317,140	205,794	73,652	66,655	1,661,454	90,718	6,183 394	4,431,222	2,306	100	.....	228	4	1,974	4	17
331,990	636,007	620,250	149,689	47,741	132,894	1,856,859	37,450	4,979,417	3,085,108	1,252	.....	.....	120	.....	1,132	1	18
191,189	227,346	900,908	110,418	44,462	123,026	1,828,516	52,462	4,501,473	2,680,495	1,242	320	.....	16	7	899	207	19
478,347	1,121,185	1,611,779	344,363	100,290	90,537	3,433,986	68,472	9,363,579	5,861,121	2,310	4	200	107	.....	1,999	.....	20
2,457,055	4,544,556	8,086,782	1,842,154	605,625	1,124,667	16,029,925	443,230	46,801,145	30,327,990	10,267	1,073	.....	251	21	8,922	421	21
1,378,009	2,394,038	3,035,040	583,320	199,152	985,318	7,506,072	190,073	24,930,421	17,234,276	6,438	15	.....	396	15	6,012	14	22
1,075,160	1,502,891	3,531,693	1,169,380	257,875	424,678	5,676,389	202,352	20,088,590	14,209,849	4,550	279	.....	373	7	3,891	47	23
104,836	51,938	341,665	10,733	22,670	18,239	292,267	25,084	1,347,777	1,030,426	511	.....	.....	162	.....	349	1	24
1,492,194	3,129,680	4,410,609	1,128,253	370,786	526,676	11,594,122	265,451	30,011,808	18,152,235	7,014	1,868	.....	731	6	4,409	1,168	25
223,942	326,364	1,120,993	54,862	99,718	54,054	988,924	61,137	3,912,779	2,862,718	1,306	25	.....	248	3	1,030	.....	26
490,379	840,011	1,626,981	488,386	149,459	113,884	2,886,268	117,561	10,179,309	7,175,480	2,797	255	.....	438	2	2,102	309	27
45,535	11,533	147,058	3,635	13,960	5,833	82,833	10,101	467,631	374,697	189	.....	.....	31	5	153	.....	28
100,778	86,302	553,320	38,502	22,452	18,565	433,524	23,085	1,423,983	967,374	522	.....	.....	6	50	466	.....	29
997,880	1,011,070	2,945,543	202,572	131,200	289,247	3,942,083	167,239	12,399,856	8,290,534	3,304	613	.....	181	29	2,481	515	30
62,354	50,503	258,469	7,028	22,805	8,632	190,279	21,117	803,899	592,503	284	.....	.....	72	.....	212	.....	31
13,399,255	32,142,575	30,813,390	24,008,073	2,801,550	4,378,812	81,589,594	1,213,294	252,109,402	169,306,514	31,551	5,133	100	1,222	286	24,810	2,913	32
492,078	239,124	1,241,817	64,591	56,373	61,270	1,221,878	69,592	4,340,731	3,049,261	1,483	55	.....	158	.....	1,270	.....	33
183,097	148,837	674,011	74,692	59,073	25,846	564,201	60,715	2,685,869	2,051,953	1,134	7	5	347	.....	775	38	34
2,427,824	4,834,362	9,411,413	2,270,258	358,946	1,933,940	18,039,722	402,363	58,567,435	40,125,410	13,961	2,050	48	1,010	23	10,830	2,088	35
403,295	545,179	1,728,638	102,889	140,830	84,105	2,098,231	84,683	7,704,823	5,521,909	2,136	.....	.....	385	11	1,740	1	36
341,155	777,797	1,363,102	284,037	118,484	218,906	1,582,253	61,838	6,408,348	4,764,257	1,681	.....	.....	54	13	1,614	.....	37
4,691,054	8,170,249	15,381,711	2,311,528	697,908	3,075,031	38,385,149	663,075	106,666,923	67,618,699	22,045	6,485	.....	1,072	137	14,351	5,516	38
206,680	389,347	794,977	35,186	39,730	268,203	908,242	47,924	3,771,831	2,815,665	1,268	965	.....	2	2	299	522	39
244,086	241,408	714,718	40,582	38,198	84,733	847,177	46,698	3,134,051	2,241,076	976	2	.....	126	4	844	7	40
156,404	219,977	691,946	47,032	47,367	42,383	732,036	69,217	3,465,969	2,614,716	1,273	10	.....	412	.....	851	3	41
514,821	741,579	1,640,673	509,116	71,858	222,498	3,216,522	85,425	10,228,670	6,926,723	2,197	100	.....	113	4	1,980	7	42
1,227,486	1,894,465	3,567,216	597,195	253,592	313,727	5,925,638	196,272	19,998,949	13,877,039	5,708	794	5	685	13	4,211	419	43
198,543	247,877	738,286	200,962	50,992	25,251	837,581	28,066	3,129,560	2,263,913	746	.....	.....	19	.....	727	.....	44
61,554	91,112	219,613	18,259	15,169	14,184	203,280	17,169	894,527	674,078	359	.....	.....	32	13	314	11	45
340,292	483,368	1,145,014	124,074	54,281	110,025	2,024,426	59,826	5,997,572	3,913,320	1,549	10	.....	147	4	1,388	8	46
637,958	1,259,076	2,250,200	623,478	192,787	336,927	2,679,459	118,434	11,954,252	9,156,359	2,488	.....	.....	67	16	2,405	.....	47
191,997	246,344	930,144	35,776	47,628	57,022	997,027	58,238	3,402,541	2,347,276	1,569	4	.....	537	13	1,015	123	48
909,289	1,409,234	2,937,217	397,157	145,846	343,776	4,202,897	164,782	14,639,902	10,272,223	3,705	13	.....	335	19	3,338	30	49
90,967	64,317	299,892	9,616	25,699	9,459	200,105	20,566	1,078,443	857,772	1,014	2	.....	87	7	918	12	50
BOOKBINDING AND BLANK-BOOK MAKING.																	
3,390,421	4,063,491	18,658,821	452,225	1,516,593	984,763	22,750,119	485,052	66,020,677	42,785,506	11,123	555	.....	133	.....	10,435	.....	1
89,367	139,886	627,505	26,002	33,124	19,623	873,747	13,290	2,462,669	1,575,632	463	.....	.....	.....	.....	463	.....	2
.....	2,640	35,839	.....	2,740	224	28,287	449	87,832	59,096	20	.....	.....	.....	.....	20	.....	3
7,088	4,217	60,903	5,912	5,974	849	62,305	1,175	194,612	131,132	66	.....	.....	.....	.....	66	.....	4
3,380	2,282	67,244	2,052	7,096	229	53,127	1,435	169,780	115,218	28	.....	.....	.....	.....	28	.....	5
.....	.....	17,327	.....	1,564	164	6,221	738	37,262	30,303	3	.....	.....	.....	.....	3	.....	6
454,882	311,781	2,170,659	138,744	190,725	124,391	2,581,130	57,161	7,477,722	4,839,431	1,263	75	.....	2	.....	1,186	.....	7
9,915	936	55,005	.....	6,862	2,395	53,232	1,556	164,415	109,627	60	.....	.....	.....	.....	60	.....	8
14,621	84,869	64,865	4,500	8,281	12,596	133,442	2,965	421,508	285,101	92	.....	.....	.....	.....	92	.....	9
.....	.....	3,125	.....	960	49	3,470	262	15,770	12,038	4	.....	.....	.....	.....	4	.....	10
5,910	.....	35,288	76	2,090	61	17,453	628	91,045	72,964	22	.....	.....	.....	.....	22	.....	11
9,922	600	47,169	103	4,115	780	95,000	1,168	176,722	80,554	46	.....	.....	.....	.....	46	.....	12
8,100	10,023	182,669	1,712	10,054	2,739	240,213	4,689	546,371	301,469	77	.....	.....	.....	.....	77	.....	13
352,606	299,073	2,595,018	22,083	156,021	133,420	2,975,746	57,263	8,179,841	5,146,832	1,368	390	.....	2	.....	976	.....	14
138,076	222,144	405,144	693	20,805	140,367	531,725	11,823	2,091,826	1,548,278	174	.....	.....	.....	.....	174	.....	15
5,636	2,760	94,239	2,791	7,369	1,573	69,144	2,662	245,277	173,471	50	.....	.....	.....	.....	50	.....	16

[1] Same number reported for one or more other months.

TABLE 40.—DETAILED STATEMENT, THE PRINTING

	STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male	Under 16. Female	Capital.
	BOOKBINDING AND BLANK-BOOK MAKING—Continued.															
																Dollars.
1	Missouri	39	1,243	38	58	90	80	977	De 1,238	My 753	1,286	532	722	17	15	2,389,189
2	Nebraska	4	35	5	2	2	2	24	De 27	Ja 21	29	12	14	3	.....	67,409
3	New Jersey	34	445	38	14	52	26	315	De 341	Ja 276	341	212	127	2	.....	615,485
4	New York	397	10,429	395	407	567	547	8,513	De 8,800	Ja 8,306	9,819	4,446	5,268	55	50	18,211,949
5	Ohio	54	1,301	56	44	255	112	834	De 1,004	Fe 762	997	529	464	4	.....	3,242,432
6	Oregon	6	69	4	6	1	3	55	Au[3] 67	Ja[3] 49	55	24	29	2	.....	91,881
7	Pennsylvania	109	1,776	110	68	30	40	1,519	No 1,591	Ja 1,441	1,623	730	831	25	28	2,706,534
8	Rhode Island	6	37	5	5	4	2	21	Je 31	Ap[3] 18	23	14	9	.....	.....	75,468
9	Tennessee	3	15	3	.....	.....	1	11	No[3] 12	Mh 8	11	7	4	.....	.....	27,447
10	Texas	8	176	7	4	3	3	159	De 171	Fe[3] 153	170	34	136	.....	.....	130,102
11	Utah	4	28	2	3	3	.....	20	No[3] 22	Ja[3] 17	20	9	9	2	.....	32,947
12	Virginia	4	50	6	.....	2	.....	42	My 47	Ja 36	44	17	27	.....	.....	56,070
13	Washington	14	52	14	1	.....	.....	37	De 44	Se 27	41	22	17	2	.....	121,587
14	Wisconsin	32	651	23	25	83	40	480	Oc 536	Ap 436	526	195	244	34	53	857,386
15	All other states[4]	18	256	24	18	22	11	181	.....	.....	183	105	75	.....	3	340,943
	ENGRAVING, STEEL AND COPPER PLATE, INCLUDING PLATE PRINTING.															
1	United States	421	8,779	370	477	431	487	7,014	De 7,943	Ja 6,462	7,824	4,544	3,018	126	136	19,040,260
2	California	24	186	23	10	9	9	135	De 173	Ja 101	159	95	63	1	.....	217,147
3	Colorado	3	56	2	2	1	4	47	De 60	My 42	60	30	21	2	7	38,012
4	Connecticut	7	44	6	3	4	5	26	De 35	Mh 16	34	23	8	3	.....	34,625
5	District of Columbia	5	58	6	3	1	4	44	De 52	Ja 39	52	33	19	.....	.....	69,053
6	Illinois	33	1,462	21	98	74	80	1,189	De 1,286	Ap 1,109	1,281	774	436	25	46	3,649,362
7	Indiana	7	128	6	6	7	6	103	Oc 115	Ja 92	111	88	17	3	3	106,902
8	Kentucky	8	257	3	19	11	17	207	De 219	Mh 201	210	101	107	2	.....	222,409
9	Louisiana	5	49	4	4	3	3	35	(5) 35	(5) 35	35	28	7	.....	.....	30,831
10	Maryland	12	53	13	.....	1	2	37	My 42	Au[3] 31	38	27	5	4	2	33,033
11	Massachusetts	24	524	16	22	21	33	432	Oc 515	Fe 386	465	224	189	24	28	488,256
12	Michigan	10	93	16	2	4	4	67	De 85	Ja[3] 61	78	56	21	1	.....	76,018
13	Minnesota	7	101	7	1	8	5	80	De 96	Jy 73	91	39	51	1	.....	93,063
14	Missouri	15	206	12	18	2	9	165	De 211	Ja 146	208	92	110	2	4	188,538
15	New Jersey	16	212	15	12	2	6	177	De 198	Ja 155	199	168	27	2	2	279,675
16	New York	119	3,198	112	164	176	160	2,586	De 2,945	Ja 2,378	2,900	1,737	1,148	11	4	10,324,198
17	Ohio	22	304	15	14	12	8	255	Jy 271	Fe 224	271	174	97	.....	.....	225,887
18	Oregon	6	58	6	2	.....	6	44	De 51	Ja 37	51	43	8	.....	.....	72,018
19	Pennsylvania	54	1,221	48	58	84	93	938	De 1,070	Ja 873	1,054	494	486	41	33	2,302,541
20	Rhode Island	8	102	11	5	1	2	83	De 116	Fe 63	111	70	40	1	.....	94,886
21	Texas	6	66	9	.....	2	5	50	De 70	Jy 42	70	41	29	.....	.....	111,221
22	Virginia	5	24	4	1	.....	1	18	De[3] 19	Ja[3] 16	19	11	5	1	2	15,624
23	Washington	3	33	2	3	.....	4	24	No[3] 29	My[3] 21	24	10	14	.....	.....	38,333
24	Wisconsin	8	146	1	16	4	10	115	No 125	Mh 105	120	84	30	1	5	110,073
25	All other states[6]	14	198	12	14	4	11	157	.....	.....	183	102	80	1	.....	218,554
	LITHOGRAPHING.															
1	United States	331	19,305	150	1,134	1,470	933	15,618	De 16,850	Ja 14,743	16,810	13,223	3,422	110	55	60,817,330
2	California	11	889	2	35	106	50	696	No 771	Fe 634	754	618	134	1	1	2,989,533
3	Colorado	4	241	1	10	25	8	197	De 218	Fe 175	218	124	94	.....	.....	632,879
4	District of Columbia	6	242	.....	23	14	8	197	Jy 214	Ja 185	189	156	32	1	.....	561,861
5	Illinois	31	1,380	10	91	131	65	1,083	De 1,133	Ja 1,035	1,135	870	247	7	11	4,187,623
6	Indiana	3	61	4	4	1	6	46	Se 49	Ja 39	48	35	6	6	1	190,382
7	Iowa	4	165	1	13	15	9	127	No 144	My 118	141	97	41	3	.....	323,913
8	Kentucky	5	249	1	23	34	15	176	Se 186	Ja 163	184	146	36	1	1	853,362
9	Maryland	6	664	11	22	62	27	542	De 573	Mh 507	576	517	52	6	1	3,692,162
10	Massachusetts	14	1,519	1	85	106	109	1,218	De 1,349	Ap 1,166	1,349	917	412	14	6	4,141,125
11	Michigan	10	550	4	43	49	16	438	De 504	Ja 361	504	384	120	.....	.....	1,912,267
12	Missouri	15	384	9	28	65	20	262	De 278	Ja 241	257	198	50	6	3	940,976
13	New Jersey	6	186	1	9	1	2	173	No 189	Ja 148	189	164	23	2	.....	276,339
14	New York	136	8,209	63	487	609	375	6,675	De 7,218	Fe 6,285	7,205	5,897	1,282	21	5	25,522,633
15	Ohio	28	2,312	10	109	126	128	1,939	No 2,103	Ja 1,764	2,091	1,715	374	2	.....	8,364,037
16	Pennsylvania	25	1,294	20	85	63	47	1,079	No 1,205	Ja 998	1,154	803	318	28	5	3,057,194
17	Washington	4	108	.....	10	10	6	82	No 97	My 66	92	64	24	2	2	342,529
18	Wisconsin	12	529	1	37	30	23	438	Au 466	Ja 398	437	336	88	6	7	2,066,276
19	All other states[7]	11	323	11	20	23	19	250	.....	.....	287	182	89	4	12	762,239

[1] Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).
[2] Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).
[3] Same number reported for one or more other months.
[4] All other states embrace: Alabama, 2 establishments; Arizona, 1; Arkansas, 1; Delaware, 2; Idaho, 1; Kentucky, 3; New Hampshire, 2; North Carolina, 1; Oklahoma, 2; South Carolina, 1; Vermont, 2.

AND PUBLISHING INDUSTRY, BY STATES: 1919—Continued.

EXPENSES.										POWER.							
Salaries and wages.			For contract work.	Rent and taxes.		For materials.		Value of products.	Value added by manufacture.	Primary horsepower.						Electric horsepower generated in establishments reporting.	
											Owned.						
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).	Steam turbines.	Internal-combustion engines.	Water power.[1]	Rented.[2]		
BOOKBINDING AND BLANK-BOOK MAKING—Continued.																	
Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.								
150,998	234,764	822,656	3,441	42,110	37,730	1,310,074	21,190	3,194,651	1,863,387	518	.....	.....	.....	.....	518	.....	1
3,720	3,997	23,156	.....	2,640	646	16,007	1,363	61,315	43,945	17	.....	.....	.....	.....	17	.....	2
42,199	97,828	296,631	1,573	15,321	6,323	446,981	14,992	1,180,032	718,059	192	20	.....	2	.....	170	.....	3
1,580,645	1,637,053	8,228,273	121,008	756,888	320,460	9,587,720	205,886	27,892,678	18,099,072	4,589	70	.....	111	.....	4,408	.....	4
150,281	665,969	824,540	80,486	46,279	39,489	882,094	26,126	3,836,561	2,928,341	846	.....	.....	.....	.....	846	.....	5
20,354	4,304	52,843	2,520	3,875	2,738	74,618	1,705	195,734	119,411	38	.....	.....	.....	.....	38	.....	6
199,100	129,506	1,236,541	9,043	116,373	106,204	1,687,019	33,941	4,537,388	2,816,428	741	.....	.....	16	.....	725	.....	7
6,293	8,394	21,320	.....	27,092	788	33,141	330	104,004	70,533	12	.....	.....	.....	.....	12	.....	8
.....	150	11,238	.....	1,000	.....	7,977	335	27,791	19,479	6	.....	.....	.....	.....	6	.....	9
9,650	19,800	85,027	.....	4,379	1,477	141,063	1,725	309,902	167,114	64	.....	.....	.....	.....	64	.....	10
6,200	1,600	17,600	.....	2,184	391	25,881	1,026	67,059	40,152	9	.....	.....	.....	.....	9	.....	11
.....	2,200	35,297	.....	1,332	161	20,838	1,448	83,205	60,919	23	.....	.....	.....	.....	23	.....	12
1,300	.....	42,604	1,400	5,225	1,570	34,390	1,375	133,622	97,857	19	.....	.....	.....	.....	19	.....	13
50,099	128,282	355,300	21,948	26,612	15,660	602,248	9,269	1,406,875	795,358	189	.....	.....	.....	.....	189	.....	14
70,079	48,433	143,697	5,238	7,413	11,666	155,826	7,077	627,208	464,305	124	.....	.....	.....	.....	124	.....	15
ENGRAVING, STEEL AND COPPER PLATE, INCLUDING PLATE PRINTING.																	
1,758,996	1,120,321	7,908,109	138,215	423,647	441,895	6,777,505	203,242	24,209,154	17,228,407	5,420	799	.....	40	5	4,576	536	1
22,379	22,260	154,971	6,824	12,875	2,113	116,425	2,352	494,544	375,767	72	.....	.....	.....	.....	72	.....	2
3,890	2,584	34,765	.....	3,060	472	27,354	483	91,150	63,313	20	.....	.....	.....	.....	20	.....	3
8,200	2,924	21,775	250	4,060	676	23,440	386	81,088	57,262	14	.....	.....	6	.....	8	.....	4
4,840	3,889	49,799	.....	4,655	318	29,006	1,052	129,480	99,422	7	.....	.....	.....	.....	7	.....	5
376,295	203,355	1,386,968	11,073	59,559	132,374	1,530,363	40,441	4,794,095	3,223,291	1,372	725	.....	.....	.....	647	536	6
21,600	13,541	130,671	.....	5,594	1,028	73,563	4,553	362,724	284,608	92	.....	.....	.....	.....	92	.....	7
49,886	28,718	116,316	6,000	5,922	4,848	150,602	4,110	480,121	325,409	38	2	.....	.....	.....	36	.....	8
4,300	3,932	30,408	1,476	3,710	316	35,711	1,493	98,596	61,392	19	.....	.....	.....	.....	19	.....	9
.....	2,468	34,557	655	3,442	37	36,896	815	110,669	72,958	13	.....	.....	.....	.....	13	.....	10
122,682	55,549	407,250	9,074	29,780	30,912	254,262	7,340	1,318,098	1,056,496	110	.....	.....	10	.....	100	.....	11
3,000	6,088	81,748	300	7,570	187	38,572	1,207	201,395	161,616	27	.....	.....	.....	.....	27	.....	12
2,080	7,238	63,923	1,200	4,745	575	51,242	938	151,126	98,946	30	.....	.....	.....	.....	30	.....	13
42,751	9,841	141,576	2,100	11,180	1,480	118,398	2,029	405,082	284,655	70	.....	.....	.....	.....	70	.....	14
32,202	13,220	242,571	6,817	12,978	1,231	61,321	7,824	545,197	477,052	118	.....	.....	8	.....	110	.....	15
716,028	430,725	3,299,803	50,456	141,637	203,317	2,705,292	87,824	9,384,258	6,591,142	2,558	72	.....	.....	.....	2,486	.....	16
49,718	26,172	313,953	3,102	18,848	12,462	173,905	4,936	825,800	646,959	103	.....	.....	.....	.....	103	.....	17
6,565	4,282	54,818	.....	5,100	521	25,919	2,018	154,837	126,900	72	.....	.....	.....	.....	72	.....	18
178,612	247,965	872,306	17,691	51,449	24,718	964,688	21,414	3,213,669	2,227,567	464	.....	.....	16	.....	448	.....	19
10,060	1,975	100,159	3,997	6,968	2,482	41,560	1,737	217,100	173,803	55	.....	.....	.....	5	50	.....	20
.....	4,740	45,678	.....	4,424	534	46,464	644	144,199	97,091	15	.....	.....	.....	.....	15	.....	21
1,800	780	19,262	2,246	1,300	75	11,055	362	53,435	42,018	10	.....	.....	.....	.....	10	.....	22
8,070	2,540	26,446	.....	3,895	198	18,255	496	79,884	61,133	9	.....	.....	.....	.....	9	.....	23
46,945	12,902	116,086	13,014	8,000	17,444	78,867	3,428	370,353	288,058	36	.....	.....	.....	.....	36	.....	24
47,093	12,633	161,700	1,040	12,896	3,577	164,345	5,360	501,254	331,549	96	.....	.....	.....	.....	96	.....	25
LITHOGRAPHING.																	
4,716,652	4,396,299	18,201,089	1,363,424	1,019,769	1,380,634	27,128,998	589,219	73,151,115	45,432,898	18,624	6,188	254	575	.....	11,607	7,424	1
210,658	259,255	960,111	.....	25,895	326,102	1,849,067	18,082	4,583,473	2,716,324	1,413	10	.....	.....	.....	1,403	93	2
33,648	115,276	174,427	.....	15,921	18,949	417,356	6,293	914,680	491,031	169	.....	.....	.....	.....	169	.....	3
86,502	54,780	224,575	200	10,171	3,770	230,190	9,032	687,447	448,225	178	.....	.....	.....	.....	178	.....	4
416,603	440,517	1,373,085	157,546	82,837	112,157	2,199,558	44,283	6,014,666	3,770,825	1,176	127	.....	30	.....	1,019	136	5
7,435	6,881	43,369	2,791	805	1,075	64,408	1,902	141,962	75,652	58	.....	.....	.....	.....	58	.....	6
50,492	61,070	146,719	4,490	9,060	8,630	339,557	4,857	744,462	400,048	138	.....	.....	.....	.....	138	.....	7
55,580	115,411	197,783	243	3,195	6,635	199,495	5,769	649,098	443,834	149	100	.....	.....	.....	49	.....	8
97,910	141,426	615,209	12,939	11,242	80,961	1,237,337	27,280	3,123,735	1,859,118	687	300	.....	.....	.....	387	360	9
339,417	377,626	1,347,811	158,043	25,735	97,661	1,845,058	51,369	4,916,351	3,019,924	1,025	668	120	.....	.....	237	1,515	10
138,474	117,924	467,455	33,344	14,705	57,172	766,042	18,817	1,929,149	1,144,290	687	517	.....	25	.....	145	26	11
168,948	134,135	333,062	5,628	21,925	14,184	584,372	10,045	1,472,240	877,823	329	.....	.....	.....	.....	329	.....	12
18,649	3,506	175,360	9,312	5,230	1,300	176,180	5,128	522,304	340,996	134	.....	.....	.....	.....	134	.....	13
2,175,665	1,784,433	8,204,500	870,770	628,214	339,324	10,434,998	265,773	30,543,890	19,843,119	7,867	3,161	134	125	.....	4,447	3,053	14
475,937	405,324	2,007,817	45,482	46,770	147,450	3,491,174	52,583	9,150,614	5,606,857	2,720	995	.....	285	.....	1,440	1,539	15
209,669	215,504	1,071,137	17,473	80,674	26,397	1,751,533	31,967	4,040,955	2,257,455	818	310	.....	110	.....	398	702	16
32,216	26,445	95,475	.....	3,926	12,744	185,164	4,444	470,724	281,116	153	.....	.....	.....	.....	153	.....	17
137,633	90,660	496,527	18,446	14,721	98,450	872,731	19,730	2,079,440	1,186,979	569	.....	.....	.....	.....	569	.....	18
61,216	46,126	266,667	26,117	17,843	27,583	484,778	11,865	1,165,925	669,282	354	.....	.....	.....	.....	354	.....	19

[1] Same number reported throughout the year.
[2] All other states embrace: Alabama, 2 establishments; Arkansas, 1; Georgia, 1; Iowa, 1; Kansas, 1; Maine, 1; Nebraska, 1; North Carolina, 1; Oklahoma, 1; Tennessee, 1; Utah, 3.
[1] All other states embrace: Alabama, 1 establishment; Connecticut, 2; Louisiana, 1; Minnesota, 3; Nebraska, 1; Tennessee, 1; Virginia, 1; West Virginia, 1.

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON

FOURTEENTH CENSUS OF THE UNITED STATES
MANUFACTURES: 1919

RICE, CLEANING AND POLISHING

Prepared under the supervision of EUGENE F. HARTLEY, Chief Statistician for Manufactures

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WASHINGTON
GOVERNMENT PRINTING OFFICE
1922

EXPLANATION OF TERMS.

Scope of census.—Census statistics of manufactures are compiled primarily for the purpose of showing the absolute and relative magnitude of the different branches of industry covered and their growth or decline. Incidentally, the effort is made to present data throwing light upon character of ownership, size of establishments, and similar subjects. When use is made of the statistics for these purposes it is imperative that due attention be given to their limitations, particularly in connection with any attempt to derive from them figures purporting to show average wages, cost of production, or profits.

The census did not cover establishments which were idle during the entire year or for which products were valued at less than $500, or the manufacturing done in educational, eleemosynary, and penal institutions.

Period covered.—The returns relate to the calendar year 1919, or the business year which corresponded most nearly to that calendar year, and cover a year's operations, except for establishments which began or discontinued business during the year.

The establishment.—As a rule, the term "establishment" represents a single plant or factory, but in some cases it represents two or more plants which were operated under a common ownership or for which one set of books of account was kept. If, however, the plants constituting an establishment as thus defined were not all located within the same city, county, or state, separate reports were secured in order that the figures for each plant might be included in the statistics for the city, county, or state in which it was located. In some instances separate reports were secured for different industries carried on in the same establishment.

Classification by industries.—The establishments were assigned to the several classes of industries according to their products of chief value. The products reported for a given industry may thus, on the one hand, include minor products different from those covered by the class designation, and, on the other hand, may not represent the total product covered by this designation, because some products of this class may be made in establishments in which it is not the product of chief value.

Influence of increased prices.—In comparing figures for cost of materials, value of products, and value added by manufacture in 1919 with the corresponding figures for earlier censuses, account should be taken of the general increase in the prices of commodities during recent years. To the extent to which this factor has been influential the figures fail to afford an exact measure of the increase in the volume of business.

Persons engaged in the industry.—The following general classes of persons engaged in the manufacturing industries were distinguished: (1) Proprietors and firm members, (2) salaried officers of corporations, (3) superintendents and managers, (4) clerks (including other subordinate salaried employees), and (5) wage earners.

The number of persons engaged in each industry, segregated by sex, and, in the case of wage earners, also by age (whether under 16 or 16 and over), was reported for a single representative day. The 15th of December was selected as representing for most industries normal conditions of employment, but where this date did not portray such conditions, an earlier date was requested.

In the case of employees other than wage earners the number thus reported for the representative date has been treated as equivalent to the average for the year, since the number of employees of this class does not ordinarily vary much from month to month. In the case of wage earners the average has been obtained in the manner explained in the next paragraph.

In addition to the more detailed report by sex and age of the number of wage earners on the representative date, a report was obtained of the number employed on the 15th of each month, by sex, without distinction of age. From these figures the average number of wage earners for the year has been calculated by dividing the sum of the numbers reported for the several months by 12. The importance of the industry as an employer of labor is believed to be more accurately measured by this average than by the number employed at any one time or on a given day.

The number of wage earners reported for the representative day, though given in certain tables for each separate industry, is not totaled for all industries combined, because, in view of the variations of date, such a total is not believed to be significant. It would involve more or less duplication of persons working in different industries at different times, would not represent the total number employed in all industries at any one time, and would give an undue weight to seasonal industries as compared with industries in continual operation.

In order to determine as nearly as possible the age distribution of the average number of wage earners for an industry, the per cent distribution by age of the wage earners for December 15, or the nearest representative day, has been calculated from the actual numbers reported for that date. The percentages thus obtained have been applied to the average number of wage earners for the year to determine the average numbers 16 years and over, and under 16, employed.

Salaries and wages.—Under these heads are given the total payments during the year for salaries and wages, respectively. The Census Bureau has not undertaken to calculate the average annual earnings of either salaried employees or wage earners. Such averages would possess little real value, because they would be based on the earnings of employees of both sexes, of all ages, and of widely varying degrees of skill. Furthermore, so far as wage earners are concerned, it would be impossible to calculate accurately even so simple an average as this, since the number of wage earners fluctuates from month to month in every industry, and in some cases to a very great extent. The Census Bureau's figures for wage earners, as already explained, are averages based on the number employed on the 15th of each month, and while representing the number according to the pay rolls to whom wages were paid on that date, no doubt represent a larger number than would be required to perform the work in any industry if all were continuously employed during the year.

Prevailing hours of labor.—No attempt was made to ascertain the number of wage earners working a given number of hours per week. The inquiry called merely for the prevailing practice followed in each establishment. Occasional variations in hours in an establishment from one part of the year to another were disregarded, and no attention was paid to the fact that a few wage earners might have hours differing from those of the majority. All the wage earners of each establishment are therefore counted in the class within which the establishment itself falls. In most establishments, however, practically all the wage earners work the same number of hours, so that the figures give a substantially correct representation of the hours of labor.

Capital (amount actually invested).—The instructions on the schedule for securing data relating to capital were as follows:

"The answer should show the total amount of capital, both owned and borrowed, on the last day of the business year reported. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, that fact should be so stated and only the value of the owned property given. Do not include securities and loans representing investments in other enterprises."

These instructions were identical with those employed at the censusus of 1914 and 1909. The data compiled in respect to capital, however, at both censuses, as well as at all preceding censuses of manufactures, have been so defective as to be of little value except as indicating general conditions. In fact, it has been repeatedly recommended by the census authorities that this inquiry be omitted from the schedule. While there are some establishments whose accounting systems are such that an accurate return for capital could be made, this is not true of the great majority, and the figures therefore do not show the actual amount of capital invested.

Materials.—The statistics as to cost of materials relate to the materials used during the year, which may be more or less than the materials purchased during the year. The term "materials" covers fuel, rent of power and heat, mill supplies, and containers, as well as materials which form a constituent part of the product.

Rent and taxes.—The taxes include certain Federal taxes and state, county, and local taxes. Under "Federal taxes" there are included the internal revenue tax on manufactures (tobacco, beverages, etc.), excise taxes when included in values reported for products, corporation capital stock tax, and corporation income tax, but not the income tax for individuals and partners.

Value of products.—The amounts given under this heading represent the selling value or price at the factory of all products manufactured during the year, which may differ from the value of the products sold.

Value added by manufacture.—The value of products is not always a satisfactory measure of either the absolute or the relative importance of a given industry, because only a part of this value is actually created by the manufacturing processes carried on in the industry itself. Another part, and often by far the larger one, represents the value of the materials used. For many purposes, therefore, the best measure of the importance of an industry, from a manufacturing standpoint, is the value created by the manufacturing operations carried on within the industry. This value is calculated by deducting the cost of the materials used from the value of the products. The figure thus obtained is termed in the census reports "value added by manufacture."

Cost of manufacture and profits.—The census data do not show the entire cost of manufacture, and consequently can not be used for the calculation of profits. No account has been taken of depreciation or interest, rent of offices and buildings other than factory or works, insurance, ordinary repairs, advertising, and other sundry expenses.

Primary horsepower.—This item represents the total primary power equipment of the manufacturing establishments plus the amount of power, principally electric, rented from other concerns. It does not cover the power of electric motors taking their current from dynamos driven by primary power machines operated by the same establishment, because the inclusion of such power would obviously result in duplication. The figures for primary horsepower represent the rated capacity of the engines, motors, etc., and not the amount of power in actual daily use.

Fuel.—Statistics of the quantity of fuel used are shown only for anthracite and bituminous coal, coke, fuel oils, gasoline and other volatile oils, and gas, and represent the quantity used during the year. As only the principal kinds of fuel are shown, comparison as to the total cost of all fuel is impracticable.

RICE, CLEANING AND POLISHING.

GENERAL STATISTICS.

General character of the industry.—This report presents statistics for establishments engaged in the cleaning and polishing of rice for commercial use. Practically all the rice is handled in mills engaged exclusively in this industry. Previous to the enormous increase in the production of domestic rice it was necessary for the United States to import millions of pounds of rough rice yearly.

Importance and growth of the industry.—Table 1 summarizes the statistics for each census since 1899, with percentages of increase.

The large increases from 1914 to 1919, in salaries and wages, cost of materials, and value of products are due largely to the general increase in cost of production following the World War, and do not, therefore, fairly measure the growth of the industry for that period. A truer index of the conditions is found in the increases in the average number of wage earners and primary horsepower. The addition of the Federal income tax since 1914 will account for the increase in "Rent and taxes."

Principal states, ranked by value of products.—Measured by the value of products Table 2 shows Louisiana to be the leading rice-growing state, with California second and Texas third. There would be only a slight change in ranking if based on average number of wage earners or value added by manufacture.

Persons engaged in the industry.—The age classification of the average number of wage earners in Table 3 is an estimate obtained by the method described in the "Explanation of terms." The classification, by sex, for 1919 was reported separately, but for 1914 and 1909 was obtained in the same manner as the distribution by age. Figures in detail will be found in Table 14.

Wage earners, by months.—The statistics for wage earners in Table 4 show the regularity of employment, or the reverse, in accordance with industrial conditions existing during the year. Figures are given for all states reporting an average of over 200 wage earners.

Average number of wage earners, by prevailing hours of labor: 1919.—Table 5 shows the prevailing hours of labor per week for this industry, by states.

Size of establishments, by average number of wage earners.—Table 6 shows the size of establishments in the several states based upon the average number of wage earners employed.

Size of establishments, by value of products.—At the censuses of 1909 and 1914 establishments with products valued at "$100,000 to $1,000,000" constituted one group, but at the census of 1919 this group was subdivided into "$100,000 to $500,000" and "$500,000 to $1,000,000." Separate figures for the number of establishments and value of products have been compiled, however, from the returns for 1914. Table 7, therefore, gives combined figures for these two groups for all items for 1909 and for the average number of wage earners and value added by manufacture for 1914. The statistics in the table show the degree of concentration of production in large establishments. In 1919 the group "$1,000,000 and over" included 45 establishments, or 52.3 per cent of the total number for the industry; 1,763 wage earners, or 83.4 per cent of the total average number; and reported products to the value of $76,441,842, or 84.9 per cent of the total value of products.

Character of ownership.—Table 8 emphasizes the predominance of the corporate form of ownership. Corporations owned 73.3 per cent of the total number of establishments for the industry in 1919, employed 90 per cent of the total average number of wage earners and reported 87.7 per cent of the value of products.

Number and horsepower of types of prime movers.—From 1914 to 1919, Table 9 shows an increase in total horsepower for the industry of 75.9 per cent, due largely to the increase in rented power.

Fuel consumed.—Table 10 shows the principal kinds of fuel used in the industry for 1919 and 1914. In 1914 gasoline and other volatile oils were included in fuel oils.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

	1919	1914	1909	1904	1899	PER CENT OF INCREASE.[1] 1914–1919	1909–1914	1904–1909	1899–1904
Number of establishments	86	59	71	74	80	.....	.....	.....	.....
Persons engaged	3,249	1,739	1,777	1,961	891	86.8	−2.1	−9.4	120.1
Proprietors and firm members	40	48	38	33	71	.....	.....	.....	.....
Salaried employees	1,096	438	500	436	169	150.2	−12.4	14.7	158.0
Wage earners (average number)	2,113	1,253	1,239	1,492	651	68.6	1.1	−17.0	129.2
Primary horsepower	27,382	15,571	19,519	15,866	7,546	75.9	−20.2	23.0	110.3
Capital	$23,792,509	$12,626,990	$13,347,144	$8,821,099	$2,601,352	88.4	−5.4	51.3	239.1
Salaries and wages	3,441,136	1,284,034	1,176,623	1,189,194	447,618	168.0	9.1	−1.1	165.7
Salaries	1,508,940	638,171	613,085	548,562	182,033	136.4	4.1	11.8	201.4
Wages	1,932,196	645,863	563,538	640,632	265,585	199.2	14.6	−12.0	141.2
Paid for contract work	17,871	.....	.....	.....	20,094	.....	.....	.....	.....
Rent and taxes	1,184,227	83,222	90,269	[2] 68,411	[2] 44,325	1,323.0	−7.8	32.0	54.3
Cost of materials	76,633,816	20,615,860	19,501,080	13,315,065	7,575,522	271.7	5.7	46.5	75.8
Value of products	90,038,412	23,039,294	22,371,457	16,296,916	8,723,726	290.8	3.0	37.3	86.8
Value added by manufacture [3]	13,404,596	2,423,434	2,870,377	2,981,851	1,148,204	453.1	−15.6	−3.7	159.7

[1] A minus sign (−) denotes decrease; percentages are omitted where base is less than 100. [2] Exclusive of internal revenue. [3] Value of products less cost of materials.

TABLE 2.—PRINCIPAL STATES, RANKED BY VALUE OF PRODUCTS: 1919.

STATE.	Number of establishments	WAGE EARNERS. Average number.	Per cent distribution.	Rank.	VALUE OF PRODUCTS. Amount (expressed in thousands).	Per cent distribution.	Rank.	VALUE ADDED BY MANUFACTURE. Amount (expressed in thousands).	Per cent distribution.	Rank.
United States	86	2,113	100.0	...	$90,038	100.0	...	$13,404	100.2	..
Louisiana	46	1,121	53.1	1	41,220	45.8	1	5,203	38.8	1
California	14	337	15.9	3	20,264	22.5	2	3,095	23.1	3
Texas	14	23	20.0	2	$17,901	19.9	3	$4,091	30.5	2
Arkansas	5	202	9.6	4	8,996	10.0	4	1,052	7.8	4
All other states	7	30	1.4	...	1,657	1.8	...	−37	.....	..

[1] A minus sign (−) indicates cost of materials exceeds value of products.

TABLE 3.—PERSONS ENGAGED IN THE INDUSTRY: 1919, 1914, AND 1909.

CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL. Male.	Female.
All classes	1919	3,249	3,164	85	97.4	2.6
	1914	1,739	1,722	17	99.0	1.0
	1909	1,777	1,756	21	98.8	1.2
Proprietors and officials	1919	643	641	2	99.7	0.3
	1914	154	154	.....	100.0	.....
	1909	182	181	1	99.5	0.5
Proprietors and firm members	1919	40	39	1	97.5	2.5
	1914	48	48	.....	100.0	.....
	1909	38	37	1	97.4	2.6
Salaried officers of corporations	1919	84	83	1	98.8	1.2
	1914	37	37	.....	100.0	.....
	1909	43	43	.....	100.0	.....
Superintendents and managers	1919	519	519	.....	100.0	.....
	1914	69	69	.....	.....	.....
	1909	101	101	.....	.....	.....
Clerks and other subordinate salaried employees.	1919	493	438	55	88.8	11.2
	1914	332	319	13	96.1	3.9
	1909	356	340	16	95.5	4.5
Wage earners (average number)	1919	2,113	2,085	28	98.7	1.3
	1914	1,253	1,249	4	99.7	0.3
	1909	1,239	1,235	4	99.7	0.3
16 years of age and over	1919	2,110	2,082	28	98.7	1.3
	1914	1,250	1,246	4	99.7	0.3
	1909	1,235	1,231	4	99.7	0.3
Under 16 years of age	1919	3	3	.....	.....	.....
	1914	3	3	.....	.....	.....
	1909	4	4	.....	.....	.....

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR STATES: 1919.

[The 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 OF NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
United States:														
1919	2,113	3,041	2,423	1,794	1,470	1,452	1,243	*954.*	1,149	2,226	2,840	3,354	**3,410**	28.0
Males	2,085	3,000	2,399	1,772	1,453	1,421	1,192	*922*	1,141	2,214	2,815	3,319	3,372	27.3
Females	28	**41**	24	22	17	31	51	32	*8*	12	25	35	38	19.5
1914	1,253	1,758	1,690	1,342	1,175	819	344	*332*	608	1,567	1,701	**1,852**	1,848	17.9
1909	1,239	1,513	1,433	1,240	990	642	437	*436*	722	1,750	**2,017**	1,932	1,753	21.6
Arkansas	202	**374**	299	265	216	168	*68*	76	70	*68*	156	294	370	18.2
California	337	**621**	503	410	288	189	276	221	148	*141*	190	487	570	22.7
Louisiana	1,121	1,410	1,131	739	637	702	534	*393*	728	1,663	**1,881**	1,857	1,777	20.9
Texas	423	573	460	348	317	382	347	244	*176*	338	578	**675**	638	26.1

TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR STATES: 1919.

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.	Over 60.
United States	2,113	42	.....	101	.....	89	74	848	959
Arkansas	202	.....	.....	.....	.....	.....	.....	84	118
California	337	42	.....	67	.....	1	47	13	167
Louisiana	1,121	.....	.....	1	.....	2	27	555	536
Texas	423	.....	.....	28	.....	62	.....	195	138

TABLE 6.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR 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.	
			Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
United States	86	2,113	7	14	22	15	187	43	1,368	6	407	1	129
Arkansas	5	202	.....	.....	.....	1	14	3	104	1	84	.....	.....
California	14	337	.....	2	4	3	28	8	247	1	58	.....	.....
Louisiana	46	1,121	7	6	12	7	90	23	748	2	142	1	129
Texas	14	423	.....	.....	.....	4	55	8	245	2	123	.....	.....

TABLE 7.—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	86	59	71	2,113	1,253	1,239	$90,038,412	$23,039,294	$22,371,457	$13,404,596	$2,423,434	$2,870,377
Less than $5,000	3	1	3	1	.....	5	7,275	.....	11,443	3,060	.....	3,430
$5,000 to $20,000	7	3	3	4	[1] 5	3	82,143	[1] 29,542	26,830	50,202	[1] 6,488	7,603
$20,000 to $100,000	8	7	11	9	20	78	378,478	246,484	660,028	86,868	51,632	188,854
$100,000 to $500,000	9	36	51	81	960	947	2,723,508	9,136,563	16,957,715	627,504	1,814,353	2,386,337
$500,000 to $1,000,000	14	8		255			10,405,166	8,498,128		2,277,274		
$1,000,000 and over	45	4	3	1,763	268	206	76,441,842	5,128,577	4,715,441	10,359,688	550,961	284,153
	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	3.5	1.7	4.2	(2)	.....	0.4	(2)	.....	0.1	(2)	.....	0.1
$5,000 to $20,000	8.1	5.1	4.2	0.2	[1] 0.4	0.2	0.1	[1] 0.1	0.1	0.4	[1] 0.3	0.3
$20,000 to $100,000	9.3	11.9	15.5	0.4	1.6	6.3	0.4	1.1	3.0	0.6	2.1	6.6
$100,000 to $500,000	10.5	61.1	71.8	3.8	76.6	76.4	3.0	39.7	75.8	4.7	74.9	83.1
$500,000 to $1,000,000	16.3	13.4		12.1			11.6	36.9		17.0		
$1,000,000 and over	52.3	6.8	4.2	83.4	21.4	16.6	84.9	22.3	21.1	77.3	22.7	9.9

[1] Includes the group "Less than $5,000.

[2] Less than one-tenth of 1 per cent.

TABLE 8.—CHARACTER OF OWNERSHIP, BY STATES: 1919 AND 1914.

STATE.	Census year.	NUMBER OF ESTABLISHMENTS 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.		
		Individuals.	Corporations	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.		Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
United States	1919	15	63	8	2,113	77	1,902	134	3.6	90.0	6.3	$90,038,412	$3,969,683	$78,957,433	$7,111,296	4.4	87.7	7.9
	1914	4	51	4	1,253	27	1,171	55	2.2	93.4	4.4	23,039,294	816,843	20,967,445	1,255,006	3.5	91.0	5.4
	1909	9	57	5	1,239	103	1,063	73	8.3	85.8	5.9	22,371,457	1,434,535	19,907,860	1,029,062	6.4	89.0	4.6
Arkansas	1919	.....	5	.....	202	.....	202	.....	.....	100.0	.....	8,995,856	.....	8,995,856	.....	.....	.....	.....
	1914	.....	5	.....	116	.....	116	.....	.....	100.0	.....	1,837,478	.....	1,837,478	.....	.....	.....	.....
California	1919	1	9	4	337	.....	228	[1] 109	.....	67.7	32.3	20,264,263	.....	14,206,820	[1] 6,057,443	.....	70.1	29.9
	1914	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana	1919	12	30	4	1,121	34	1,030	57	3.0	91.9	5.1	41,220,471	1,935,243	36,808,316	2,476,912	4.7	89.3	6.0
	1914	1	21	2	735	.....	659	[1] 76	.....	89.7	10.4	12,966,690	.....	10,983,409	[1] 1,983,281	.....	84.7	15.3
Texas	1919	1	13	.....	423	.....	[1] 423	.....	.....	100.0	.....	17,900,547	.....	[1] 17,900,547	.....	.....	100.0	.....
	1914	.....	16	.....	345	.....	345	.....	.....	.....	.....	7,216,359	.....	7,216,359	.....	.....	.....	.....

[1] Includes the group "Individuals."

TABLE 9.—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	370	120	154	27,382	15,571	19,519	100.0	100.0	100.0
Owned	115	71	130	19,578	14,009	18,404	71.5	90.0	94.3
Steam	94	68	125	18,881	13,927	18,252	69.0	89.4	93.5
Engines	90	(1)	(1)	18,821	(1)	(1)	68.7	(1)	(1)
Turbines	4	(1)	(1)	60	(1)	(1)	0.2	(1)	(1)
Internal-combustion engines	21	3	4	697	82	137	2.5	0.5	0.7
Water wheels, turbines, and motors	.....	.....	1	.....	.....	15	.....	.....	0.1
Rented	188	49	24	7,804	1,562	1,115	28.5	10.0	5.7
Electric	188	49	24	5,762	1,562	1,115	21.0	10.0	5.7
Other	.....	.....	.....	2,042	.....	.....	7.5	.....	.....
Electric	255	74	54	8,679	1,970	1,738	100.0	100.0	100.0
Rented	188	49	24	7,804	1,562	1,115	89.9	79.3	64.2
Generated by establishments reporting	67	25	30	875	408	623	10.1	20.7	35.8

[1] Not reported separately.

TABLE 10.—FUEL CONSUMED, BY STATES: 1919 AND 1914.

STATE.	Census year.	COAL.		Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	STATE.	Census year.	COAL.		Fuel oils (barrels).	Gasoline and other volatile oils (barrels).
		Anthracite (tons, 2,240 pounds).	Bituminous (tons, 2,000 pounds).					Anthracite (tons, 2,240 pounds).	Bituminous (tons, 2,000 pounds).		
United States	1919	703	10,855	54,720	346	Louisiana	1919	703	9,143	22,298	226
	1914	.....	9,536	41,479	.....		1914	.....	9,071	13,459	.....
Arkansas	1919	.....	1,440	712	.....	Texas	1919	.....	17	26,069	120
	1914	.....	400	.....	.....		1914	.....	.....	28,020	.....
California	1919	.....	.....	5,641	.....	All other states	1919	.....	255	.....	.....
	1914	.....	.....	.....	.....		1914	.....	65	.....	.....

SPECIAL STATISTICS.

Detailed statistics of quantity and value of materials and products, by states: 1919, 1914, 1909, and 1899.—The special schedule used in collecting the statistics for the rice-cleaning and polishing industry provided for reporting the quantity and value of the various products manufactured. Table 11 shows these statistics, by states, for the last five censuses, so far as available and without disclosing individual operations.

Equipment.—Table 12 shows the equipment used in the industry, with the maximum capacity per bushel.

TABLE 11.—DETAILED STATISTICS OF QUANTITY AND VALUE, BY STATES: 1919, 1914, 1909, 1904, AND 1899.

	Census year.	United States.	Arkansas.	California.	Louisiana.	Texas.	All other states.
Number of establishments	1919	86	5	14	46	14	7
	1914	59	5	(1)	24	16	14
	1909	71	5	.....	37	19	10
	1904	74	.....	(1)	43	17	14
	1899	80	.....	(1)	37	(1)	43
Rough rice treated, aggregate, pounds	1919	1,609,951,895	155,415,375	314,477,775	793,533,285	319,765,950	26,759,610
	1914	1,036,587,825	82,086,840	(1)	607,616,370	315,169,065	31,715,550
	1909	974,747,475	37,014,075	.....	540,002,250	371,816,370	25,914,780
	1904	999,727,650	.....	(1)	635,010,885	316,170,405	48,546,360
	1899	398,602,018	.....	(1)	290,165,708	(1)	108,436,310
Domestic, total, pounds	1919	1,608,014,880	155,415,375	314,238,375	793,533,285	319,765,950	25,061,895
Blue Rose, pounds	1919	938,818,260	91,900,395	3,752,145	562,463,955	260,779,635	19,922,130
Honduras type, pounds	1919	251,096,715	58,441,230	775,395	149,332,770	40,408,605	2,138,715
Japan type, pounds	1919	349,469,775	5,073,750	250,384,455	72,679,185	18,577,710	2,754,675
All other types, pounds	1919	68,630,130	.....	59,326,380	9,057,375	.....	246,375
Foreign, pounds	1919	1,037,115	.....	239,400	.....	.....	1,697,715
Products, total value	1919	$90,038,412	$8,995,856	$20,264,263	$41,220,471	$17,900,547	$1,657,275
	1914	$23,039,294	$1,837,478	(1)	$12,966,690	$7,216,359	$1,018,767
	1909	$22,371,457	$944,726	.....	$12,528,656	$8,142,438	$755,637
	1904	$16,296,916	.....	(1)	$10,718,311	$4,640,269	$938,336
	1899	$8,723,726	.....	(1)	$5,736,451	(1)	$2,987,275
Clean rice: Pounds	1919	1,062,813,400	108,239,360	219,945,498	505,323,945	210,826,438	18,478,159
	1914	674,872,108	52,038,773	(1)	391,728,722	206,724,899	24,379,714
	1909	626,089,489	23,197,442	.....	351,302,414	236,117,295	15,472,338
	1904	623,900,245	.....	(1)	394,744,386	197,423,320	31,722,539
	1899	243,031,200	.....	(1)	173,632,724	(1)	69,398,476
Value	1919	$83,462,235	$8,508,525	$19,345,892	$38,544,593	$15,486,109	$1,577,116
	1914	$21,655,105	$1,735,201	(1)	$12,106,776	$6,840,320	$972,808
	1909	$20,685,982	$810,421	.....	$11,640,318	$7,571,780	$663,463
	1904	$15,357,133	.....	(1)	$10,110,144	$4,352,058	$894,931
Polish: Pounds	1919	36,197,025	4,260,600	7,023,586	16,778,378	7,420,561	713,900
	1914	31,053,118	2,460,420	(1)	17,984,219	9,856,739	751,740
	1909	29,821,813	1,105,072	.....	17,558,068	10,402,638	756,035
	1904	33,290,331	.....	(1)	22,526,750	9,500,830	1,262,751
	1899	15,134,648	.....	(1)	11,491,319	(1)	3,643,329
Value	1919	$965,655	$100,615	$165,442	$490,805	$194,515	$14,278
	1914	$352,271	$26,984	(1)	$206,963	$107,198	$11,126
	1909	$362,052	$12,275	.....	$207,317	$132,258	$10,202
	1904	$267,647	.....	(1)	$178,608	$77,578	$11,461
Bran: Pounds	1919	142,984,394	15,760,625	24,670,037	72,248,121	27,964,999	2,340,612
	1914	99,403,200	7,475,501	(1)	60,325,729	29,251,625	2,350,345
	1909	91,208,529	3,224,991	.....	55,215,995	29,505,946	3,261,597
	1904	120,694,130	.....	(1)	74,531,334	40,772,421	5,390,375
	1899	60,265,012	.....	(1)	50,243,288	(1)	19,021,724
Value	1919	$2,499,788	$263,424	$357,647	$1,338,093	$498,210	$42,414
	1914	$772,275	$57,093	(1)	$463,692	$228,199	$23,291
	1909	$736,215	$24,456	.....	$404,442	$276,535	$30,782
	1904	$501,193	.....	(1)	$303,886	$169,647	$27,660
All other products, value	1919	$3,110,734	$123,292	$395,282	$846,980	$1,721,713	$23,461
	1914	$259,643	$18,200	(1)	$189,259	$40,642	$11,542
	1909	$587,208	$97,574	.....	$276,579	$161,865	$51,190
	1904	$170,943	.....	(1)	$125,673	$40,986	$4,284

1 Figures included under "All other states."

TABLE 12.—EQUIPMENT.

STATE.	Census year.	Shelling stones (number).	Scouring machines (number).	Composition leather. Polishers (number).	Composition leather. Dressed polishers (number).	Glazing drums (number).	Estimated maximum capacity of mill per day of 24 hours (bushels).
United States	1919	261	530	62	114	192	446,098
	1914	176	382	146	.....	.....	276,426
Arkansas	1919	21	50	2	10	14	41,000
	1914	19	43	9	.....	.....	30,640
California	1919	49	113	6	18	30	101,503
Louisiana	1919	132	239	41	54	107	194,432
	1914	94	190	75	.....	.....	139,660
Texas	1919	54	111	11	27	38	101,010
	1914	55	102	51	.....	.....	91,180
All other states	1919	5	17	2	5	3	8,153
	1914	8	47	11	.....	.....	14,946

GENERAL TABLES.

Comparative summary by states.—Table 13 gives for 1919, 1914, and 1909 the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products for Arkansas, Louisiana, and Texas. California can not be shown for 1914 and 1909 without disclosing individual operations.

Detailed statement, by states.—Table 14 presents, for 1919, statistics for each state for which figures can be shown without disclosing individual operations.

TABLE 13.—COMPARATIVE SUMMARY, BY STATES: 1919, 1914, AND 1909.

STATE.	Census year.	Number of establishments	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
United States	1919	86	2,113	27,382	$1,932	$76,634	$90,038
	1914	59	1,253	15,571	646	20,616	23,039
	1909	71	1,239	19,519	564	19,501	22,371
Arkansas	1919	5	202	1,785	184	7,943	8,996
	1914	5	116	1,520	48	1,705	1,837
	1909	5	37	1,610	23	852	945
California	1919	14	337	4,698	500	17,169	20,264
Louisiana	1919	46	1,121	12,562	$803	$36,017	$41,220
	1914	24	735	7,742	368	11,694	12,967
	1909	37	693	10,706	327	10,971	12,529
Texas	1919	14	423	7,998	414	13,809	17,901
	1914	16	345	5,365	199	6,366	7,216
	1909	19	430	6,274	189	7,122	8,142
All other states	1919	7	30	339	31	1,694	1,657
	1914	14	57	944	31	851	1,019
	1909	10	79	929	25	556	755

TABLE 14.—DETAILED STATEMENT FOR THE INDUSTRY, BY STATES: 1919.

STATE.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc. Male.	Clerks, etc. Female.	Wage earners. Average number.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Capital.	EXPENSES. Salaries and wages. Officials.	EXPENSES. Salaries and wages. Clerks, etc.
United States	86	3,249	40	603	438	55	2,113	De 3,410	Jy 954	3,432	3,390	39	3	$23,792,509	$831,034	$677,906
Arkansas	5	263	.....	23	34	4	202	Ja 374	Je[1] 68	370	369	1	.....	1,488,878	82,892	48,056
California	14	449	15	36	37	24	337	Ja 621	Se 141	585	577	7	1	4,329,485	139,941	100,680
Louisiana	46	1,889	23	467	263	15	1,121	Oc 1,881	Jy 393	1,787	1,783	2	2	10,485,157	390,193	347,787
Texas	14	604	1	70	98	12	423	No 675	Au 176	630	601	29	.....	6,946,699	202,268	163,906
All other states[2]	7	44	1	7	6	.....	30	.....	.....	60	60	.....	.....	542,290	15,740	17,477

STATE.	EXPENSES—continued. Salaries and wages—Con. Wage earners.	For contract work.	Rent and taxes. Rent of factory.	Rent and taxes. Taxes, Federal, state, county, and local.	For materials. Principal materials.	For materials. Fuel and rent of power.	Value of products.	Value added by manufacture.[3]	POWER. Primary horsepower. Total.	Owned. Steam engines (not turbines).	Owned. Steam turbines.	Owned. Internal-combustion engines.	Rented.	Electric horsepower generated in establishments reporting.
United States	$1,932,196	$17,871	$122,905	$1,061,322	$76,335,172	$298,644	$90,038,412	$13,404,596	27,382	18,821	60	697	7,804	875
Arkansas	183,560	.....	.....	83,350	7,930,440	13,027	8,995,856	1,052,389	1,785	1,785	.....	.....	.....	144
California	499,743	.....	110,485	357,460	17,094,978	74,267	20,264,203	3,095,018	4,698	850	.....	.....	3,848	.....
Louisiana	803,408	.....	4,235	265,196	35,896,591	120,819	41,220,471	5,203,061	12,562	9,778	60	277	2,447	264
Texas	414,116	17,871	6,165	349,747	13,721,606	87,824	17,900,547	4,091,117	7,998	6,103	.....	420	1,475	467
All other states[2]	31,369	.....	2,020	5,569	1,691,557	2,707	1,657,275	−36,989	339	305	.....	.....	34	.....

[1] Same number reported for one or more other months.
[2] All other states embrace: South Carolina, 1 establishment; Tennessee, 1; Washington, 5.
[3] A minus sign (−) indicates cost of materials exceeds value of products.