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### 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 byproducts 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.

									PER (	CENT OF	INCRE	ASE.1	
	1019	1914	1909	1904	1899	1889	1879	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 Proprietors and firm mem-	124,935	95,516	81,473	70,051	53,012	(2)	(2)	30.8	17. 2	36. 4	53.7	ļ. <b>.</b>	
bers. Salaried employees.	171	221 6,838	250 5,245	309 3,778	431 2,935	(2) (2)	(2) (2)	-22, 6 60, 9	-11.6 30.4	-28,5 81.0	42,0 78.7		
Wage earners (average num- bor)	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 \$905,794,583	1,621,154 \$534,624,600	1,304,265 \$409,348,505	1,093,708 \$277,444,471	762,118 \$167,507,713	297, 724 \$89, 829, 548	\$48, 139, 652	14. 2 69. 4	24. 3 30. 6	43, 2 92, 7	71.1 144.4	156, 0 86, 5	86,6
Salaries and wages. Salaries Wages.	165,643,386 29,952,744 135,690,642	66, 163, 815 12, 918, 176 53, 245, 639	50,314,643 9,510,141 40,804,502	38,116,244 6,097,032 32,019,212	25, 247, 337 4, 500, 911 20, 746, 426	14, 975, 485 (2) (2)	8,970,133 ( <sup>1</sup> ) ( <sup>2</sup> )	150. 4 131. 9 154. 8	31. 5 35. 8 30. 5	73.6 111.9 66.3	99.3 111.3 96.7	68.6	66, 9
Paid for contract work. Rent and taxes. Cost of materials. Value of products. Value added by manufacture 1	487, 240 34, 911, 259 467, 482, 637 788, 059, 377 320, 576, 740	539,626 4,493,053 213,181,286 332,147,175 118,965,889	527, 915 2, 637, 540 165, 442, 341 267, 656, 964 102, 214, 623	118, 403 31, 582, 116 111, 251, 478 188, 715, 189 77, 463, 711	320,846 31,336,215 70,530,236 127,326,162 56,795,926	(2) (2) 44, 228, 480 78, 937, 184 34, 708, 704	(1) (2) 34, 862, 132 57, 366, 860 22, 504, 728	-9.7 677.0 119.3 137.3 169.5	2. 2 70. 4 28. 9 24. 1 16. 4	91. 6 76. 0	64. 5 134, 6 110. 2 80. 0	59. 5 61. 3 63. 6	26. 9 37. 6 54. 2

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

Figures not available.

<sup>3</sup> Exclusive of internal revenue.

<sup>·</sup> Value of products less cost of materials,

# MANUFACTURES.

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

					<del></del>		<u> </u>	
	TOT	AL.	:		MILLS M	KING		
en e			Paper	only.	Pulp	only.	Both paper	and pulp.
	1919	1914	1919	1914	1919	1914	1919	1914
Number of establishments	729	718	497	495	61	68	171	160
Persons engaged. Proprietors and firm members. Salaried employees. Wage earners (average number).	124,935 171 11,005 113,759	95, 516 221 6, 838 88, 457	56,796 143 5,610 51,043	46,299 179 3,639 42,481	6,309 21 481 5,807	5,807 30 403 5,874	61,830 7 4,914 56,909	43,410 12 2,798 40,602
Primary horsepower	1,851,014 \$905,794,583	1,621,154 \$534,624,600	561,698 \$363,382,919	479,846 \$177,413,070	\$42,081,327	161,107 \$36,027,869	1,145,945 \$500,330,337	980,201 \$321,183,661
Salaries and wages	165,643,386 29,952,744 135,690,642	66, 163, 815 12, 918, 176 53, 245, 639	72,985,153 14,660,500 58,324,653	31,444,202 6,763,344 24,680,858	7,591,403 1,066,848 6,524,555	4,004,939 749,711 3,255,228	85,066,830 14,225,396 70,841,434	30,714,674 5,405,121 25,309,558
Paid for contract work. Rent and taxes (including internal revenue). Cost of materials. Value of products. Value added by manufacture 1.	34,911,259 467,482,637	539,626 4,493,053 213,181,286 332,147,175 118,965,889	134, 286 14, 252, 913 287, 402, 880 374, 362, 494 136, 959, 614	114,128 1,793,242 103,678,513 158,426,850 54,748,337	11,652 1,889,252 22,686,708 35,884,802 13,108,094	44,311 375,666 13,733,080 20,526,386 6,793,306	341,302 18,769,094 207,393,049 377,812,081 170,419,032	381, 187 2, 324, 145 95, 769, 693 153, 193, 939 57, 424, 246

<sup>1</sup> Value of products less cost of materials.

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

	of nts.	WAGE	EARNE	RS.		UE OF OUCTS.		VALUE. MANUE				of ents.	WAGE	EARNE	ers.		UE OF		VALUE A		
STATE.	Number of establishments.	Average number.	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribution.	Rank.	STATE.	Number of establishments.	Average number.	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribution.	Rank.
United States.  New York. Maine.  Massachusetts. Wisconsin Michigan  Pennsylvania. Ohio. New Hampshire. New Jersey Minnesota.	. 156 39 78 57 39 56 49 27	113, 759 17, 571 13, 058 12, 060 12, 789 9, 561 0, 843 6, 899 5, 000 3, 108 2, 528	100.0 15.4 11.5 11.4 11.2 8.4 8.7 6.1 4.4 2.7 2.2	_	129,381 93,917 87,160 80,328	100.0 16.4 11.9 11.1 10.2 8.4 8.2 7.0 5.3 2.6 2.6	1 2 3 4 5 6 7 8 9	\$320, 577 52, 427 30, 246 33, 396 35, 123 25, 946 29, 073 19, 388 16, 992 8, 365 8, 780	100.0 16.4 12.2 10.4 11.0 8.1 9.1 6.0 5.3 2.6 2.7	12436 578109	Washington Maryland	10 7 9	2,214 1,831 1,951 1,999 1,832 1,610 1,408 806 956 683 291 136 4,730	1.9 1.6 1.7 1.8 1.6 1.4 1.2 0.7 0.8 0.3 0.1	11 15 13 12 14 16 18 21 20 22 26 30	\$15, 120 14, 357 13, 602 12, 939 10, 863 10, 653 9, 917 5, 805 4, 888 4, 573 1, 779 662 23, 726	1.9 1.8 1.7 1.6 1.4 1.3 0.7 0.6 0.6 0.2 0.1	11 12 13 14 15 16 17 20 21 22 25 30	\$5, 606 5, 144 5, 807 4, 722 4, 209 5, 501 3, 101 2, 308 1, 588 1, 344 658 319 11, 309	0.4 0.2 0.1	12 14 11 15 16 13 18 20 21 22 25 31

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

	Cen-			Fe-	PER OF TO			Cen-			Fe-	PER C	
CLASS.	sus year	Total.	Male.	male.	Male.	Fe- male.	CLASS.	year.	Total.	Male.	male.	Male.	Fe- male.
All classes	1919 1914 1909	124,935 95,516 81,473	111,778 85,022 70,916	13, 157 10, 494 10, 557	89.5 89.0 87.0	10.5 11.0 13.0	Clerks and other subordinate salarled employees.	1919 1914 1909	7, 159 4, 634 3, 197	4,500 3,540 2,393	2,659 1,094 804	62.9 76.4 74.9	37.1 23.6 25.1
Proprietors and officials	1919 1914 1909	4,017 2,425 2,298	3, 901 2, 393 2, 269	116 32 29	97.1 98.7 98.7	2.9 1.3 1.3	Wago carners (averago number)	1919 1914 1909	113,759 88,457 75,978	103, 377 79, 089 66, 254	10, 382 9, 308 9, 724	90.9 89.4 87.2	9.1 10.6 12.8
Proprietors and firm members	1919 1914 1909	171 221 250	144 205 232	27 16 18	84.2 92.8 92.8	15.8 7.2 7.2	16 years of age and over	1919 1914 1909	113, 603 88, 351 75, 721	103, 295 79, 018 66, 151	10, 308 9, 333 9, 570	90.9 89.4 87.4	9.1 10.6 12.6
Salaried officers of corporations	1919 1914 1909	1,312 887 773	1, 285 877 766	27 10 7	97.9 98.9 99.1	2.1 1.1 0.9	Under 16 years of age	1919 1914 1909	156 106 257	82 71 103	74 35 154	52.6 67.0 40.1	47.4 33.0 59.9
Superintendents and managers	1910 1914 1909	2,534 1,317 1,275	2,472 1,311 1,271	62 6 4	97.6 99.5 99.7	2.4 0.5 0.3		-500				, 3412	

#### 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 itails figures.]

	Average number		NUM)	BER EMPI,	OYED ON	15TH DAY	of the	MONTH O	R NEARE:	or repres	entativi	E DAY.		Per
STATE.	em- ployed during year.	Janu- ary.	Febru- ary.	March.	April.	Мау.	June.	July.	August.	Septem- ber.	Octo- ber.	November.	Decem- ber.	mini- mum is of maxi- mum.
United States: 1919. Males. Females. 1914. 1909.		113,179 102,766 10,413 89,140 74,986	109, 184 99, 396 9, 788 89, 235 75, 788	108, 451 98, 510 9, 941 89, 756 76, 291	107,762 98,095 9,667 89,916 75,983	108, 258 98, 341 9, 917 89, 633 77, 013	109, 901 99, 681 10, 220 88, 389 76, 829	114,337 103,820 10,508 87,061 75,009	115, 920 105, 222 10, 698 86, 725 74, 517	117,878 107,067 10,811 88,847 75,147	118, 797 107, 953 10, 844 88, 830 76, 026	120, 762 109, 826 10, 936 87, 018 76, 717	120,679 109,838 10,841 86,934 77,430	89. 2 89. 3 88. 4 96. 5 96. 2
California	806	695	756	688	696	743	789	855	932	918	890	876	834	73.8
Connecticut	1,999	1,965	1,857	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	668	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	2,816	2,287	83.8
Maine	13,058	12,620	12,698	12,983	12,484	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	12,919	13,020	13,575	13,845	13,029	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	0,879	90, 7
Minnesota	2,523	2,681	2,660	2,545	2,599	2, 590	2, 556	2,337	2,505	2,372	2,452	2,524	2,655	86, 0
New Hampshire. New Jersey. New York. Ohio. Pennsylvania.	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
	3,108	3,029	2,827	2,048	2,799	2,827	2,922	3, 213	3, 374	3,384	3, 406	3,335	3,232	82. 2
	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
	6,899	6,838	6,463	6,384	6,806	6,438	6,726	7, 171	7, 382	6,894	7, 431	7,464	7,291	84. 5
	9,843	9,740	9,521	9,842	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	1,907	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	1,448	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	864	901	942	024	953	943	939	918	903	924	72.9
Wisconsin.	12,789	12,894	12,914	12,352	12,133	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.

			IN	ESTABI HOURS		NTS WI				ING				IN	establ Hours		NTS W.				ING
STATE.	Cen- sus year,	Total.	and un- der.	Be- tween 44 and 48.	48.1	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Over 60.	STATE,	Cen- sus year.	Total.	and un- der.	Be- tween 44 and 48.	48.1	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Over 60.
United States	1919 1914 1909	113,759 88,457 75,978	(2)	1, 228 (2) (2)	64, 979 10, 624 5, <b>5</b> 95	5,581	12.702	10.427	18, 993	13, 416 30, 130 31, 339	New Hampshire.	1919 1914	5,000 8,905	(2)	(2)		485 1,114	123 270	780	280 22	140 804
California	1919	806	16		790		•••••		,		New Jersey	1919 1914	3,108 2,927	667		832	454	56 78	451 789	205 438	1,622
Connecticut	1919 1914	1,999 1,898	361 (2)	(2)	225 100	283 179	226 79	92 288	364 417	448 835	New York		17,571 13,570	(2)	(²)	11,938 1,672		889 2,671	680	1,182 3,380	3, 411 5, 167
Delaware	1919 1914	683 591			100			2 3	474	581 114	Ohio	1919 1914	6, 899 5, 480	270		1,878		437 829	1,518 344	783 820	2,018 3,437
Illinois	1919 1914	1,831 1,704	37		626		98 231	238	104 227	728 1, 246	Pennsylvania	1919 1914	9, 843 7, 447		1,170	3,437	752 2	28 29	403 1,016	1,877 3,244	2,176 3,150
Indiana	1919 1914	2,214 1,620	(2)	58 (2)	615 128		153	94	387 658	907 834	Vermont	1919 1914	1,832 1,264	(2)	(2)	1,813 211	626	171 123	11 136	241 40	96 128
Maine	1919 1914	13,058 10,033	(2)	(2)	8,694 1,666	700 1,677	3, 549 3, 753	2,221	<u>i</u> è	115 704	Virginia	1919 1914	1,951 1,260		ļ	1,559		55		100 286	237 974
Maryland	1919 1914	1,408 1,586			864		51		356	544 1,179	Washington	1919 1914	1,610 877		ļ	1,610			485		392
Massachusetts		12,960 13,401	2, 453 (2)	(2)	7,533 5,171	2,263 1,705	3, 149	74 2,006	359 620	278 750	West Virginia	1919 1914	956 1,033			630		161	78 66	75 666	12 301
Michigan	1919 1914	9,561 6,051			5,310	1,904 278	2,011 1,016	226 623	9 1,482	101 2,652	Wisconsin	1919 1914	12,789 8,968	190 (2)	(2)	7, 546 378	:	3,375	614 485	945 4, 473	119 3,632
Minnesota	1919 1914	2,523 1,345			1,672				544 900	307 445											<b>S</b>

Includes 48 and under for 1914 and 1909,

<sup>&</sup>lt;sup>2</sup> Corresponding figures not available.

Figures not available for 1914.

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

	TO	TAL.			-			,	ESTA	BLISHME	ITS EM	PLOYING-						
"Tlte.	rments.	earners (average number).	i t wa carn inclu	ge ers.	6 to wa earr inclu	ige iers,	ear ear	to 50 rage rners, usivo.	w dar	o 100 age ners, usive.	w ear	to 250 agë ners, usive.	ea i	to 500 age ners, usive.	W eat	o 1,000 age ners, usive.	W	1,000 age ners.
	Establishments.	Wage earner num	Establish- ments.	Wage earners.	Establish- ments-	Wage earners.	Establish- ments.	Wage earners.	Establish- ments-	Wage earners.	Establish- ments.	Wage earners.	Establish- ments.	Wage earners.	Establish- ments.	Wage earners.	Establish- ments.	Wage earoers.
United States1919 1914	729 718	113,759 88,457	24 29	76 95	87 114	1, 1 <b>7</b> 9 1, 540	158 172	5, 140 5, 856	139 134	10,166 9,660	204 183	33,732 29,991	70 60	24, 017 20, 630	38 21	26, 340 14, 615	9 5	13, 109 6, 070
California Connecticut Delaware Illinois Indiana	7 44 5 19 26	806 1,999 683 1,831 2,214	5 1	15 2	1 13  2	16 177 30	14 5 9	447 199 325	2 6 1 7 6	120 428 100 529 482	4 6 2 7 9	670 932 297 1,103 1,377	i	284				
Maine Maryland Massachusetts Michigan Minnesota	39 10 78 89 9	13,058 1,408 12,960 9,561 2,523	2	4 6	4 3	57 42 23	3 5 9 2 1	94 140 309 63 82	15 4 1	1,117 280 90	10 2 37 13 2	1,671 400 6,309 2,305 269	6 ii 11 11 8	2,004 3,694 3,718 1,011	1 1 2 3 2	2,852 864 1,489 2,036 1,115	1 1	5,763 1,130
New Hampshire. New Jersey. New York. Ohio. Pennsylvania.	27 33 156 49 56	5,000 3,108 17,571 6,899 9,843	1 7 5	5 22 20	2 20 3 11	107 32 291 46 142	8 12 48 14 11	256 403 1, 580 429 342	4 8 31 12 6	264 515 2, 274 898 354	3 8 32 14 10	418 1,135 5,098 2,085 1,675	8 1 11 4 7	1, 447 351 3, 669 1, 455 2, 122	1 7 1 5	667 4,637 621 3,866	1 i 1	2,508 1,365 1,322
Vermont Virginia. Washington West Virginia Wisconsin	20 10 6 9 57	1,832 1,951 1,610 956 12,789	1	2	1 3	56 12 45	6 2 3 5		5 2 2 3 10	374 155 159 236 713	3 1 21	595 1,002 623 144 3,810	1 10	452 3, 504	1 1 1 7	640 739 828 4,576		

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

VALUE OF PRODUCT.		UMBER ( BLISHME			GE NUMB GE EARNE		VAI	UE OF PRODU	ors.	VALUE AD	DED BY MANU	FACTURE.
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1019	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	\$118,965,880	\$102, 214, 623
Less than \$5,000. \$5,000 to \$20,000. \$20,000 to \$100,000. \$100,000 to \$500,000. \$500,000 to \$1,000,000. \$1,000,000 and over.	20 87 234 146 238	10 44 159 292 145 68	20 57 203 447 50	7 89 1,409 10,432 16,857 84,965	20 330 3,399 } 49,882 34,826	49 406 4,415 48,532 22,516		31,787 580,160 9,287,827 74,199,728 100,700,145 147,347,528	64, 416 719, 516 11, 354, 011 } 161, 938, 623 93, 580, 398	3,203 81,117 2,215,182 23,837,665 41,096,888 253,342,685	10, 952 275, 052 3, 389, 035 61, 646, 087 53, 638, 763	28,908 322,819 4,757,258 61,229,578 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 . \$5,000 to \$20,000 . \$20,000 to \$100,000 . \$100,000 to \$500,000 . \$500,000 to \$1,000,000 . \$1,000,000 and over	0. 5 2. 7 11. 9 32. 1 20. 0 32. 7	1.4 6.1 22.1 40.7 20.2 9.5	2.6 7.3 26.1 57.5 6.4	$ \begin{bmatrix} (1) & 0.1 \\ 1.2 & 9.2 \\ 14.8 & 74.7 \end{bmatrix} $	(1) 0, 4 3, 8 56, 4 39, 4	0. 1 0. 6 5. 8 63. 9 29. 6	(1) (1) 0.7 7.6 13.6 78.1	(¹) 0, 2 2, 8 22, 3 30, 3 44, 4	(1) 0.3 4.2 60.5 35.0	(1) (1) 0. 7 7. 4 12. 8 79. 0	(1) 0.2 2.8 51.8 45.1	(1) 0.3 4.7 59.9 35.1

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

### TABLE 9.—CHARACTER OF OWNERSHIP: 1919 AND 1914.

CHARACTER OF OWNERSHIP.	Cen- sus year.	estab.	Average number of wage earners.	Value of	Value added by manu- facture.	CHARACTER OF OWNERSHIP.	sus year.	octob.	Average number of wage earners.	Value of products.	Value added by manu- facture.
Total	1919 1914	729 718	113, 759 88, 457	\$788, 059, 377 332, 147, 175	\$320, 576, 740 118, 965, 889	Per cent distribution: Individual	1919 1914	4. 5 6. 8	0.6 1.0	0. 5 0. 8	0, 4 0, 8
Individual	1919 1914	33 49	648 857	3, 879, 687 2, 684, 573	1, 418, 680 961, 751	Corporation	1919 1914	88. 8 84. 7	96. 8 94. 5	90. 4 95. 0	97.n 94.5
Corporation	1919 1914	647 608	110, 134 83, 557	759, 532, 959 315, 401, 140	310, 807, 387 112, 411, 490	All other	1919 1914	6.7	2.6 4.6	3. 1 4. 2	2.6 4.
All other	1919 1914	49 61	2,977 4,043	24,646,731 14,111,462	8, 350, 673 5, 592, 648						

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

	NUMBER O	F ENGINES C	R MOTORS.			HORSEPOW	ER,		
POWER.	4040		1000		Amount.		Per ce	nt-distribut	ion.
	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 Steam¹ Engines	3, 157 2, 918	6,434 2,980 (2)	6,229 2,705 (2)	1,613,037 698,983 559,208 139,775	1,484,255 597,840 (2)	1, 264, 185 469, 364 (3)	87. 1 37. 8 30. 2 7. 6	91. 6 36. 9	96.9 36.0
Turbines. Internal-combustion engines. Water wheels, turbines, and motors.	239 37 2,558	62 3,392	(2) 46 3,478	3, 191 910, 863	9,674 876,741	6,675 788,146	0.2 49.2	0.6 54, 1	0. 8 60.
Rented Electric. Other	6,001 6,001	2,615 2,615	761 761	237,977 236,662 1,315	136,899 127,699 9,200	40,080 38,610 1,470	12.9 12.8 0.1	8. 4 7. 9 0. 6	3. 1 3, 0 0. 1
Electric	17, 756 6, 001 11, 755	8, 210 2, 615 5, 595	2,963 761 2,202	583,586 236,662 346,924	325,211 127,699 197,512	130,120 38,610 91,510	100.0 40.6 59.4	100, 0 39, 3 60, 7	100.0 29.7 70.3

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

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

	G	COA	AT.	Coke		Gasoline and other volatile	Gas (1,000 cubic
STATE.	Census year.	Anthracite (tons, 2,240 lbs.).	Bituminous (tons, 2,000 lbs.).	(tons, 2,000 lbs.).	Fuel oils (barrels).	other volatile oils (barrels).	(1,000 cubic feet).
United States	1919 1914	869,948 741,177	7, 863, 150 6, 268, 853	<b>63,384</b> <b>15,4</b> 55	2,117,674 635,329	(¹) <sup>2,440</sup>	286,060 2,260,56
alifornia	1919 1914				151,366 120,085	(1)	256, 28
Connecticut	1919 1914	4,161 10,458	167, 679 133, 406	•••••	46,002	24	••••••
Oelaware	1919 1914	890	66, 282 60, 927		10,448 69	·····(1)	•••••
llinois	1919 1914		275, 179 307, 517	5,568	1,016	115	
ndiana	1919 1914	2,295	341,971 287,582	476	2,218	(1)5	19,55
faine	1919 1914	8,779 51,574	763,348 631,522		492,599 334	(1)	
Asryland	1919 1914		171,970 121,653	530		55	1,58
fassachusetts	1919 1914	64,120 89,012	520,492 458,974		62,278 273	(1)	5,00
fichigan	1919 1914		846,634 513,410	1,915		533	
finnesota	1919 1914		198, 472 97, 829				
New Hampshire	1919 1914	179, 355 82, 154	158, 457 222, 727		522,000		
New Jersey	1919 1914	129,058 183,119	120,959 105,818	522	51, 235 1, 206	(1)	
New York	1919 1914	415,064 273,764	984, 537 928, 160	2,753	283 1,361	(1)	
Ohio	1919 1914	275	706, 985 625, 807	12,051	5,126 179	(1)	210,38
Pennsylvania	1919 1914	43,951 27,491	1,071,733 777,020	1,459 936	150 802	(1)	543,6
Vermont	1919 1914	22,890 21,920	65,948 44,303	4,143		40	
Virginia	1919 1914		196,940 152,855	800	600 600	(1)	
Washington	1919 1914		19,218 8,047		347,651 246,061	(1) 28	
West Virginia	1919 1914		102,601 50,089	200			11,3 1,375,1
Wisconsin	1919 1914	795	800, 733	37,757 1,738	14,500	(1) 25	21, 1
All other states	1919 1914		283,012 228,566	11	426, 920 247, 641	1	14,0 88,8

<sup>1</sup> Included in figures for fuel oils.

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

#### 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 Wood pulp purchased:	\$87, 386, 083	\$39, 408, 453	\$34, 477, 540	\$20,800,871
Tons 1	1,595,980 \$118,967,841	1,521,980 \$54,207,982	1, 241, 914 \$43, 861, 357	877, 702 \$27, 633, 164
Tons Cost Ground, Imported—	398, 133 \$10, 249, 210	379, 283 <b>\$</b> 7, 540, 922	333, 313 \$6, 764, 475	317,286 \$5,754,259
Cost	100, 440 \$3, 537, 460	153, 463 \$3, 148, 755	119,536 \$2,728,033	\$5,754,259
Tons	153,639 \$13,074,318	155, 635 \$6, 764, 892	145, 163 \$6, 464, 870	120,978 \$5,047,105
Tons	<b>\$</b> 1, 807	5, 289 \$297, 838	9,463 \$397,994	]
Tons Cost Sulphito fiber, im- ported	564,776 \$54,380,663	436, 196 \$19, 762, 127	453,636 \$19,041,329	433,160 \$16,567,122
Tons	159,307 \$14,600,807	261, 172 \$12, 128, 105	172,393 \$8,143,397	]
Tons. Cost. Sulphate fiber, im- ported— Tons	72, 440 \$6, 350, 229	16, 414 \$679, 826	* 8,410 * \$326,259	1 6, 278 1 \$264, 678
Cost Screenings, mechan- ical—	108, 584 \$9, 883, 251	88, 497 \$3, 486, 540	]	
Tons Cost Screenings, chemical—	0,488 \$321,006	4,806 \$41,841	(i) (i)	(a) (a)
Tons	29, 148 \$1, 104, 090	21, 245 \$357, 586	(3)	(a) (8)
Tons	277, 849 \$24, 217, 978	\$12, 151, 288	357, 470 \$10, 721, 559	294, 552 \$8, 864, 607
High-grade shavings, including old and waste paper— Tons	1,854,886	1,509,981	983.882	588 E45
Cost. Manila stock: Rope— Tons.	1,854,886 \$43,567,775	1,509,981 \$19,161,400	983, 882 \$13, 691, 120	588,543 \$7,430,335
Cost. Jute bagging, waste, threads, etc.— Tons	68, 235 \$5, 114, 426 48, 759	64, 256 \$2, 492, 094	117,080 \$3,560,033	107, 029 \$2, 502, 332
Cost Straw: Tons	48,759 <b>\$2,091,827</b> 853,899	56,914 \$1,553,478	303 197	904 505
Cost Other stock for making paper: Tons	853, 399 83, 594, 947	307, 839 \$1,675,598	303, 137 \$1, 460, 282	304,585 \$1,502,886
Cost China clay: Tons	106, 850 \$4, 494, 888 258, 533	97, 276 \$1, 778, 669	29, 422 \$479, 959	\$1,963,066
Cost Bleaching powder: Tons	258, 533 \$4, 421, 157 139, 914	(3)	(3)	(3)
Cost. Sulphur: Tons.	139, 914 \$5, 647, 952 187, 794	(3) (3) 136, 458	(3) (3)	(1) (1)
Cost	\$5,014,736	\$3, 134, 699	(3)	130, 400 \$3, 221, 834
All other materials, cost	\$162,968,527	\$77, 617, 680	\$57, 190, 491	<b>\$3</b> 7, 332, 383

Quantities are reported in tons of 2,000 pounds.
 Reported as "Other chemical fiber."
 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.

	. 2020, 202.	, 1000, AND	1001.	
KIND.	1919	1914	1909 1	1904
Total;				
Cords	5, 477, 832	4, 470, 763	4,001,607 \$34,477,540	3,050,717
Cost	\$87, 386, 083	\$39, 408, 453	\$34, 477, 540	<b>\$</b> 20, <b>80</b> 0, <b>8</b> 71
Spruce, domestic:				
Cords	2,313,419	1,892,739	1,653,249	1,732,531
Spruce, imported:	\$39, 783, 167	\$17,893,673	(2)	1,732,531 \$11,937,852
Cords	873,795	768,056	768, 332	538, 305
Cost Poplar, domestic:	\$18, 219, 970	\$9,008,609	(2)	\$4,570,017
Poplar, domestic:	100 100		· · ·	, ,
Cost	180, 160 \$3, 214, 901	328, 513 \$2, 714, 210	302, 876 (2)	213,058 \$1,506,971
Poplar, imported:	40, 211, 001			#1,000,BIT
Cords	158, 220	61,644	25, 622 (2)	35,313
Cost Hemlock:	<b>\$</b> 2,851′,583	\$582,924	(2)	\$251,600
Cords	795, 154	602,754	559, 657	(8)
Cost	\$8,760,805	\$4, 176, 542	(2)	(2)
Pine: White and jack pine—			''	, ,
Cords	59, 147	62,037	(2)	(9)
Cost	\$620,491	\$353, 188	(2)	(3)
Yellow pine	201 100	·		
Cords	234, 463 \$2,745, 368	79,322	(2) (2)	(2)
Balsam fir, domestic:	₩#, 130, 000	\$466, 855	(-)	(*)
Cords	181,840	125, 296	(2)	(2)
Cost Balsam fir, imported:	<b>\$</b> 2, <b>491</b> , 833	\$1,200,499	(2)	(a) (b)
Cords	106,974			
Cost	\$2,028,983			
Yellow poplar: Cords				
Cost	72,605 \$1,090,649	(2)	(2)	(2) (2)
Beech, birch, maple, etc.: Cords.	<b>41,000,013</b>	(-)	(*)	(*)
Cords	184, 111	(2)	(2) (2)	(2) (3)
Cost Slabs and other mill waste:	\$2, 228, 481	(2)	(2)	(1)
Cords	175, 081	253,887		
Cost. All other wood:	\$1,691,307	\$1,225,840		
All other wood: Cords	4 140 800	' '	201.52	
Cost	\$1,658,545	296, 515 \$1, 786, 113	691, 871	531, 510
	wx, 000, 020	1, 100, 110	(2)	\$2, 534, 431

<sup>1</sup> The figures relating to quantity for 1009 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.
2 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.

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. Cost.	5, 477, 832 \$87, 386, 083	1, 279, 852 \$24, 795, 628	375, 597 \$7, 297, 625	1, 055, 145 \$20, 498, 405	423, 822 \$6, 873, 612	854, 185 \$10, 242, 909	1, 489, 231 \$17, 677, 909
Spruce: Cords Cost Poplar:	3,187,214	1, 034, 540	262,805	860, 972	121, 653	282, 370	624, 874
	\$58,003,137	\$20, 456, 085	\$5,006,702	\$17, 184, 826	\$2, 359, 439	\$4, 365, 858	\$8, 630, 227
Cords	338,380	172, 936	68	103, 653	45, 633	2, 643	13, 447
	\$6,066,484	\$3, 136, 080	\$1,032	\$1, 882, 168	\$847, 759	\$20, 865	\$178, 580
Cords Cost All other wood:	795, 154 \$8, 760, 805	10,129 \$203,591	1,172 \$16,487	55,722 \$929,416	8,737 \$125,471	417, 868 \$4,377, 358	301, 526 \$3, 108, 482
Cords	982, 003	58, 201	92,347	21, 685	192,847	145, 436	471, 487
	\$12, 864, 350	\$976, 744	\$1,880,816	\$385, 688	\$3,103,610	\$1, 432, 397	\$5,085,095
Cords. Cost	175,081	4,046	19, 205	18, 113	54,952	5, 868	77, 897
	\$1,691,307	\$23,123	<b>\$</b> 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.

		WOOD	PULP USED.	1
KIND.	Census year.	Total.	Produced and con- sumed in same estab- lishment.	Purchased.
Total	1919 1914 1909 1904	4,019,696 3,490,123 2,826,591 2,018,764	2, 423, 716 1, 968, 143 1, 584, 677 1, 141, 062	1,595,980 1,521,980 1,241,914 877,702
Ground	1919 1914 1909 1904	1,675,063 1,504,955 1,321,368 1,012,862	1,176,490 972,229 868,519 695,576	498, 573 582, 726 452, 849 317, 286
DomesticImported	1919 1914 1909 1919 1914 1909	1,574,623 1,351,492 1,201,832 100,440 153,463 119,536	1,176,490 972,229 868,519	398, 133 379, 263 333, 313 100, 440 153, 463 119, 536
Sods fiber	1919 1914 1909 1904	396, 031 345, 354 297, 408 187, 382	242,367 184,430 142,782 66,404	153,664 160,924 154,626 120,978

Tens, 2,000 pounds.

Table 15.—Kind and Quantity of Wood Pulp Used: 1919, 1914, 1909, and 1904—Continued.

		wo	OD FULP USE	), <sup>1</sup>
KI <b>N</b> D.	Census year.	Total.	Produced and con- sumed in same estab- lishment.	Purchased
Sulphite fiber	1919 1914 1909 1904	1,617,478 1,429,528 1,199,405 812,242	893, 395 732, 160 573, 376 379, 082	724, 083 697, 368 626, 029 433, 160
DomesticBleachedUnbleached	1919 1914 1909 1919 1919	1,458,171 1,168,356 1,027,012 504,485 953,686	893, 395 732, 160 573, 376 218, 541 674, 854	564,770 436,196 453,636 285,944 278,832
Imported  Bleached Unbleached	1919 1914 1909 1919 1919	159, 307 261, 172 172, 393 44, 859 114, 448		159, 30 261, 17 172, 39 44, 85 114, 44
Sulphate fiber	1919 1914 1909 1904	265, 819 154, 553 28, 410 26, 278	84,795 49,642	181,02 104,91 2 8,41 3 6,27
DomesticBleachedUnbleached	1919 1914 1919 1919	157, 235 66, 056 31, 268 125, 967	84,795 49,642 23,263 61,532	72,444 16,41 8,00 64,43
ImportedBleachedUnbleached	1914	108,584 88,497 5,374 103,210		108, 58- 88, 49 5, 37- 103, 21-
Screenings, mechanical	1919 1914 1919 1914	20, 161 15, 586 45, 144 40, 147	10,673 10,780 15,996 18,902	9,48 4,80 29,14 21,24

<sup>1</sup> Tons, 2,000 pounds.

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.

<sup>\*</sup> Reported as "Other chemical fiber."

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

	w	OOD PULP P	URCHASED.	1
MATERIAL AND STATE.	191	9	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. New York. Maine. Wisconsin All other states	19,786,670 8,872,157 4,071,910 1,771,919 5,070,684	498,573 220,709 110,890 43,958 123,016	532,726 236,027 110,466 53,827 132,406	452,849 150,844 98,553 64,959 138,493
Soda fiber, total Massachusetts. Ohio Michigan All other states.	13,076,125 4,608,031 2,244,624 1,185,726 5,037,744	153,664 58,275 25,827 13,030 56,532	160,924 44,102 33,855 12,833 70,134	154,626 38,434 27,326 14,950 73,916
Sulphite fiber, total.  Massachusetts. New York. Ohio Michigan. Wisconsin. Fennsylvania. New Hampshire. All other states.	58,996,470 12,221,099 11,350,489 9,885,543 6,918,237 6,853,194 4,061,565 2,745,156 14,961,087	724,083 110,150 142,840 99,384 67,931 77,025 40,527 29,221 157,005	697, 368 113, 036 123, 013 86, 559 42, 765 89, 952 40, 009 (1) 202, 034	626,029 91,103 162,847 47,167 29,070 84,884 30,712 (1) 180,246
Sulphate fiber, total.  Massachusetts. New York. Ohlo. Pennsylvania. All other states.	15,683,480 2,399,356 2,125,319 1,175,094 753,537 9,230,174	181,024 25,949 22,046 13,729 8,140 111,160	104, 911 12, 786 16, 455 9, 017 10, 202 56, 451	*8,410
Screenings, mechanical and chemical, total	1,425,096	38,636	26,051	(a)
Rags, including cotton and flax waste and sweepings, total Massachusetts. Pennsylvania Ohio Wisconsin New Jersey All other states.	24, 217, 978 9, 490, 326 3, 225, 995 1, 979, 338 1, 516, 010 1, 054, 076 6, 952, 233	277, 849 60, 465 55, 238 29, 544 13, 387 13, 595 96, 620	361, 667 70, 307 63, 975 37, 303 17, 222 26, 818 137, 042	357, 470 93, 558 64, 654 33, 744 (1) 20, 484 145, 030
Paper stock, including high-grade shavings and old and waste paper, total. Michigan New York Massachusetts Ohio Illinois Ponnsylvania. New Jersey. Connecticut Indiane. All other states.	43,507,775 9,084,955 4,983,209 4,846,672 4,439,189 3,720,406 2,986,835 2,713,874 2,295,481 1,875,794 6,616,210	1,854,386 300,908 229,086 157,995 180,863 169,629 163,932 157,087 97,883 106,029 290,974	1,509,981 200,370 188,379 137,716 200,996 124,815 125,171 154,879 111,282 94,227 172,146	983, 882 114, 497 155, 436 106, 216 93, 239 106, 150 114, 437 75, 169 90, 790
Manila stock, including jute bag- ging, rope, waste, threads, etc., total. Ohio. New Jersey. All other states.	7,206,253 1,257,347 995,673 4,953,233	116, 994 18, 802 13, 820 84, 372	121,170 39,230 17,008 64,932	117,080 25,949 21,162 69,969
Straw, total. Indiana Illinois All other states.	3,594,947 1,312,867 806,778 1,475,302	353,399 143,715 86,215 123,469	307,839 93,556 74,327 139,956	303, 137 140, 580 57, 254 105, 303

Included in "All other states,"
 Reported as "Other chemical fiber."
 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.

	1919	1914	1909	1904
PRODUCTS.1				
Total value	2 <b>\$</b> 788,059,377	2 \$332,147,175	2 \$2,67656,984	\$188,715,189
Newspaper, in rolls and sheets:	1 000 000	1 010 001	4 400 000	040 000
Tons	1,323,880 \$98,559,359	1,313,284 \$52,942,774	1,168,098 \$46,390,041	\$35,906,460
Tons	69,445	96, 527	92, 158	62,606
Value	\$6,043,390	\$4,488,910	\$4,431,514	\$3,013,464
TonsValue	80,394 \$7,272,755	7,883 \$490,766	7,456 \$465,519	(1)
Book paper:	•1,1-1 <b>-</b> ,1-0	4.0.,1.00	V13.3, 5.13	\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \
Book, machine finished— Tons	532, 413 \$76, 772, 582	<b>)</b>		
Value Book, sized and supercal- endered—	\$10,112,582	786,626 \$58,496,221	575, 616 \$42, 846, 674	434,500 \$31,156,728
TonsValueCoated—	286,407 \$41,498,194	]	VII, 010, 011	401,100,720
Tons Value	132,454 \$24,009,614	117,342 \$11,605,584	95,213 \$9,413,961	(1)
Plate, lithograph, map, woodcut, etc.—				
TonsValue	9,821 \$1,556,372	9,332 \$588,332	6,498 \$555,352	19,837 \$1,458,343
Cover paper: Tons	22,163	21,679	17,578	22,150
Value Fine paper:	\$5,643,191	\$2,809,377	\$1,982,853	\$2,023,986
Ledger and highest grade—				
TonsValuePole dried—	\$12,254,967		<u> </u>	
Tons	48,564			
Value Air dried—	\$19,868,978			
TonsValue	28,786 \$9,514,618			
TonsValue	59,674 \$14,665,308	\$34,054,918	\$29,076,638	\$22,249,170
Sulphite bond— TonsValue	82,467 \$17,484,179			
All other— Tons. Value.	1	11-		
Value	<b>\$13,952,756</b>	<i>'</i>	I .	1

<sup>1</sup> Quantities reported in tons of 2,000 pounds.

2 Th addition, in 1919 paper to the value of \$1,064,772 was produced by 5 establishments engaged primarily in the manufacture of paper hoxes, 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 \$2,567,207, 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.		***************************************		
Vrapping paper:				
Manila (rope, jute, etc.)— Tons Value Heavy (mill wrappers,	111,782 \$15,493,141	77,878 \$7,070,254	73,731 \$6,989,436	86, 826 \$6, 136, 080
ctc.)— Tons Value Straw—	\$9,856,002	98,780 \$3,588,357	108, 561 \$4, 380, 794	96,992 \$4,035,588
Tons Value Bogus or wood manila, all	5,895 \$457,606	15,606 \$519,309	32,988 \$870,419	54,232 \$1,389,348
grades— Tons Value Kraft—	126,175 \$12,047,371	353,987 \$17,975,636	367,932 \$19,777,707	228,371 \$10,099,772
TonsValueAll other—	192, 583 \$26, 575, 194	100,753 \$6,949,244	12,661 \$936,940	(1)
TonsValue	\$38,639,983	\$13,269,953	\$9,265,095	177,870 \$8,774,804
phite): Tons Value	27,092 \$5,459,980	29,230 \$1,935,693	{¹}	(1)
Wood pulp— Tons Value	179,747 \$14,887,881	116,419 \$4,227,493	71,036 \$2,639,496	60,863 \$2,347,250
Straw— Tons Value News—	228,248 \$12,220,837	175, 424 \$4, 270, 519	171,789 \$3,750,851	167,278 \$4,367,560
TonsValueBinders', trunk, and	88,839 \$4,604,082	127,966 \$3,502,134	74,606 \$2,215,469	38,560 \$1,174,216
press— Tons Value Leather—	43,091 \$3,787,860	61,453 \$2,663,744	92,012	(1) (1)
YalueCardboard, bristol board, card middles, tickets,	28, 167 \$2, 263, 288	26,689 \$1,177,189	\$3,819,071	(•)
etc.— Tons Value Chip—	84,987 \$11,104,105	83,010 \$5,376,434	51,449 \$3,352,151	39,060 \$2,764,444
Tons Value All other—	\$37,749,210	(2) (2)	(2)	(2) (2)
Tons Value Pissue paper: High-grado—	518,022 \$37,464,380	700, 844 \$23, 652, 095	\$13,720,697	253,950 \$9,070,531
Tons Value White, colored and wax-	31,025. \$11,137,550			
rons Value Manila and No. 2 white—	36,545 \$7,644,952			
Tons	23,985 \$3,589,279	\$11,535,720	77,745 \$8,553,654	43,928 \$5,056,438
Tons Value Toilet—	19,206 \$5,144,895 79,740			
Tons Value Blotting paper: Tons	\$13, 178, 847 13, 420	14, 157	9,577	8,70
Value	\$3,209,137 195,244	\$1,457,807 243,908	\$1,186,180	\$1,046,700 145,02
Tons	\$17,737,341 191,617	\$9,475,733	\$9,251,308	\$4,845,62 106,29
Value	\$29,690,905	\$7,464,182	\$6,869,169	\$6,729,82
Tons Value Ground—	1,100,303 \$80,095,047	\$31,677,717	910,846 \$30,177,366	780,70 \$23,144,57
Steamed— Tons	61,411	,		

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

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

	1919	1914	1909	1904
reconucts—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 Sulphite fiber— Bleached—	\$14,939,293	\$7,213,086	\$6,572,152	\$5,159,615
TonsValue Unbleached—	288,709 \$31,715,215	\$10,803,787	444, 255	376,940
Tons	227, 395	192,687	\$17,955,748	\$13,601,464
Value Sulphate fiber— Bleached—	\$17,791,975	\$7,284,492	] 	
TonsValue	4,740 \$392,765	h	-	
Unbleached-		10,052 \$359,957	(1)	(1)
Tons Value	39,552 \$2,743,389	\$000,001	(-)	
Screenings— Mechanical—		,		
Tons Value Chemical—	2,313 \$33,448	2,553 \$27,910	8	(1)
Tons Value	22, 333 \$750, 161	15,098 \$301,566	(1) (1)	\ \{\bar{1}{2}\}
All other products, value	2 \$34,915,241	\$8,880,990	\$4,738,549	\$1,924,195
Wood rulp.				
Quantity produced (includ- ing that used in mills in		:		
which manufactured), total, tons	3,517,952	2,893,150	2,495,523	1,921,768
Steamed, tons Not steamed, tons Soda fiber—	281,635 1,237,194	} 1,293,661	1,179,266	968,976
Bleached, tons Unbleached, tons	384,085 27,608	347,928	298, 626	196,770
Sulphite fiber— Bleached, tons Unbleached, tons	509, 738 910, 091	385, 349 765, 978	} 1,017,631	750,022
Sulphate fiber— Bleached, tons Unbleached, tons	28,003 92,375	52,641	(1)	(1)
Screenings— Mechanical, tons Chemical, tons	12,220 35,003	11,769 35,824	(1)	(1) (1)

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. Wisconsin ranked first in value of heavy wrapping paper, and also 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.

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<sup>2</sup> Included in "All other boar

 $<sup>^1</sup>$  Not reported separately.  $^2$  Includes 27,460 tons of paper bags, valued at \$6,469,010, made in paper mills.

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

	191		1914	1909	11PAL STATES: 1919, 1914, 1	191	9	1914	1909
PRODUCT AND STATE.	Value.	Quantity (tons 2,000	Quantity (tons 2,000 lbs.).	Quantity (tons 2,000 lbs.).	PRODUCT AND STATE.	Value.	Quantity (tons 2,000	Quantity (tons 2,000 lbs.).	Quantity (tons 2,000
News paper, in rolls and sheets, total New York	\$98, 559, 359 35, 922, 875 28, 507, 697 9, 738, 081 9, 580, 742	1,323,880 463,341 424,706 115,987 117,386	1,313,284 489,136 336,020 135,336 111,002 79,664 31,223 130,903	1 1,175, 554 374, 808 313, 125 169, 151 43, 565	Boards—Continued. Strawboard, total. Ohio. Illinois. All other states News board, total.	\$12, 229, 837 3, 347, 752 2, 630, 255 6, 251, 830 4, 604, 082	228, 248 48, 618 42, 246 137, 384 88, 830 25, 989 62, 850	175, 424 39, 496 42, 952 92, 976 127, 986 42, 328 85, 638	171,789 37,710 29,510 104,589 74,606 33,411 41,195
New Hampshire	28, 507, 697 9, 738, 081 9, 580, 742 2, 281, 032 2, 017, 361 10, 511, 571 6, 043, 390	115, 987 117, 386 28, 950 28, 052 145, 458		16, 455 258, 450	New Jersey All other states Binders', trunk, and press boards, total Connecticut.	4,604,082 1,392,596 3,211,486 3,787,860 1,151,642 2,636,218	25, 989 62, 850 43, 091 8, 814 34, 277	42, 328 85, 638 61, 453 12, 895	33,411 41,195 (*)
Hanging papers, total. New York. Wisconsin. All other states.	6,043,300 4,374,840 1,071,483 597,067	69,445 48,215 15,728 5,504	96, 527 69, 022 14, 870 12, 635	92, 158 62, 179 8, 868 21, 111	All other states Cardboard, bristol board, card middles, tickets, etc., total. Massachusetts. All other states	2, 686, 218 11, 104, 105 4, 830, 930 0, 273, 175 2, 263, 288 394, 950	84, 277 84, 987 23, 910 61, 077	48,558	(8)
Poster, novel, tablet, lining, etc., total * Book paper: Plain, total	7,272,755	80,394 818,820	7, 883 786, 626	(4) 575, 616	Leather board, total.  New Hampshire All other states Chip board, total.	2, 263, 288 394, 950 1, 868, 338 37, 749, 210	28,167 6,250 21,917 695,963	83,010 34,899 48,111 26,689 3,972 22,717 (8)	24,755 (8) (8) (8) (8)
Book paper: Plain, total Massachusotts Pannsylvania Michigan New York Wisconsin All other states Coated, total Michigan All other states Plate, lithograph, map, woodcut, etc., total	18, 045, 565 14, 921, 845 13, 976, 418 13, 138, 331 12, 463, 685 45, 724, 932 24, 009, 614 10, 810, 359 13, 199, 255 1, 556, 372	818, 820 111, 788 96, 731 97, 220 96, 252 93, 207 323, 622 132, 454 54, 733 77, 721 9, 821	784, 585 118, 590 88, 840 78, 917 74, 560 318, 874 117, 342 26, 101 91, 241	88, 744 73, 763 72, 677 66, 139 57, 493 216, 800 95, 213 (2) 95, 213 6, 498	Strawboard, total. Ohio. Ohio. Illinois. All other states Nows board, total. New Jersey. All other states Binders', trunk, and press boards, total. Connecticut. All other states Cardboard, bristol board, card middles, tickets, etc., total. Massachusetts. All other states Loather board, total. New Hampshire. All other states Chip board, total. New Hampshire. All other states Chip board, total. New York. Illinois. New Jersey. Connecticut. All other states All other states All other boards, total. New York. Connecticut. Illinois. New York. Connecticut. Illinois. New Jersey. Connecticut. Illinois. New Jorsey. Ohio. Indiana. All other states	4, 203, 905 3, 760, 931 2, 195, 779 1, 075, 166 26, 508, 429 37, 464, 330 6, 213, 069 5, 094, 998 4, 153, 638 3, 931, 952 3, 864, 914	80, 999 75, 385 41, 041 22, 047 467, 491 518, 022 82, 316 60, 514 71, 391 53, 236 47, 959 41, 405 152, 201	(8) (8) (8) (8) (9) 700, 844 135, 407 62, 987 63, 027 74, 569 127, 814 55, 285 181, 745	51, 449 26, 694 (a) (a) (a) (a) (a) (a) (a) (a) (a) (a)
Cover paper, total	5,643,191 2,001,029	22, 163 6, 849 15, 314 825, 183	21, 679 6, 475 15, 204 247, 728	17, 578 3, 898 13, 680	Indiana. All other states  Tissue paper  High-grade, total.  New York.	2/ 372/ 332 11, 833, 477 40, 695, 523 11, 137, 550 1, 535, 775 9, 601, 775	190, 561 31, 025 6, 038	55, 285 181, 745 115, 401	40,556 172,590 77,745
Fine paper, total.  Ledger and highest grade, total.  Massachusetts. All other states. Pole dried, total.  Massachusetts. All other states. Machine dried, total. Massachusetts. All other states. Sulphite bond, total. New Hampshire. All other, total. Ohio. Pennsylvania. New Hampshire. All other states.	12, 254, 967 7, 512, 822 4, 742, 145 19, 868, 978 16, 462, 684 9, 514, 618 6, 070, 369 2, 465, 849 978, 900	30, 584 13, 584 17, 000 48, 564 39, 510 9, 054 28, 786 19, 863 6, 170			Tissue paper High-grade, total. New York. All other states White, colored and waxing, total. Manila and No. 2 white, total. New York. All other states Towel and napkin, total. Tollet, total New York All other states	7, 644, 952 3, 589, 279 2, 206, 958 1, 382, 321 5, 144, 895 13, 178, 847 8, 005, 041 5, 173, 806	24, 987 36, 545 23, 985 14, 705 9, 280 19, 266 79, 740 47, 197 32, 543	(5)	(*)
Machine dried, total  Massachusetts  All other states  Subhits bond treat	978,900 14,665,308 7,629,046 7,036,262	59, 674 30, 856 28, 818	(6)	(f)	Building, roofing, asbestos, and	3, 209, 137	13,420	14, 157	9,577
New Hampshire. New York. All other states. All other, total.	978,900 14,665,308 7,629,046 7,036,262 17,484,179 3,316,283 667,778 13,511,168 13,952,756 6,163,832 4,178,187 1,249,799 2,361,438	3, 253 59, 674 30, 856 28, 818 82, 467 17, 438 2, 721 62, 308 75, 108 31, 771 22, 684 6, 903			Building, roofing, asbestos, and sheathing paper, total. Pennsylvania. All other states. All other paper, total.	17, 737, 341 5, 202, 680 12, 534, 661 29, 690, 905	195, 244 63, 716 131, 528 191, 617	243, 908 55, 273 188, 635 93, 346	225, 824 60, 168 165, 656 96, 577
Pennsylvania New Hampshire All other states	4,178,187 1,249,799 2,361,438	22,684 6,903 13,750			All other paper, total	2, 865, 451 26, 825, 454	191, 617 12, 373 179, 244	92,795	96,577 2,390 94,187
Manila (rope, jute, tag, etc.), total.  New York.  All other states.  Heavy wrapping (mill wrappers, etc.), total.  Wisconsin  New York.  Pennsylvania.  All other states.	15, 493, 141 3, 485, 162 12, 007, 979 9, 856, 002 2, 324, 571 2, 272, 796 1, 698, 509 3, 560, 126	111,782 18,181 93,601 118,755 23,952 31,007 14,421 49,375	77, 878 16, 327 61, 551 98, 780 18, 369 11, 424 19, 654 49, 333	73,731 17,347 56,384 108,561 36,619 (2) 18,951	those in which produced, total Ground, total Maine. New York. Wisconsin All other states Soda fiber, total Sulphite fiber, total New York. Maine. Wisconsin All other states Sulphate fiber, total Screenings, mechanical, total Screenings, mechanical, total All other products.	80, 095, 047 11, 728, 801 5, 131, 076 3, 666, 570 1, 418, 865 1, 512, 290 14, 939, 293 49, 507, 190 8, 041, 032 7, 629, 408 6, 014, 906	1, 100, 303 345, 929 148, 746 110, 774 38, 163 48, 246 169, 332 516, 104 85, 672 81, 118 81, 645	912, 490 313, 951 118, 813 100, 631 43, 337 51, 170 163, 522 407, 314 53, 874 55, 432	910, 846 310, 747 107, 116 100, 383 37, 904 65, 284 155, 844 444, 255 46, 073 73, 719
Bogus or wood manila, all grades, total. New York. All other states. Kraft paper, total	12,047,371 3,248,479 8,798,892 26,575,194	49,375 5,895 126,175 36,757 89,418 192,583	15, 606 353, 987 87, 277 266, 710 109, 753	52, 991 32, 988 367, 932 79, 952 287, 980	All other states Sulphate fiber, total. Screenings, mechanical, total. Screenings, chemical, total. All other products.	27, 821, 844 3, 136, 154 33, 448 750, 161 34, 915, 241	267, 669 44, 292 2, 313 22, 333	78, 878 224, 130 10, 052 2, 553 15, 098	178,207 (*) - (*) -
Wisconsin Pennsylvania New York Vermont All other states All other wrapping paper, total.	3, 121, 783 3, 055, 854 830, 375 14, 318, 067	36, 893 23, 351 23, 604 6, 578 102, 153	15, 808 (6) (6) (8) 93, 945	(6) (6) (6) (6) (6)	Wood rule produced timelution		3, 517, 952 1, 518, 829 479, 817 469, 148 225, 843	2,893,150 1,203,661 423,605 357,393 189,221	2, 495, 523 1, 179, 268 405, 376 324, 264 166, 822 48, 390
Wisconsin Michigan New York Pennsylvania Massachusotts All other states	38,639,983 7,655,119 4,996,975 2,736,519 2,654,790 1,424,826 19,172,754	58, 934 36, 876 20, 934 25, 573 6, 820 127, 045	225, 795 60, 320 44, 677 23, 605 (2) 29, 299 67, 894	179, 855 41, 471 88, 224 30, 474 (2) 15, 507 54, 179	that used in mills which manufactured), total.  Ground, total.  New York.  Maine.  Wisconsin.  Vermont.  New Hampshire.  All other states.  Soda fiber, total.  Sulphite fiber, total.  New York.  Wisconsin.  All other states.  Sulphite fiber, total.  Maine.  New York.  Wisconsin.  All other states.  Sulphate fiber, total.  Wisconsin.  All other states.  Sulphate fiber, total.  Screenings, mechanical, total.  Screenings, chemical, total.	**************	225, 843 69, 946 41, 192 232, 883 411, 693 1, 419, 829 323, 718	54, 356 63, 883 205, 203 347, 928 1, 151, 327 236, 385	166, 822 48, 390 (4) 234, 414 298, 626 1, 017, 631 217, 501 234, 717 154, 391
Tag stock (rope, jute, and sulphite), total Boards:	5, 459, 980	27,092	29, 230	(7)	New York Wisconsin. All other states. Sulphate fiber, total	************	260, 891 233, 591 601, 629 120, 378	219, 446 188, 797	411,022
Wood pulpboard, total New York	14,887,881 3,449,512 11,438,309	179,747 44,927 134,820	116, 419 32, 376 84, 043	71,036 23,757 47,279	Wisconsin. All other states Screenings, mechanical, total. Screenings, chemical, total.		44, 119 76, 259 12, 220 35, 003	52, 641 24, 633 28, 008 11, 769 35, 824	33333

<sup>!</sup> Includes "Poster, novel, lining, etc."

2 Included in "All other states."

3 Reported as "Poster" in 1914.

4 Included in "News paper, in rolls and sheets."

Figures not available.
Included in "All other wrapping paper."
Not reported separately.
Included in "All other be "de"

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:  'Total number Capacity, yearly, tons Fourdrinier— Number Capacity per 24 hours, tons Cylinder— Number Capacity per 24 hours, tons	1, 545 7, 671, 043 862 14, 542 683 10, 549	1, 540 6, 439, 787 859 13, 545 681 8, 024	1, 480 5, 293, 397 804 10, 508 6, 316	1,369 3,857,903 752 8,569 617 4,740
Pulp equipment: 1 Grinders, number Digesters, total number Sulphite fibor Soda fiber Sulphate fiber Capacity, yearly, tons, total Ground Sulphite Soda Sulphate	789 478 202 59 4, 348, 582 1, 975, 039	1, 497 581 361 197 23 3, 708, 130 1, 789, 363 1, 341, 622 409, 325 77, 820	1, 435 542 348 194 (2) 3, 405, 621 1, 809, 685 1, 250, 983 344, 953 (2)	1, 362 517 309 208 (2) 2, 644, 753 1, 515, 088 885, 092 244, 573 (2)

<sup>1</sup> Capacity in tons of 2,000 pounds.

#### 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.	Cen-	Num- ber of estab-	Wage earners (aver- age	Primary horse-	Wages.	Cost of mate- rials.	Value of prod- ucts.	STATE.	('en-	Num- ber of estab-	Wage earners (aver- age	Primary horse-	Wages.	Cost of mate- rials.	Value of prod- nets.
	year.	lish- ments.	num- ber).	power.	Expres	sed in tho	usands.		year.	lish- ments.	num- ber).	power.	Express	ed in tho	usands.
United States	1919 1914 1909	729 718 777	113,759 88,457 75,978	1.621.154	\$135,691 53,246 40,805	\$467, 483 213, 181 165, 442	\$788,059 332,147 267,657	Minnesota	1919 1914 1909	9 8 9	2,523 1,345 607	56, 106 53, 259 23, 440	\$2,994 983 361	\$11,409 3,245 1,438	\$20, 138 5, 573 2, 385
Connecticut	1919 1914 1909	44 44 51	1,999 1,898 1,720	26,742 21,111 19,509	2,194 1,141 924	8, 217 4, 007 3, 303	12,939 5,969 5,527	New Hampshire	1919 1914 1909	27 30 34	5,000 3,905 3,413	123, 929 118, 123 79, 912	6,546 2,513 2,106	24,834 12,537 9,253	41, 826 17, 708 13, 994
Delaware	1919 1914 1909	5 7 6	683 591 516	5, 120 5, 954 4, 318	703 327 310	3, 230 1, 753 1, 587	4,578 2,481 2,292	New Jersey	1919 1914 1909	33 33 37	3, 108 2, 927 2, 223	32,948 29,695 22,996	3,722 1,709 1,181	11,995 7,181 4,769	20, 361 10, 931 7, 554
Illinois	1919 1914 1909	19 21 19	1,831 1,704 1,397	22, 438 24, 613 15, 169	2,130 1,118 727	9, 212 4, 265 3, 099	14, 356 6, 952 4, 983	New York	1919 1914 1909	156 150 178	17, 571 13, 570 12, 073	415, 306 392, 268 337, 548	22,114 8,577 6,744	76,954 35,930 31,767	129, 381 56, 336 48, 860
Indiana	1919 1914 1909	26 24 27	2,214 1,620 1,501	25, 485 20, 719 18, 382	2,239 916 754	9,514 4,314 3,497	15, 120 6, 234 5, 202	Ohio	1919 1914 1909	49 48 47	6, 899 5, 430 4, 673	64, 420 50, 013 51, 402	8, 094 3, 378 2, 419	35,710 16,109 10,898	55,098 23,284 16,965
Iowa	1919 1914 1909	4 3 4	136 87 205	1,932 1,312 1,435	141 54 81	293 183 <b>2</b> 81	612 280 437	Pennsylvania	1919 1914 1909	56 53 62	9,843 7,447 6,656	83, 510 75, 305 66, 910	12, 459 3, 483 3, 303	35,643 16,047 11,398	64,716 25,439 19,873
Kansas	1919 1914 1909	3 3 3	291 239 97	2,007 2,344 920	286 122 46	403	1,779 610 218	Vermont	1919 1914 1909	20 23 25	1,832 1,264 1,030	42,084 42,066 38,191	2, 144 811 594	6,564 3,004 2,455	3,902
Maine	1919 1914 1909	39 38 45	13, 058 10, 033 8, 647	291, 223 245, 121 223, 787	. 16, 508 6, 754 5, 267	25,458	93, 917 40, 180 33, 950	Virginia	1919 1914 1909	10 8 9	1,951 1,260 912	15, 367 13, 585 9, 770	1, 958 692 412	2, 148	5, 501 3, 657
Maryland	1919 1914 1909	10 13 13	1,408 1,586 1,249	18, 148 15, 028 11, 407	926	4, 126	9, 917 6, 149 4, 894	West Virginia	1919 1914 1909	8	956 1,033 1,162	11,735 11,025	995 506 478	1,683	2,804 2,65
Massachusetts	1919 1914 1909	86	13, 401	133,860	7,549	53, 764 26, 611 22, 350	43, 353	Wisconsin	1919 1914 1909	58	7,467	191, 693 136, 903		20,568 16,693	31, 20 25, 96
Michigan	1919 1914 1909	37	9, 561 6, 051 4, 327	62,528	3,559	40, 353 14, 545 9, 025	22.050	All other states	1919 1914 1909	23	4,098	110,822	2,789	7,736	14,32

<sup>&</sup>lt;sup>2</sup> Not reported separately.

### MANUFACTURES.

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

				PERSO	ns en	GAGED	IN THE	INDU	STRY.			WAGI NEARES	E EARN ST REP	ERS DE RESENT.	C. 15, C	OR DAY,				EXPEN	SES.
	Num-	,		Sala- ried	Clerk	s, etc.		Wa	ige earne	rs.			16 a	ıd over.	Und	er 16.			Sal	aries an	d wages.
STATE.	ber of estab- lish-		Pro- prie- tors	offi- cers, super-				Nu	mber, 15	th	day of—	Total.					C	apital.			
	ments	Total	and firm mem- bers.	in- tend- ents, and man- agers.	Male.	Fe- male.	Aver- age num- ber.		ximum onth.		Inimum month.	Total.	Male	Fe- male	Male	Fe- male	)		Off	cials.	Clerks, etc.
United States	729	124, 93	171	3,846	4,500	2,650	113,759	No	120,762	Λ	p 107, 762	122, 139	111, 12	1 10,85	2 88	78		ollars. ,794,58	3 18,7	llars. 35,837	Dollars, 11, 216, 907
California	7 44 5 19 26	933 2,353 727 2,003 2,385	5	46 189 13 81 76	37 84 23 62 53	41 75 7 28 35	806 1,999 683 1,831 2,214	Au De No Jy Oc	932 2, 195 718 1, 941 2, 395	Mi Fe Je Mi Aj	3 1,837 650 h 1,687	834 2,230 663 1,973 2,293	1,95 60 1,89 2,19	9 26	5   4 1   9   1	2	13 3 13	,930,98 ,346,92 ,802,60 ,928,74 ,030,00	11	12, 929 94, 399 74, 682 75, 247 98, 835	105,644 196,528 61,317 147,791 144,741
Iowa. Kansas Maine. Maryland. Massachusetts	3 39 10 78	15 350 14,37 1,51 14,52	7 10 1 7	6 18 329 24 432	5 670 57 613	306 306 15 497	136 291 13,058 1,408 12,960	Fe Ja Se Oc De	191 376 13,650 1,807 14,093	MI AI MI Fo	h 193 p 12,434 h 623 6 11,971	187 278 13,462 1,760 14,115	12,77 1,63 10,49	7 3 6 68 0 13	1 2	38	130 10	,515,74 ,451,86 ,702,07 ,214,63 ,302,29	2,0	32,400 36,807 58,768 06,869 81,568	11,857 35,794 1,548,411 210,014 1,419,544
Michigan Minnesota New Hampshire New Jersey New York	39 9 27 33 156	10, 22, 2, 77, 5, 33, 3, 49, 19, 22,	3 12 7 39	279 86 107 160 670	241 95 167 133 599	141 67 52 84 343	9, 561 2, 523 5, 000 3, 108 17, 571	No Ja No Oc De	9,996 2,681 5,639 3,406 19,219	M At M Aj M	u 2,305 h 4,477 p 2,799 y 16,412	9,825 2,642 5,135 3,326 19,334	8,55 2,47 4,96 3,02 18,57	8 16	3 3 4 2 44	3 14 2	20 167	,680,65 ,634,70 ,603,01 ,886,50 ,111,33	3,1	37,077 10,502 32,820 39,025 85,616	652,642 214,269 852,405 350,393 1,290,381
Ohio Pennsylvania Vermont. Virginia	49 56 20 10	7, 563 11, 023 2, 003 2, 12	3 27 3 14	269 325 67 71	210 523 53 76	184 308 42 29	6,899 9,843 1,832 1,951	No De De Se	7,464 10,447 1,972 2,046	M Al F	p 6,306 h 9,342 p 1,671 e 1,785	7,447 10,483 1,975 1,985	6,46 9,72 1,83 1,83	1 75 3 11	1 5	3 6 3	74 63 15 12	,498,11 ,882,51 ,314,13 ,881,96	$\begin{bmatrix} 1 & 1, 3 \\ 8 & 1, 6 \\ 7 & 4 \\ 3 & 4 \end{bmatrix}$	20, 891 58, 890 26, 473 54, 351	684,671 1,232,376 140,667 170,160
Washington West Virginia Wisconsin All other states <sup>1</sup>	6 9 57 23	1,76 1,03 13,91 5,14	3    4	46 50 351 151	67 22 494 187	89 8 278 72	1,610 956 12,789 4,730	De Ja De	1,801 1,171 13,394	F(M)	h 854	1,777 1,125 13,375 5,915	1,61 1,06 12,33 5,84	8 15 6 5 1 1,03 5 7	8 1 5	3	12 4 92 29	, 049, 29 , 435, 60 , 268, 72 , 322, 14	14 2 12 1 10 1,6	32, 490 64, 735 35, 327 85, 136	208,786 47,087 1,095,377 389,452
				EXPEN	SESC	ontinue	ed.									-	P	ower.			
	Salarie wage Conti	es		Rent	and t	axes.	For	mat	erials.						F	rima	ry ho	rsepow	er.		Elec-
STATE.	Conti		For					·	·	-	Value of products.	manu	i by				Own	ied.		-	horse- power gener-
	Ve earn	ıge	ontract work,	Rent	of s	axes, deral, tate, unty, and ocal.	Princi materi	pal als.	Fuel an rent of power.	1		tur	е.	Total.	Steamenging (no turbines	t st	team tur- ines.	Inter- nal- com- bus- tion en- gines,	Water power	Rent ed. <sup>2</sup>	
United States	Doll 135, 69		Dollars. 487, 240	Dollar 1,078,92		ollars. 332, 330	Dollar 412, 482,		Dollars 54, 999, 95		Dollars. 788,059,377	Dolla 320, 576		1,851,014	550 9	190	775	9 101	010 889	227 07	7 346,924
California Connecticut Delaware	92 2,19	3,418 3,938 2,665	14, 993	80 99	0 2	62,504 52,166	2,898, 7,007		508,83 1,208,85 376,82 1,050,25 1,407,31	. 11	5,805,199 12,939,103 4,573,339 14,356,529			16, 275 26, 742 5, 120 22, 438 25, 485			900 1,190	5, 151	5,721 8,119 480	7,04 1,60	
Illinois. Indiana Iowa	2, 13 2, 23	0,263 8,632 1,161	1,020	17,49 25,72	8 6	20,062 340,480 23,689 6,514	8, 162, 8, 106, 224,				15, 120, 059			22,438 25,485 1,932	III .	- 1	1,461 2,921	10 42	2,550 350	18	5,629 5 4,074
Maine Maryland Massachusetts	28 16,50 1,94 14,64	6,433 7,569 8,658 2,413	152,056 24,881	1, 20 187, 23 60 59, 03	4 6,8 0 2,6	34,993 68,006 95,199 607,871	1,000, 46,682, 6,172, 48,847,	760 333 827 111	68,40 120,02 7,988,25 643,20 4,916,77		612,132 1,778,761 93,916,628 9,916,628 87,159,890	3,100		2,007 291,223 18,148 145,323	1,05 1,85 45,65 6,35 54,75	98   18	2,348 0,600 5,045	12 7	202,302 490 50,340	30, 91 69 25, 13	65 8 41,433 12,229 16,294
Michigan Minnesota New Hampshire New Jersey New York	2,99 6,54 3,72 22,11	3, 895 5, 865 2, 101 4, 221	9, 145 30, 903 85, 449	32,72 5,23 6,06 227,47		084,802 748,238 555,267 871,622 868,760	1	358	3, 925, 14 1, 381, 83 2, 734, 04 1, 628, 52 8, 819, 38		66, 299, 513 20, 138, 482 41, 825, 551 20, 360, 692 129, 381, 032	16,991 2 8,365 2 52,427		95,729 56,106 123,929 32,948 415,306	57, 34 11, 38 14, 19 22, 77 81, 19	47   10 50   15 71   15 27   15	0,050 565 2,917 1,007 5,510	1,655 526	23, 019 40, 036 59, 516 2, 423 260, 917	5,31 4,15 37,30 5,09 57,22	8,794 12,991 3,658 48,887
Ohio Pennsylvania Vermont. Virginia	12, 45 2, 14 1, 95	4,230 9,234 4,116 8,230	12,506 3,090 4,176	7, 64 82, 40 280, 85 80, 38	11 2	12,475 554,938 239,151 198,419	32,762, 31,047, 5,830, 7,051,	615	2,947,47 4,595,48 733,68 743,73	71 39 35 37	55,098,196 64,715,767 10,862,858 13,602,264	19,387 7 29,072 3 4,298 4 5,806	, 848 2, 649 8, 558 6, 590	64,420 83,510 42,084 15,367	47,75 64,95 5,1 6,35	23 1 35 70	1,579 7,287 8,575	30 55 50 225	2, 105 6, 000 34, 080 1, 865	2,78	3 25,227 35,936 34 3,445 31 8,694
Washington West Virginia Wisconsin All other states 1	14,01	3,628 5,250 0,430 7,283	6,631 135,052 7,338	4,71 40,83 17,50	9 6,6	538,094 174,879 547,183 577,018	4,286, 2,908, 39,567, 10,016,	641 1	775,66 393,15 5,633,30 2,399,78	30 35 34 34	10,653,361 4,887,568 80,328,483 23,727,345	5 500		31,809 12,138 237,239 85,738	6,5 6,0 37,2 26,8	20 30 89 11 34	795 1,000 8,259 9,766	250 320	1,800 3,600 166,514 38,636	15, 17	7   53,525

<sup>1</sup> 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.

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

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

### 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 proper 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 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, 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" represents 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 for 1919 and 1914, and by states for 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 for 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 for 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.

						PER	CENT OF	INCREAS	E.I
	1919	1914	1909	1904	1899	1914- 1919	1909- 1914	1904- 1909	1899- 1904
Number of establishments.		33, 471	31,445	27,793	23,814	-3.0	6.4	18.1	16.7
Persons engaged Proprietors and firm members Salaricd employees. Wage earners (average number).	455,822 28,493 140,051 287,278	419, 313 31, 041 116, 180 272, 092	388,466 30,424 99,608 258,434	316,047 28,368 68,592 219,087	261,440 25,495 40,685 195,260	8.0 -8.2 21.4 5.6	7.9 2.0 16.6 5.3	22, 9 7, 2 45, 2 18, 0	20.9 11.3 68.6 12.2
Primary horsepower. Capital	362,123 \$1,150,505,247	329,210 \$720,231,654	297,763 \$588,345,708	166,380 \$432,853,984	119,775 \$333,003,432	10.0 59.7	10.9 22.4	79. 0 35. 9	38.9 30.0
Salaries and wages. Salaries. Wages.	563, 584, 011 232, 064, 588 331, 519, 423	332,907,294 137,396,936 195,510,358	268, 086, 431 103, 458, 251 164, 628, 180	194, 944, 287 67, 748, 298 127, 195, 989	139, 291, 335 39, 475, 220 99, 816, 115	69.3 68.9 69.6	24.2 32.8 18.8	37.5 52.7 29.4	40,0 71.6 27.4
Paid for contract work. Rent and taxes Cost of materials Value of products. Value added by manufacture 2.	87,687,115 56,464,238	41,532,901 24,291,193 257,847,976 901,534,801 643,686,825	36,384,359 16,347,981 201,774,590 737,876,087 536,101,497	28,880,362 212,123,388 142,514,182 552,473,353 409,959,171	19,235,938	111. 1 132. 4 121. 6 88. 5 75. 3	14, 2 48, 6 27, 8 22, 2 20, 1	26.0 34.8 41.6 38.6 30.8	

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

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

					establishme	NTS ENGAG	ED PRIMARILY	IN	
	TOTAL	FOR INDUSTRY.		Printing and p	ublishing, book	and job.	Printing and	l publishing, n	nusic.
	1919	1914	Per cent of in- crease, <sup>1</sup> 1914- 1919.	1919	1914	Per cent of in- crease, 1914- 1919.	1919	1914	Per cent of in- crease,1 1914- 1919.
Number of establishments	32,476	33, 471	-3.0	13, 089	12, 115	8.0	160	180	-11.1
Persons engaged Proprietors and firm members Salaried employees Wage earners (average number)	455, 822 28, 493 140, 051 287, 278	419, 313 31, 041 116, 180 272, 092	8. 0 8. 2 21. 4 5. 6	171, 199 12, 185 36, 009 123, 005	152, 908 11, 717 28, 070 113, 121	12.0 4.0 28.3 8.7	2,622 107 1,616 809	2,182 146 1,163 873	20, 2 -26, 7 39, 0 3, 0
Primary horsepower	362, 128 \$1, 150, 505, 247	329, 210 \$720, 231, 654	10. 0 59. 7	131, 961 \$405, 554, 984	115, 233 \$247, 282, 409	. 14. 5 64. 0	\$8,006,122	594 \$4, 260, 844	6. 7 87. 9
Salaries and wages Salaries Wages	331, 519, 423	332, 907, 294 137, 396, 936 195, 510, 358	69.3 68.9 69.6	207, 196, 883 65, 720, 640 141, 476, 243	113, 419, 236 35, 005, 536 78, 413, 700	82.7 87.7 80.4=	3, 974, 228 3, 047, 240 926, 988	1,903,872 1,330,887 572,985	108. 7 129. 0 61. 8
Paid for contract work  Rent and taxes. Cost of materials. Value of products Value added by manufacture *	87,687,115 56,464,238 571,510,277 1,699,789,229 1,128,278,952	41, 532, 901 24, 291, 193 257, 847, 976 901, 534, 801 643, 686, 825	111, 1 132, 4 121, 6 88, 5 75, 3	32, 243, 303 19, 853, 046 211, 067, 174 597, 663, 228 386, 596, 054	17, 658, 478 10, 278, 667 96, 453, 232 307, 330, 861 210, 877, 629	82. 6 93. 1 118. 8 94. 5 83. 3	2, 713, 899 642, 299 2, 123, 781 14, 592, 177 12, 468, 396	1,561,812 246,945 1,046,630 7,271,266 6,224,636	73. 8 160. 1 102. 9 100. 7 100. 3
value added by manufacture *	1, 128, 278, 952	043,080,825		ABLISHMENTS EN			12, 468, 396	0, 224, 636	10

				ES.	fablishmen'	rs Engl	GED PRIMAI	RILY IN—				٠
	Printing an papers :	d publishing, and periodica	news- ls.		ng and bland making,	k-book	Engraving plate, inclu	, steel and d ding plate pr	copper inting.	Lith	ographing.	
	1919	1914	Per cent of in- crease, <sup>1</sup> 1914- 1919.	1919	1914	Per cent of in- crease, <sup>1</sup> 1914- 1919.	1919	1914	Per cent of in- crease, <sup>1</sup> 1914- 1919.	1919	1914	Per cent ofin- crease, <sup>1</sup> 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, 630	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	80,065	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	\$29, 179, 790	-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		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	15,020,590	73. 8	10,787,426	6, 404, 409	68. 4	27,314,040	16, 572, 216	64. 8
	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
	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. Rent and taxes. Cost of materials. Value of products. Value added by manufacture <sup>2</sup> .	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
	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
	300, 385, 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
	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
	623, 767, 691	366, 828, 730	70. 0	42, 785, 506	24, 770, 161	72. 7	17, 228, 407	9, 871, 877	74.5	45, 432, 898	26, 118, 792	80. 9

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

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

	Number	WAGI	E EARNERS	•	VALUE (	or produc	rs.	VALUE ADDED	BY MANUF	ACTURE.
STATE.	of establish- ments.	Average number.	Per cent distribu- tion.	Rank.	Amount (expressed in thousands).	Per cent distribu- tion.	Rank.	Amount (expressed in thousands).	Per cent distribu- tion.	Rank.
United States	32,476	287, 278	100.0		\$1,699,789	100.0		\$1,128,279	100. 0	
New York Illinois. Pennsylvania. Ohio Massachusetts.	2,457	67, 491 36, 537 26, 456 19, 174 18, 247	23.5 12.7 9.2 6.7 6.3	1 2 3 4 5	478, 898 219, 331 165, 344 112, 029 104, 551	28. 2 12. 9 9. 7 6. 6 0. 2	1 2 3 4 5	326, 371 140, 023 104, 322 73, 712 69, 645	28. 9 12. 4 9. 3 6. 5 6. 2	1 2 3 4 5
California. Missouri. Michigan Minnesota. Texas.	1,504 1,310 1,045 1,003 1,087	10, 047 11, 465 7, 880 6, 319 5, 594	3.5 4.0 2.7 2.2 1.9	7 6 8 10 12	61, 815 61, 250 46, 829 33, 480 32, 687	3.6 3.6 2.8 2.0 1.9	6 7 8 9 10	41,476 38,118 31,293 23,127 21,561	3.7 3.4 2.8 2.0 1.9	6 7 8 9 10
Indiana Iowa Wisconsin New Jersey Maryland	997 842	6,772 4,808 5,838 5,358 4,391	2.4 1.7 2.0 1.9 1.5	9 14 11 13 15	30, 612 26, 806 26, 467 24, 218 23, 835	1.8 1.6 1.6 1.4 1.4	11 12 13 14 15	20,504 18,955 17,377 15,567 14,720	1.8 1.7 1.5 1.4 1.3	11 12 13 14 15
Washington District of Columbia Tennesses Nebraska Georgia	569 186 366 694 418	2,453 2,154 2,967 2,531 2,844	0.8 0.7 1.0 0.9 1.0	23 25 18 22 19	17, 349 16, 859 15, 833 15, 322 14, 130	1.0 1.0 0.9 0.9 0.8	16 17 18 19 20	12,796 12,311 10,361 10,374 8,908	1.1 1.1 0.9 0.9 0.9	16 17 19 18 21

<sup>3</sup> Value of products less cost of materials.

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

	Number	WAGE	EARNERS		VALUE (	F PRODUC	rs.	VALUE ADDED	BY MANUE	ACTURE.
STATE.	of establish- ments.	Average number.	Per cent distribu- tion.	Rank	Amount (expressed in thousands).	Per cent distribution.	Rank.	Amount (expressed in thousands).	Per cent distribu- tion.	Rank.
Connecticut. Virginia Kansas Colorado Kentucky	412 380 738 464 373	3,021 2,719 3,043 2,306 2,850	1.1 0.9 1.0 0.8 1.0	17 21 16 24 20	\$14,036 13,162 12,717 12,613 11,735	0.8 0.8 0.7 0.7 0.7	21 22 23 24 25	\$0,496 8,626 7,696 8,449 8,121	0.8 0.8 0.7 0.7	20 22 25 23 24
Oklahoma Oregon Louislana Rhode Island	510 358 270 155	1,931 1,595 1,581 1,650	0.7 0.6 0.6 0.6	26 30 31 27	10, 241 10, 155 8, 110 7, 326	0.6 0.6 0.5 0.4	26 27 28 29	7,193 7,149 5,029 5,108	0.6 0.6 0.5 0.5	26 27 29 28
Alabama North Carolina Maine Florida	237 319 175 237	1,253 1,608 1,599 1,172	0, 4 0. 6 0. 6 0. 4	33 28 29 35	7, 286 6, 404 5, 932 5, 618	0.4 0.4 0.3 0.3	30 31 32 33	4,907 4,371 3,531 3,911	0.4 0.4 0.3 0.3	30 31 33 32
West Virginia. Montana Arkansas. Utah	222 247 - 294 156	1,339 1,011 1,102 1,218	0.5 0.4 0.4 0.4	32 38 36 34	4,837 4,763 4,747 4,581	0.3 0.3 0.3 0.3	34 35 36 37	3,255 3,436 3,300 3,165	0.3 0.3 0.3 0.3	36 34 35 37
South Carolina. South Dakota. North Dakota. All other states.	174 358 318 994	1,022 706 660 4,508	0,4 0,3 0,2 1,6	37 40 41	4,005 3,882 3,225 16,769	0.2 0.2 0.2 1.0	38 39 40	2,801 2,900 2,374 11,939	0.2 0.3 0.2 1.1	39 38 40

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

CLASS.	Cen-	Maria I	35.1.	Fe-		CENT OTAL,		Cen-			Fe-	PER OF TO	
CLASS.	sus year.	Total.	Male,	male.	Male.	Fe- male,	CLASS.	sus year.	Total.	Male,	male.	Male.	Fe- male.
All classes	1919 1914 1909	455, 822 419, 313 388, 466	1325, 983	120, 159 93, 330 86, 785	73.6 77.7 77.7	26.4 22.3 22.3	Clerks and other subordinate salaried employees.	1919 1914 1909	110,380 94,510 80,700	62,338 62,436 54,905	48,042 32,074 25,795	56. 5 66. 1 68. 0	43.5 33.9 32.0
Proprietors and officials	1919 1914 1909	58, 164 52, 711 49, 332	54,606 50,236 47,351	3,558 2,475 1,981	93. 9 95. 3 96. 0	6. 1 4. 7 4. 0	Wage earners (average number)	1914	287, 278 272, 092 258, 434	218, 719 218, 311	68,559 58,781 59,009	76.1 78.4 77.2	23.9 21.6 22.8
Proprietors and firm members	1919 1914 1909	28, 493 31, 041 30, 424	26,941 29,467 29,130	1,552 1,574 1,294	94. 6 94. 9 95. 7	5. 4 5. 1 4. 3	16 years of age and over	1919 1914	278,990 265,860	211,939	67,051 57,807 57,926	76.0 78.3 77.0	24.0 21.7 23.0
Salaried officers of corporations	1919 1914 1909	11,523 9,000 7,265	10,805 8,528 6,952	718 472 313	93. 8 94. 8 95. 7	6.2 5.2 4.3	Under 16 years of age		8,288 6,232 6,333	6,780 5,258 5,250	1,508 974 1,083	81.8 84.4 82.9	18.2 15.6 17.1
Superintendents and managers.	1919 1914 1909	18, 148 12, 670 11, 643	16,860 12,241 11,269	1,288 429 374	92.9 96.6 96.8	7.1 3.4 3.2			3,000	5,200	2,000	32.0	11.1

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.]

	Aver- age		NUMB	ER EMPLO	YED ON	15тн дач	OF THE	MONTH O	R NEARES	T REPRES	BENTATIVI	DAY.		Per
INDUSTRY, SEX, AND STATE.	num- ber em- ployed during year.	Janu- ary.	Febru- ary.	March.	April.	May.	June.	July.	August.	Septem- ber.	Octo- ber.	Novem- ber.	December.	mini- mum is of maxi- mum.
United States: 1919. Males. Females. 1914	287, 278 218, 719 68, 559 272, 092	276,442 209,618 66,824 274,519	278,620 211,226 67,394 274,926	281, 043 212, 977 68, 066 276, 848	281, 491 214, 274 67, 217 273, 961	283, 046 215, 894 67, 152 272, 907	285, 243 218, 242 67, 001 271, 313	288, 116 220, 147 67, 969 267, 625	291, 226 222, 802 68, 424 286, 932	293, 648 224, 746 68, 902 269, 842	287, 446 218, 248 69, 198 271, 909	298, 783 222, 734 71, 049 271, 598	307, 232 233, 720 73, 512 272, 724	90. 0 89. 7 90. 9 96. 4
Printing and publishing, book and job: 1919	91, 544 31, 461 113, 121	119, 117 88, 480 30, 637 114, 868	119,993 88,916 31,077 115,215	120, 294 89, 080 31, 214 116, 496	120, 266 89, 518 30, 748 114, 034	120, 515 90, 069 80, 446 113, 221	121, 811 91, 107 30, 704 112, 223	123, 230 92, 198 31, 032 110, 453	125, 111 98, 752 31, 359 110, 475	126, 470 94, 623 31, 847 111, 999	121,000 89,436 31,564 112,852	124, 512 91, 866 32, 646 112, 726	133, 741 99, 483 34, 258 112, 890	89. 1 88. 9 88. 9 94. 8
Males. Females. 1914 Printing and publishing, newspapers	899 714 185 873	840 661 179 893	863 675 188 889	850 658 192 901	890 692 198 887	909 718 191 876	920 738 182 850	897 725 172 845	892 721 171 849	902 732 170 873	919 740 179 877	950 755 195 884	958 753 203 852	87. 9 87. 2 83. 7 93. 8
Males Females 1914	00' 570	115,928 95,896 20,530 114,492	116, 902 96, 304 20, 598 114, 495	118, 549 97, 530 21, 019 114, 838	118, 724 97, 981 20, 743 114, 812	119, 798 98, 960 20, 838 114, 842	120, 078 99, 629 20, 449 114, 145	120, 617 99, 796 20, 821 112, 555	121, 511 100, 730 20, 781 112, 504	122, 279 101, 635 20, 644 113, 694	121, 215 100, 522 20, 693 115, 041	123,006 102,006 21,000 115,248	125, 967 104, 375 21, 592 115, 834	02. 0 91. 4 94. 7 97. 1

### PRINTING AND PUBLISHING.

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.]

n to nation on i	Aver-				TED ON 1							DAY.		Per
INDUSTRY, SEX, AND STATE.	age num- ber em- ployed during year.	Janu- ary.	Febru- ary.	March.	April.	Мау.	June.	July.	August.	Septem- ber.	Ooto- ber.	November.	Decem- ber.	cent mini- mum is of maxi- mum.
Bookbinding and blank-book making: 1919 Males Females 1914. Engraying, steel and copper plate, in-	20, 361 10, 195 10, 166 21, 693	19,854 9,491 9,863 22,166	19, 565 9, 670 9, 895 22, 311	19, 858 9, 840 10, 018 22, 536	19,789 9,888 9,901 22,099	19, 756 9, 806 9, 950 21, 706	20, 016 10, 096 9, 920 21, 781	20, 488 10, 345 10, 143 21, 853	20, 734 10, 409 10, 325 21, 272	20,773 10,521 10,252 21,376	20, 845 10, 483 10, 362 21, 191	21, 379 10, 763 10, 616 20, 878	21, 775 11, 028 10, 747 21, 147	88. 9 80. 1 91. 8 92. 6
cluding plate printing: 1919 Males. Fémales. 1914.	7,014 4,273 2,741 6,859	6,462 3,996 2,466 7,020	6,551 4,030 2,521 6,977	6,530 4,044 2,486 6,917	6,778 4,152 2,624 6,951	6,927 4,219 2,708 7,022	6, 998 4, 299 2, 699 6, 971	7,040 4,363 2,677 6,710	6, 978 4, 332 2, 646 6, 624	7, 103 4, 372 2, 731 6, 724	7, 288 4, 299 2, 989 6, 761	7, 572 4, 447 3, 125 6, 704	7,043 4,723 3,220 6,927	81.4 84.6 76.6 94.3
Lithographing: 1919. Males Females. 1914.	15, 618 12, 421 3, 197 15, 171	14,748 11,594 3,149 15,080	14,746 11,631 3,115 15,039	14, 962 11, 825 3, 137 15, 160	15,046 12,043 <i>5,008</i> 15,178	15, 141 12, 122 3, 019 15, 240	15, 420 12, 373 3, 047 15, 343	15, 844 12, 720 3, 124 15, 209	16,000 12,858 3,142 15,208	16, 121 12, 863 3, 258 15, 176	16, 179 12, 768 3, 411 15, 187	16, 364 12, 897 3, 467 15, 158	16,850 13,358 3,492 15,074	87. 5 86. 8 86. 0 98. 0
Alabama Arizona Arkansas California Coiorado	1, 253 518 1, 110 10, 047 2, 306	1,178 501 1,045 9,522 2,230	1, 219 507 1, 074 9, 680 2, 216	1, 227 505 1, 062 9, 677 2, 255	1,253 504 1,074 9,670 2,277	1, 258 512 1, 098 9, 764 2, 315	1, 231 510 1, 099 9, 910 2, 293	1, 242 520 1, 108 10, 041 2, 325	1, 244 514 1, 118 10, 134 2, 340	1,285 519 1,137 10,119 2,216	1, 290 534 1, 146 10, 401 2, 361	1, 294 538 1, 198 10, 782 2, 411	1, 320 552 1, 161 10, 855 2, 433	88. 9 90. 8 87. 2 87. 7 91. 1
Connecticut	3,008 381 2,154 1,172 2,895	2,902 365 1,992 1,171 2,777	2,952 370 2,056 1,171 2,778	2, 981 377 2, 121 1, 162 2, 825	3,016 378 2,120 1,158 2,803	3,045 381 2,099 1,120 2,814	3, 045 373 2, 166 1, 131 2, 851	3, 037 376 2, 167 1, 118 2, 847	3, 048 378 2, 137 1, 140 2, 889	3,083 893 2,128 1,144 2,992	3,177 392 2,223 1,190 3,024	3, 244 392 2, 302 1, 242 3, 041	3,286 397 2,337 1,317 3,099	88.3 91.9 85.2 84.9 89.6
Idaho Illinois Indiana Iowa Kansas	438 36, 537 6, 772 4, 831 3, 055	404 35,637 6,872 4,574 2,966	410 35,933 6,533 4,644 3,000	403 35,582 6,561 4,708 3,015	437 54,860 6,643 4,716 3,012	437 35, 094 6, 696 4, 690 3, 031	440 35, 524 6, 796 4, 709 3, 025	433 36, 528 6, 845 4, 756 3, 034	434 37, 592 6, 900 4, 773 3, 035	450 37, 705 6, 909 4, 714 3, 073	451 37,058 7,013 5,084 3,117	470 37, 941 6, 992 5, 174 3, 150	487 38,990 7,004 5,421 3,202	82. 8 89. 4 90. 9 84. 4 92. 6
Kentucky. Louisiana. Maine. Maryland. Massachusetts.	2,882 1,583 1,600 4,391 18,247	2,906 1,493 1,630 4,336 17,209	2,925 1,497 1,649 4,311 17,433	2, 953 1, 515 1, 664 4, 304 17, 678	2,969 1,534 1,642 4,296 17,980	2,608 1,567 1,598 4,313 18,154	2, 647 1, 578 1, 587 4, 303 18, 253	2,669 1,580 1,553 4,347 18,188	2,716 1,603 1,500 4,406 18,101	3, 033 1, 611 1, 532 4, 432 18, 392	3, 022 1, 653 1, 561 4, 471 18, 921	3, 053 1, 670 1, 621 4, 553 19, 274	3,083 1,695 1,663 4,620 19,381	84. 6 88. 1 90. 1 93. 0 88. 8
Michigan Minnesota Mississippi Missouri Montana	7,899 6,352 595 11,465 1,011	7,472 6,075 576 10,778 981	7,602 6,174 581 11,021 976	7,606 6,193 578 11,159 990	7,648 6,260 586 11,183 1,012	7,662 6,276 585 11,137 1,010	7,715 6,250 593 11,291 1,017	7,826 6,256 595 11,336 1,025	7, 935 6, 342 595 11, 438 1, 010	8, 146 6, 402 595 11, 525 1, 013	8, 275 6, 535 611 11, 894 1, 023	8, 355 6, 696 622 12, 261 1, 047	8, 546 6, 761 623 12, 562 1, 028	87. 4 89. 9 92. 5 85. 8 93, 2
Nebraska Nevada New Hampshire New Jersey New Mexico	2, 531	2,883 127 823 5,194 277	2,412 120 848 5,291 201	2, 442 129 858 5, 316 288	2, 475 129 862 5, 220 281	2,504 132 872 5,352 280	2, 522 132 849 5, 394 280	2,475 133 842 5,265 288	2,521 129 834 5,189 292	2,582 130 860 5,245 292	2,611 133 869 5,519 292	2, 706 126 896 5, 491 289	2,789 134 931 5,796 294	87. 0 94. 0 88. 4 89. 5 94. 2
New York North Carolina North Dakota Ohio. Oklahoma	67, 491 1, 617 660 19, 174	65,889 1,585 632 17,849 1,839	66,512 1,671 631 17,981 1,837	67, 648 1, 576 637 18, 225 1, 852	67, 895 1, 586 645 18, 507 1, 896	68, 174 1, 587 655 18, 712 1, 885	68,353 1,608 672 19,003 1,889	69, 251 1, 611 653 19, 344 1, 924	69, 986 1, 629 667 19, 542 1, 986	70,681 1,643 672 19,564 2,010	60,556 1,653 674 19,997 2,030	62, 574 1, 677 684 20, 568 2, 017	72, 373 1, 678 698 20, 796 2, 027	83. 7 93. 6 90. 4 85. 8 90. 5
Oregon Pennsylvania Rhode Island South Carolina. South Dakota	1,595 26,456 1,650 1,025 766	1,535 25,906 1,555 984 739	1,526 25,388 1,547 998 730	1, 531 25, 780 1, 580 996 742	1,559 25,517 1,581 1,004 740	1,589 25,922 1,607 1,010 739	1,586 26,247 1,645 1,017 746	1,578 26,371 1,640 1,020 752	1,598 26,701 1,625 1,029 759	1,599 26,964 1,676 1,047 767	1,640 27,319 1,718 1,055 813	1,075 27,659 1,766 1,056 830	27, 698 1, 860 1, 075	88, 5 91, 7 83, 2 91, 5 87, 4
Tennessee Texas Utah Vermont Virginia	3,009 5,594 1,258 616 2,829	2,782 5,318 1,234 608 2,766	2,845 5,364 1,235 610 2,807	2, 854 5, 363 1, 236 606 2, 826	2, 959 5, 406 1, 252 609 £, 748	2,995 5,416 1,262 608 2,756	3,023 5,505 1,247 610 2,779	3,004 5,641 1,229 608 2,832	3,030 5,707 1,245 621 2,839	3, 107 5, 609 1, 256 624 2, 860	3,136 5,908 1,282 628 2,888	3, 175 5, 964 1, 306 625 2, 915	1, 312	87. 0 89. 2 93. 7 95. 4 93. 7
Washington West Virghis. Wisconsin Wyoming		2,303 1,309 5,421 208	2,321 1,304 5,529 204	2,340 1,326 5,579 212	2, 428 1, 322 5, 614 216	2,444 1,357 5,694 221	2, 454 1, 378 5, 741 226	2,427 1,367 5,861 239	2, 475 1, 371 5, 898 251	2, 311 1, 373 5, 974 254	2,536 1,368 6,146 248	2,580 1,392 6,228 261	6,371	84.7 93.7 85.1 76.1 Per ct.
States showing large proportion of females.	646	626	624	631	639	644	637	619	625	644	675	684	704	av. is of state. 21, 1 22, 1
Connecticut. District of Columbia. Georgia. Illinois. Indiana.	475 554 8,943 1,805	471 529 8,874 1,673	480 536 8,880 1,732	493 552 9,097	486 562 8,508	471 542 8,416 1,783	473 543 8, 451 1, 803	491 544 8,736 1,855	469 540 9 206	448 565 9, 218	468 573 8,996 1,883	469 566 9,245 1,875	488 596 9,689 1,862	19.1 24.5 26.7
Maine. Massachusetis. Michigan Missouri	632 4,961 2,036 3,271	671 4,720 1,940 3,201	683 4,827 1,966 3,250	690 4,896 1,975 3,253	4,942 1,958 3,162		614 4,981 1,964 3,162		2,013 3,150	4,933 2,112 3,211	3,353	5,237 2,186 3,579	5,216 2,259 3,646	39. 5 27. 2 25. 8 28. 5
New York Ohio Pennsylvania Wisconsin	4,689	15,654 4,485 6,448 1,598	4,405 6,513	16, 067 4, 426 6, 583 1, 623	15, 903 4, 505 6, 496 1, 623	15,946 4,596 6,536 1,644	15,686 4,627 6,445 1,656	16, 064 4, 755 6, 555 1, 651	6,683	16,091 4,711 6,724 1,706	0.892	15,305 5,053 7,019 1,921	5,156 6,872	23.5 24.5 25.1 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.

			IN	ESTABI HOUR	LISHMEN S OF LA	ITS WH BOR PE	ere te R Wee	ie pre k wer	VAILIN E—	3				IN F		SHMEN OF LAB					
INDUSTRY AND STATE.	Cen- sus year.	Total.	44 and under	Be- tween 44 and 48.	48.1	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Over 60.	Industry and State.	Cen- sus year.	Total.	44 and under	Be- tween 44 and 48.	48.1	Be- tween 48 and 54.	54.	Be- ween 54 and 60.	60.	Over 60.
United States	. 1919 1914 1909	287, 278 272, 092 258, 434	24, 274 (2) (2)	l (3) l	216, 138 186, 759 138, 850	37, 249	35.118	8, 131	1,841 4,501 10,911	387 334 719	Minnesota	1919 1914	6,352 6,134	404 ( <sup>2</sup> )	595 (²)	4,661 3,442	353 1,639	298 795	12 64	28 172	22 22
rintingand pub- lishing, book an	1919	123, 005 113, 121	8,500	2,927	98, 259 80, 023	10.453	2.048	467 1,293		110 18	Mississippi	1919	595 673	( <sup>2</sup> ) <sup>6</sup>	(2) 493	398 369, 8,171	11 21 846	75 157 574	18 6 24	84 120 84	; 
job. Frinting and pub- lishing, music.	1	899 878		(2)	864 95	14 676	1 60	8 39	3		Missouri	1919	11,465 10,571	1,200 (2) 4	( <sup>2</sup> )	7,550	1,358	1, 283	155	212	1
Printing and pub- lishing, news- papers and pe-	·   1914	120,381 114,378	12,573 (2)	4,689 (2)	83,406 80,130	6,074 7,977	7,643 17,057	4, 225 5, 139	1,497 3,765	274 307	Montana Nebraska	1919 1914 1919	1,011 902 2,531 2,413	( <sup>2</sup> ) 74	(2) 16	713 1,880 1,238	28 295	98 219	59 6	4 34	• • •
riodicals. Bookbinding and blank-book	1919		2,049 ( <sup>2</sup> )	440 (2)	15,033 9,195		683 5,053	262 1,593	93 38	3	Nevada	1914 1919 1914	2,413 130 161	(2) 5 (2)	(2) (2)	1,238 113 161	429	627	25 12	91	
making. Engraving, stee and copper plat- including plate	9, 1914		949	406 ( <sup>3</sup> )	4,932 4,932	590 1,727	112 327	25 47	<b>5</b> 5	9	New Hampshire	1919 1914	862 717	49 (2)	3 (2)	674 201	70 169	60 198	6 146	3	•••
printing. Lithographing	. 1919 1914		193 1 (2)	481 (2)	13,644 12,622	1,259 1,910	17 528	16 20	10 91		New Jersey	1919 1914	5, 356 5, 433	370 (²)	123 (2)	4,119 3,509	529 929	66 624	133 285	15 83	
Alabama	. 1919 1914		(2)	8 (2)	1,013 737	90 78	80 335	4 44	34 90	15 62	New Mexico	1919 1914	287 258	(2)	(2)	276 178	<sub>i</sub>	10 41	29	9	 
Arizona	1919 1914		(2)	(2)	460 322		1 12	<sub>i</sub> .			New York	. 1919 1914		11, 201 (2)	1,783 (2)	48, 492 44, 314	3,128 10,504	1,376 7,407	1,448 1,522	63 220	
Arkansas	1919 1914		(2)	(2)	800 534	31 51	193 137	30 30	5 <u>4</u> 128	16 13	North Carolina	. 1919 1914		( <sup>2</sup> )	(2)	1,129 720	96 79	98 422	86 90	119 231	ļ.,
California	1919 1914		527 (2)	829 (2)	8,533 8,208	49 184	89 322	4	16 39	<sub>2</sub>	North Dakota	1919 1914		(2)	(2)2	573 405	22 91	32 186	9	17 59	
Colorado	1919 191		34 (2)	(2)	2,211 1,927	4 24	25 118	10 95	4 8	4 1	Ohio	. 1919 1914	18,070	504 (²)	1,032 (2)	15, 192 12, 587	1,424 1,826	496 2,453	401 1,055	77 149	ļ
Connecticut	191 191		217 (²)	219 (2)	2,156 1,647	235 675	61 348	179 72	96		Oklahoma	- 1919 1914		(2)	(2)3	1,613 1,176	31 50	122 295	138 22	13 68	
Delaware	191 191		(2)	(2)	301 212	98	31 33	8 23	1 5		Oregon	. 1919 1914		(2)	(2)	1,381 1,365	32 48	15 128	1	13	
District of Colum bia.	191		103	145 (2)	1,719 1,578	58	38	187	3		Pennsylvania	. 1919 1914		1,720	660 (2)	21, 320 18, 878	1,677 4,230	797 2,980	713	47 97	
Florida	191 191	4 1,220	(2)	(2)	924 604	32 102	146 349	35 142	14 23		Rhode Island	1919 1914	1,515	1	(2)	1, 231 1, 158		121	19	21	ŀ
Georgia	191	4 2,476	II.	(2)	1,495	158 292	274 393	106 82	68 191	23	South Carolina	1914	901	(2)	(2)	793 456		114 211	23 57	25 115	
Idaho	191	4 488	3 (2)	(2)	364 352	11 32	16 68	12 22	14		South Dakota	1914	1 801	(2)	(2)3	498	141	162 315	13	33 58	
Illinois	191	4 32, 838	(2)	(2)	24, 447	5, 401 5, 181	2,698	125 312	89 200	64	Tennessee	1919	1 2,68£	(2)	126 (2)	2,199 1,621	469	299 354	17 74	68 142	1
Indiana	191	4   6,140	(2)	(2)	3,412	1,095 851	1	450 575	106 234	1	Texas	1914	4,690	(2)	(2)	2,939	1		169 332	261	
Iowa	191	4 4,948	Ш	(2)	3,360 2,449	519	1,396	233 330	65 246	8	Utah	191	4 872	1	(2)	1, 181 812	2 22	1	2		ŀ
Kansas	191	4 2,818	11	(2)	1,882	1	428 579	48 48	160 104	2	Vermont	191	4 660	(2)	(2)	174	E 31	405	81	1	1
Louisiana	191	4 3,028	L)	(2)	1,614 1,908	292 174 33	1	325 61 191	104 188 32	ii	Washington	191	4 2,790	- 11	(2)	1,232	- i	812	83	112	
Maine	101	4 1,40	11	( <sup>2</sup> )	836	36	331	58	137	7	West Virginia.	191	4 2,35	- 11	(2)	2,22	1	62		i	
Maryland	191	4 1,77	11	(²) 619	624	231	821	65	31		Wisconsin	191	4   1,21	11	(2)	74	1	288	96	147	,
Massachusetts.	19	14   4,17 19   18,24	- 11	(2)	2,446	1	320	90	69	4	Wyoming	191	.4 5,67 .9 23	4	7 126 (2)	3,42 3,42	1 2	1,165	316	128	3
Michigan	19	19 7, 89	- 11	5 196	6,142	831	338	635	126	3	•	191	.4 18	3 (3)	(2)	12	3 2	18 27	i		7
	19		_11		5,001		1,318		132	24											

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

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.

	то	TAL.							ESTABLE	SIIMEN	TS EMPL	OYING-							
INDUSTRY AND STATE.	Estab-	Wage earners	No wage earn- ers.	Wi oari	o 5 age aers, asive.	ear:	o 20 age ners, usive.	ear	to 50 rage ners, usive.	w w	to 100 rage rners, usive.	ear incl	to 250 age ners, usive.	ea inc	to 500 wage rners, lusive.	ear	to 1,000 vage rners, lusive.	w	n 1,000 age ners.
	ments.	(average number).	Es- tab- lish- ments.	Es- tab- lish- ments.	Wage earners.	Es- tab- lish- ments.	Wage earners.	Establish- ments.	Wage earners.	Establish- ments.	Wage earners.	Establish- ments.	Wage earners.	Establish- ments.	Wage earners.	Establish- ments.	Wago carners.	Establish- ments.	Wage earn- ers.
United States: 1919 1914	32, 476 33, 471	287, 278 272, 092	9, 116 8, 524	15, 879 17, 456	35,464 40,665	4,916 5,081	53, 158 53, 694	1,588 1,500	51,023 47,285	531 499	37, 139 35, 067	325 311	49,866 47,650	86 71	28, 968 23, 909	28 25	19,365 16,939	7 4	12, 298 6, 888
Printing and publishing, book and job: 1919	13, 089 12, 115	123,005 113,121	3,220 2,672	6, 167 6, 009	14, 124 14, 329	2,479 2,337	27, 141 25, 046	822 726	26,221 23,000	236 208	16,919 14,561	122 123	18,748 18,438	32 28	11, 115 9, 255	9 11	6,009 7,366	2 1	2,728 1,120
music: 1919 1014 Printing and publishing, newspapers and pe-	160 180	899 873	124 139	21 20	54 47	6 13	70 137	4 4	133 128	2 1	130 64	3	512 497					••••	•••••
riodicals: 1919 1914 Bookbinding and blank- book making:	17,362 19,317	120, 381 114, 375	5,568 5,541	9,034 10,749	19,490 24,500	1,828 2,151	19,240 21,854	549 532	17, 918 16, 604	199 188	13,608 13,352	128 117	19,980 18,421	39 28	12,796 9,100	13 9	9,139 6,036	4 2	8,210 . 4,50
1919	1,113 1,124	20,361 21,693	101 72	449 475	1,217 1,233	376 362	3,968 4,068	101 124	3,203 3,916	41 51	2,729 3,616	35 29	5,145 4,407	8 9	2,664 3,355	2 2	1,435 1,098		•••••
1919 1914 Lithographing:	421 399	7, 014 6, 859	62 57	150 147	407 385	146 129	1,699 1,457	38 43	1,151 1,296	14 13	919 899	9 8	1,183 1,256	1	298 311			1	1,357 1,258
1910 1914	331 336	15,618 15,171	41 43	58 56	172 165	81 89	1,040 1,132	73 71	2,346 2,341	40 38	2,885 2,575	28 31	4,298 4,631	6 5	2,095 1,888	3	2,782 2,439		
Alabama Arizona Arkansas California Colorado	237 85 297 1,504 464	1,253 518 1,110 10,047 2,306	50 22 63 459 140	137 42 199 714 248	282 92 427 1,517 431	34 16 25 231 56	316 152 235 2,445 601	14 3 8 66 13	478 110 236 2,087 409	2 1 1 20 2	177 57 87 1,371 157	1 1 11 5	107 125 1,648 708	3	979				
Connecticut	414 58 186	3,068 381 2,154 1,172 2,895	123 15 83 46 91	189 28 50 143 243	404 70 117 354 536	61 9 28 39 59	698 77 327 375 654	27 5 15 6 16	844 174 562 188 535	12 1 4 2 6	857 60 241 141 345	2 6 1 3	265 907 114 494	1	331				
Idaho Illinois Indiana Iowa Kansas		438 36,537 6,772 4,831 3,055	42 817 181 226 202	100 1,108 460 610 448	196 2,545 1,082 1,365 865	16 412 153 115 69	180 4,568 1,620 1,185 732	183 53 36 16	5, 904 1, 770 1, 071 504	58 13 8 2	4, 121 895 498 145	46 4 3 1	7, 365 679 459 111	15 1	4,759 253	6 1	4,547 726 698	2	2,72
Kentucky. Louisiana Maine. Maryland Massachusetts.	376 272 176 386 1,327	2,882 1,583 1,600 4,391 18,247	75 61 41 98 362	219 146 84 183 534	537 335 213 414 1,303	56 46 32 64 277	799 460 282 694 3,014	15 14 11 22 89	435 438 330 673 2,860	5 5 6 10 32	332 350 386 754 2,243	6 2 5 22	779 389 677 3,216	4 5	1,179 1,690	Ğ	3,921		
Michigan		7,899 6,352 595 11,465 1,011	241 266 51 327 68	538 549 114 701 148	1,200 1,101 230 1,579 263	184 137 23 176 20	1,958 1,508 226 1,940 215	56 35 5 64 10	1,792 1,147 139 2,090 410	23 10 23	1,559 687 1,540	4 6 13 1	738 814 1,935 123	2 3 5	657 1,095 1,860	<u>.</u>	521		
Nebraska Nevada New Hampshire New Jorsey New Mexico	694 39 130 774 87	2,531 130 862 5,356 287	232 6 38 220 23	387 28 61 387 56	712 67 149 906 117	52 4 22 120 5	595 38 222 1,234 59	16 1 6 27 3	531 25 188 797 111	4 2 12	303 112 904	3 1 7	390 191 1,237	i	278				
New York North Carolina North Dakota Ohio	4,831 321 318 1,780	19 174	1,643 59 114 445	1,815 198 180 812	4,413 493 298 2,016 573	836 51 18 341	9, 160 566 184 3, 831	305 0 6 111	9, 883 269 178 3, 523	111 4 38	7,763 289 2,773	78  25	12,109 3,915	29	10,389	10	7,283	4	6,49
Oklahoma Oregon Pemusylvania Rhode Island South Carolina South Dakota	155	1,931 1,595 26,456 1,650 1,025 766	101 122 695 36 31 115	282 174 1,092 76 106 218	2,653 168 252	53 52 445 23 31 19	544 578 4,786 267 338 206	10 5 132 13 3 6	176 4, 095 394 118 186	3 40 5 4	210 3,086 404 317	3 2 36 2	320 5,525 417	9		i	519	i	3,07
Tennessee. Texas. Utah. Vermont. Virginia.	371 1,089 159 108	3,009 5,594 1,258 616 2,829	90 311 46	200 586 80 53 199	458 1,267 188 134 487	52	532 1,454 223 179 555	14 35 7 7 23	459 1,183 244 250 722	8 14 1 1 7	53	7 2 3	1,010 280 550	i	451				
Washington West Virginia. Wisconsin Wyoming	571 223 842	2,453 1,354 5,838	197	287 142 467 58	547 348 974	66 30 112 10	712 356 1,172 111	14 10	418 321 1,300 22	3 3 19	235 225 1,437	4 1 4	541 104 590	1	365				

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

	ES	NUMBE TABLISE		8.		RAGE NU AGE EA			VALI	OE OF PRODU	cts.	<del>-1-0</del>		LUE ADDED B ANUFACTURE		
INDUSTRY AND VALUE OF PRODUCT.	1919	1914	dis	cent tri- ion.	1919	1914	dis	cent stri- tion.	1919	1914	dis	cent stri- cion.	1919	1914	dis	cent tri- ion.
			1919	1914			1919	1914			1919	1914			1910	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		\$643, 686, 825	100.0	100.0
Less than \$5,000	11,547 6,140 2,117	17,201 10,306 4,473 1,239 148 104	37.3 35.6 18.9 6.5 1.0 0.7	51.4 30.8 13.4 3.7 0.4 0.3	7,309 30,791 62,046 81,623 35,439 70,070	19, 265 43, 437 68, 253 }101,634 39, 503	$\begin{array}{c} 2.5 \\ 10.7 \\ 21.6 \\ \{28.4 \\ 12.3 \\ 24.4 \end{array}$	7.1 16.0 25.1 37.4 14.5	31, 520, 745 116, 673, 997 270, 110, 339 441, 666, 418 219, 155, 554 620, 662, 176	42, 356, 622 99, 039, 126 193, 007, 423 248, 103, 243 103, 149, 363 215, 879, 024	1.9 6.9 15.9 26.0 12.9 36.5	4.7 11.0 21.4 27.5 11.4 23.9	23, 362, 140 84, 772, 863 190, 081, 006 302, 974, 293 146, 319, 733 380, 768, 917	33, 658, 091 76, 856, 305 142, 655, 537 }246, 958, 797 143, 558, 095	2. 1 7. 5 16. 8 {26. 9 13. 0 33. 7	5, 2 11, 9 22, 2 38, 4 22, 3
PRINTING AND PUBLISH- ING, 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. \$5,000 to \$20,000. \$20,000 to \$100,000. \$100,000 to \$600,000. \$500,000 to \$1,000,000. \$1,000,000 and over.	4,216 4,542 3,127 1,013 138 53	5, 402 4, 094 2, 047 514 40 18	32.2 34.7 23.9 7.7 1.1 0.4	44.6 33.8 16.9 4.3 0.3 0.1	1,750 11,920 32,640 41,821 17,137 17,737	4, 945 18, 317 34, 903 }46, 324 8, 632	1.4 9.7 26.5 34.0 13.9 14.4	4.4 16.2 30.9 41.0 7.6	10, 359, 620 47, 714, 891 138, 462, 721 { 203, 567, 319 89, 454, 441 108, 104, 236	13, 065, 523 40, 551, 051 88, 944, 772 100, 802, 347 27, 415, 557 36, 551, 611	1.7 8.0 23.2 34.1 15.0 18.1	4.3 13.2 28.9 32.8 8.9 11.9	6, 935, 152 31, 343, 275 89, 955, 251 132, 110, 447 59, 494, 298 66, 757, 631	9, 463, 400 28, 908, 705 61, 112, 627 } 87, 695, 322 23, 697, 575	1, 8 8, 1 23, 3 (34, 2 15, 4 17, 8	4.5 13.7 29,0 } 41.6 11.2
PRINTING AND PUBLISH- ING, 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, 398	6, 224, 636	100.0	100.0
Less than \$5,000. \$5,000 to \$20,000. \$20,000 to \$100,000. \$100,000 to \$500,000. \$500,000 and over.	46 41 38 29 6	71 45 46 } 18	28.8 25.6 23.7 {18.1 3.8	39. 4 25. 0 25. 6 }10, 0	$     \begin{cases}             & 2 \\             32 \\             82 \\             301 \\             302     \end{cases} $	15 75 173 610	$\begin{array}{c} 0,2\\ 3.5\\ 9.2\\ \{43.5\\ 43.6\end{array}$	1. 7 8. 6 19. 8 }69. 9	110, 226 455, 242 1, 750, 253 6, 483, 324 5, 793, 132	150, 609 450, 427 2, 372, 863 4, 297, 367	0.8 3.1 12.0 {44.4 39.7	$ \begin{array}{c c} 2.1 \\ 6.2 \\ 32.6 \\ \end{array} $ $ \begin{array}{c} 32.1 \\ \end{array} $	97,646 359,772 1,383,011 5,184,847 5,443,120	140, 432 410, 326 2, 127, 283 3, 546, 595	0.8 2.9 11.1 {41.6 43.7	2.3 6.6 34.2 57.0
Printing and publise- ing, newspapers and periodicals	17, 362	19, 317	100. 0	100.0	120, 381	114, 375	100.0	100. 0	924, 152, 878	495, 905, 948	100.0	100. 0	623, 767, 691	366, 823, 730	100.0	100.0
Less than \$5,000. \$5,000 to \$20,000. \$20,000 to \$100,000. \$100,000 to \$60,000. \$500,000 to \$1,000,000. \$1,000,000 and over.	1 829	11, 142 5, 533 1, 940 538 86 78	43. 0 36. 5 14. 0 4. 8 0. 8 0. 9	57.7 28.6 10.0 2.8 0.4	5,279 15,915 20,774 26,201 10,233 41,979	13, 374 20, 344 22, 180 }33, 155 25, 322	4.4 13.2 17.2 21.7 8.5 35,1	11. 7 17. 8 19. 4 }29. 0 22. 1	20, 024, 837 61, 499, 459 105, 596, 017 170, 020, 650 94, 186, 006 463, 826, 509	27, 631, 219 51, 317, 416 82, 109, 202 109, 578, 913 60, 572, 174 164, 697, 024	2, 2 6, 7 11, 4 19, 4 10, 2 50, 2	5. 6 10. 3 16. 6 22. 1 12. 2 33. 2	15, 486, 712 47, 542, 141 81, 746, 205 132, 788, 556 64, 447, 204 281, 756, 873	22, 783, 258 42, 297, 720 65, 132, 178 }125, 109, 125 110, 501, 449	2. 5 7. 6 13. 1 {21. 3 10. 3 45. 2	6. 2 11. 5 18. 0 34. 1 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 \$5,000 to \$20,000 \$20,000 to \$100,000 \$100,000 to \$500,000 \$500,000 and over.	248 431 312 95 27	399 414 233 65 13	22, 3 38, 9 28, 0 8, 5 2, 4	35. 5 36. 8 20. 7 5. 8 1. 2	235 2, 163 5, 172 5, 886 6, 905	743 3,300 6,458 }11,192	1. 2 10. 6 25. 4 {28. 9 33. 9	3. 4 15. 2 29. 8 }51. 5	683, 104 4, 861, 125 13, 564, 105 20, 449, 337 26, 463, 006	1,070,879 4,249,843 9,964,163 12,251,470 10,568,013	1.0 7.4 20.5 31.0 40.1	2. 8 11. 2 26. 1 32. 2 27. 7	536, 643 3, 862, 703 9, 433, 980 12, 774, 709 16, 177, 471	894,173 3,329,346 6,798,330 } 13,748,312	$1.3$ $9.0$ $22.0$ $\{29.9$ $\{37.8$	3.6 13.4 27.4 } 55.5
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. \$5,000 to \$20,000. \$20,000 to \$100,000. \$100,000 to \$300,000. \$500,000 and over.	90 149 139 36 7	136 154 86 20 3	21, 4 35, 4 33, 0 8, 6 1, 7	34.1 38.6 21.6 5.0 0.8	36 624 2,072 1,917 2,365	158 1,070 2,071 3,560	0. 5 8. 9 29. 5 {27. 3 {33. 7	2. 3 15. 6 30. 2 31. 0	251, 046 1, 655, 036 5, 771, 603 6, 994, 048 9, 537, 421	343, 179 1,724, 581 3,403, 287 4,031, 555 4,283,783	1.0 6.8 23.8 28.9 39.4	2. 5 12. 5 24. 7 29. 2 31. 1	220, 717 1, 289, 623 4, 334, 922 4, 979, 789 6, 403, 356	294,116 1,341,439 2,551,161 } 5,685,161	1, 3 7, 5 25, 2 {28, 9 37, 2	3.0 13.6 25.8 } 57.6
LITHOGRAPHING	1	336		100.0	15, 618	15, 171		100.0	73, 151, 115	39, 135, 973	100.0	100. 0	45, 432, 898	25, 118, 792	100.0	100.0
Less than \$5,000. \$5,000 to \$20,000. \$20,000 to \$100,000. \$100,000 to \$500,000. \$500,000 to \$1,000,000. \$1,000,000 and over.	113 24	51 66 121 86 7 5	12.4 13.3 28.7 34.1 7.3 4.2	15. 2 19. 6 36. 0 25. 6 2. 1 1. 5	137 1,306 5,407 3,360 5,401	30 331 2,468 8,969 3,373	(1) 0.9 8.4 (34.6 (21.5 34.6	0. 2 2. 2 16. 3 }59. 1 22. 2	92, 412 488, 244 4, 965, 740 25, 151, 740 16, 642, 294 25, 810, 685	95, 213 745, 808 6, 213, 136 18, 449, 366 4, 459, 256 9, 173, 194	0.1 0.7 6.8 34.4 22.8 35.3	0.2 1.9 15.9 47.1 11.4 23.4	85, 270 375, 349 3, 227, 637 15, 135, 945 10, 305, 739 16, 302, 958	82,712 568,769 3,933,958 14,892,936 5,640,417	0. 2 0. 8 7. 1 {33. 3 {22. 7 35. 9	0.3 2.3 15.7 50.3 22.5

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

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

The state of the s		MBER		AV	ERAGE	NUMBE	R OF V	yage e	ARNER	s.		1	VALUE OF PRO	DUCTS.			
INDUSTRY AND STATE.		NED B				tablish vned by		Pe	r cent total.	of		O:	establishmer owned by—	nts	Pe	er cent total.	of
·	Indi- vid- uals.	Corpora- tions.	All oth- ers.	Total.	Indi- vid- uals.	Corpora-	All others.	Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Total,	Individ- uals.	Corpora- tions.	All others.	Indi- vid- uals.	Cor- pora- tions.	All oth- ers.
United States: 1919 1914	17, 676 19, 086	8,947 8,589	5, 853 5, 796	287, 278 272, 092	46, 738 55, 774	215, 081 188, 873	25, 459 27, 445	16.3 20.5	74. 9 69. 4	8. 9 10. 1	\$1,699,789,229 901,534,801	\$204, 495, 041 136, 850, 328	\$1,359,663,580 686,696,324	\$135,630,608 77,988,149	12, 0 15, 2		8.0 8.6
Printing and publishing, book and job: 1919	7, 458 7, 090	3,367 2,880	2, 264 2, 145	123,005 113,121	20, 663 22, 715	90, 486 78, 305	11,856 12,041	16.8 20.1	73.6 69.3	9. 6 10. 6	597, 663, 228 307, 330, 861	92, 086, 652 54, 760, 532	445, 041, 406 219, 984, 491	60, 535, 170 32, 585, 838	15. 4 17. 8	74.5 71.6	10, 1 10, 6
1919 1914. Printing and publishing, newspapers and periodi- cals:	63 85	76 70	21 25	899 873	133 120	760 610		14.8 13.7	84.5 69.9	0, 7 16. 4	14, 592, 177 7, 271, 266	1,187,026 1,124,839	12, 100, 708 5, 335, 895	1,304,443 810,532	8. <b>1</b> 15. 5		
1919. 1914. Bookbinding and blank- book making:	9, 262 10, 992	4,856 5,016	3, 244 3, 309	120, 381 114, 375	20, 139 25, 998	90, 688 77, 693	9, 554 10, 684	16. 7 22. 7		7. 9 9. 3	924, 152, 878 495, 905, 948	93, 990, 148 70, 710, 425	768, 916, 217 888, 126, 392	61, 246, 513 37, 069, 131	10. 2 14. 3		6.6 7.5
1919 1914 Engraving, steel and cop- per plate, including plate	586 624			20, 361 21, 693	4,034 5,413	13,727 13,673	2,600 2,607	19. 8 25. 0		12, 8 12, 0	66, 020, 677 38, 104, 368	11,381,293 7,249,974	47,427,127 27,109,050	7, 212, 257 8, 744, 444	17. 2 19. 0	71.8 71.1	10.9 9.8
printing: 1919 1914 Lithographing: 1919	226 196 81	225	78 25	7,014 6,859 15,618	1,174 782 595	5, 152 14, 399	624	16.7 11.4 3.8	71.6 75.1 92.2	11. 7 13. 5 4. 0	24, 209, 154 13, 786, 385 73, 151, 115	3, 138, 514 1, 284, 850 2, 711, 408	68, 114, 319	3,006,837 1,583,102 2,825,388	13. 0 9. 3 3. 7	79. 2 93. 1	12.4 11.5
1919 1914	1	209	28	15,171	746	13, 380	1,045	4.9	88.2	6, 9	39, 135, 973	2,711,408 1,719,708	35, 221, 163	2,195,102	4.4	90.0	3, 2 5, 6
Alabama California Colorado Connecticut District of Columbia		60 321 102 94 60	51 328 70 58 47	1, 253 10, 047 2, 306 3, 021 2, 154	231 1, 868 457 627 234	1,699 2,181	1,365 150	18. 4 18. 6 19. 8 20. 8 10. 9	72. 9 67. 8 73. 7 72. 2 81. 4	8. 7 13. 6 6. 5 7. 1 7. 7	7, 286, 113 61, 815, 272 12, 612, 870 14, 035, 915 16, 859, 238	802, 741 9, 182, 428 1, 803, 492 2, 949, 377 1, 011, 857	6,050,117 44,379,865 10,122,138 10,163,119 12,815,736	433, 255 8, 252, 979 687, 240 923, 419 3, 031, 645	11.0 14.9 14.3 21.0 6.0	80.3	5.4 6.8
Georgia Illinois Indiana Iowa Kansas	214 1, 295 453 619 542	109 940 232 171 62	95 412 180 207 134	2,844 36,537 6,772 4,808 3,043	565 3,808 1,346 1,276 1,836	2,008 31,139 4,522 2,892 842	904 640	19.9 10.4 19.9 26.5 60.3	70.6 85.2 66.8 60.1 27.7	9. 5 4. 4 13. 3 13. 3 12. 0	14, 129, 694 219, 330, 711 36, 612, 318 26, 806, 486 12, 716, 832	2,273,060 17,671,430 4,350,997 4,870,113 7,527,195	10,636,379 189,908,308 20,501,397 19,198,665 3,622,991	1,220,255 11,750,973 5,759,944 2,737,708 1,566,646	16. 1 8. 1 14. 2 18. 2 59. 2	75. 3 86. 6 67. 0 71. 6 28. 5	18.8
Kentucky Louisiana Maryland Massachusetts Michigan	186 138 169 712 553	116 85 128 436 286	71 47 88 179 <b>20</b> 6	4,391 18,247	427 208 446 2,737 1,271	3,038	907	15.0 18.8 10.2 15.0 16.1	78. 8 71. 5 69. 2 72. 6 74. 4	6. 2 9. 6 20. 7 12. 4 9. 5	11,734,539 8,109,761 23,835,004 104,551,284 46,828,716	1, 236, 033 943, 808 1, 566, 631 9, 370, 471 4, 986, 663	9,894,388 6,652,002 18,123,480 79,818,861 37,942,118	604,118 513,951 4,144,893 15,361,952 3,899,935	10.5 11.6 6.6 9.0 10.6	84.3 82.0 76.0 76.3 81.0	5.1 6.3 17.4 14.7 8.3
Minnesota Missouri Nobraska New Jerssy New York	577 729 478 461 2,225	253 343 91 197 1,823	173 238 125 114 783	6,319 11,465 2,531 5,356 67,491	1,091 2,182 656 917 8,421	1,642 4,019	807 233 420	17.3 19.0 25.9 17.1 12.5	74. 4 73. 9 64. 9 75. 0 81. 2	8. 4 7. 1 9. 2 7. 8 6. 3	33, 479, 797 61, 249, 545 15, 321, 689 24, 217, 733 478, 898, 471	4,206,045 11,749,090 3,038,091 3,810,838 41,401,110		2,694,464 3,823,637 1,366,201 1,814,013 23,963,195	12. 6 19. 3 19. 8 15. 7 8. 6	79. 4 74. 6 71. 3 76. 8 86. 4	8.0 6.2 8.9 7.5 5.0
Ohio. Oklahoma Oregon Pennsylvania Rhodo Island.	845 317 200 1, 414 89	578 92 90 565 31	357 101 68 478 35	19,174 1,931 1,595 20,456 1,650	2,530 459 264 4,885 227	1,263 1,195	209 136	13. 2 23. 8 16. 6 18. 5 13. 8	78. 5 65. 4 74. 9 69. 4 78. 3	8.3 10.8 8.5 12.1 9.9	112,029,131 10,241,286 10,154,778 105,344,144 7,326,052	11, 268, 633 2, 010, 285 1, 443, 638 24, 726, 894 801, 258		8,095,418 1,098,577 691,444 14,071,077 538,162	10. 1 19. 6 14. 2 14. 9 10. 9		6.8
Tennessee. Texas Virginia Washington Wisconsin	193 657 206 326 468	96 194 109 145 240	77 236 65 98 134	2, 967 5, 594 2, 719 2, 453 5, 838	477 1,337 546 505 932	2,152 3,540 1,790 1,825 4,253	383 123	16. 1 23. 9 20. 1 20. 6 16. 0	72. 5 63. 3 65. 8 74. 4 72. 9	11, 4 12, 8 14, 1 5, 0 11, 2	15, 832, 846 32, 686, 733 13, 162, 355 17, 348, 530 26, 466, 906	1,966,693 5,586,596 2,061,960 2,662,377 3,384,964	11, 120, 619 23, 726, 274 9, 411, 969 13, 746, 944 21, 518, 579	2,745,534 3,373,868 1,688,423 939,209 1,563,363	12, 4 17, 1 15, 7 15, 3 12, 8	70. 2 72. 6 71. 5 79. 2 81. 3	17.8 10.3 12.8 5.4 5.9

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

	NUMBER O	F ENGINES C	R MOTORS.			HORSEPOW	er.		-
POWER.		and the second s	<u> </u>		Amount.		Per c	ent distribu	tion.
	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. Steam <sup>1</sup> Engines.	4,987 448 422 21	7, 889 710 (2) (2)	9, 460 1, 090 (²)	64,723 46,727 45,578 1,149 17,132 864	86, 400 57, 583 (2) (2) (2) 27, 435 1, 388	93, 806 59, 834 (2)	17.9 12.9 12.6	26. 2 17. 5	81, 5 19, 9
Turbines. Internal-combustion engines Water wheels, turbines, and motors.	4,357 187	(2) 6, 849 330	(2) 7,755 615	1,149 17,132 864	(2) 27, 435 1, 388	32, 152 2, 320	0.3 4.7 0.2	8.3 0.4	10.8 0.8
Rented. Electric Other	127, 887 127, 887	90, 783 90, 783	52, 588 52, 588	297,400 296,401 999	242,804 240,697 2,107	203, 957 197, 692 6, 265	82.1 81.8 0.3	73.8 73.1 0.7	68, 5 66, 4 2, 1
Electric Rented Generated by establishments reporting.	137,468 127,887 9,581	99, 988 90, 788 9, 205	60, 731 52, 588 8, 143	331,500 296,401 35,099	277, 206 240, 697 86, 509	229, 312 197, 692 31, 620	100, 0 89. 4 10, 6	100. 0 86. 8 13. 2	100, 0 86, 2 13, 8

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

# MANUFACTURES.

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

	==	ÇO,		1	<del></del> -	Gaso-					COAL.				Gaso- line	
STATE.	Cen- sus year.	Anthracite (tons, 2,240 lbs.).	Bitumi- nous (tons, 2,000 lbs.).	Coke (tons, 2,000 lbs.).	Fuel oils (bar- rels).	line and other volatile oils (bar- rels).	Gas (1,000 cubic feet).	STATE.	Cen- sus year.	Anthreite (tons 2,246 lbs.)	, (t	umi- (	tons, 2,000	Fuel oils (bar- rels).	and other volatile oils (bar- rels).	Gas (1,000 cubic feet).
United States	1919 1914	179,403 165,903	370,398 351,395	7,048 4,830	73,553 52,849	28,401 (1)	2, 567, 301 2, 270, 571	Montana	1919 1914		1	600 1,945	i	41 484	(1)	2,342 6,543
Alabama	1919 1914	49	1,337 1,265	157 62	61 507	301 (¹)	5,111 21,333	Nebraska	1919 1914		10 16	7,379 6,597	42 29	116 858	775 (1)	23,187 15,543
Arizona	1919 1914	8	80 84		97	100 (¹)	6,987 4,491	Nevada	1919 1914		10 21	166 105	3 5	147	(¹)	5,456 251
Arkansas	1919 1914	80 73	673 411		149 644	454 (¹)	18,499 11,474	New Hampshire	1919 1914		64 00	970 597	1 24	i <b>1</b>	(¹)	1,711 2,583
California	1919 1914	44 69	417	4 2	23,823 10,288	1,903 (¹)	224,999 89,781	New Jersey	1919 1914		35 14	2,634 7,002	1,511	20 332	160 (¹)	31,177 47,092
Colorado	1919	48 123	5,377	52 28	65 375	379 (1)	20,528 30,628	New Mexico	1919 1914		63 20	502 104		198	(1)	722 1,094
Connecticut	. 1919 1914	3,713 2,719	2,975	60	75 91	457 (1)	26, 878 19, 871	New York	. 1919 1914		397 523	38,067 29,217	220 611	1,520 1,541	1,014	314,585 375,747
Delaware	1919	31	305	<b>\ </b>	. 8 65	(1)	1,048 1,201	North Carolina	1919 1914		141 208	2,007 2,260	$\frac{21}{32}$	50 526	336 (¹)	3,838 8,256
District of Columbia		86	1,810	i	. 3	61 (¹)	15,887 24,992	North Dakota	. 191 191		297 707	3,108 1,912	21 45	45 782	(1)	2,560 1,508
Florida	1	20	7 196	95	86 828		6,018 4,988	Ohio	191 191		322 895	35,823 40,519	204 714	335 889	(1)	375, 222 409, 403
Georgia		13	5 1,623	16	142		32,012 12,442	Oklahoma	191 191		51 118	1,421 1,050	1 10	898 898	580 (¹)	91,389 66,831
Idaho		9 4	9 1,089	II.		103	622 1,719	Oregon	191 191		27 25	455 478	20	1,465	(1)	10,785 13,194
Illinois		9 1,66	33 86,65 36 72,90	2 27 8 33		7 3,98° 5 (¹)	139,983 108,935	Pennsylvania	191 19	19 49 14 44	,920 ,917	14,203 14,908	59 51	90 868	(1)	275,761
Indiana	1	9 3	12 16,44 99 17,40	3 22	3 34 4 91		7 52,483 57,987	Rhode Island	19 19		,663	798 2,669	60 20		3 ( <sup>1</sup> )	7,494
Iowa	1	0 9	45 15,17 89 16,39	77 18 99 26	7 24 7 1,96		45,815 21,638	South Carolina	19 19	19 14	87 498	1,340 973	10 5	35	3 (1)	1,816
Kansas		19 1,2	1 1	11	18 38 38 1,07	0 64 4 (¹)	6 47,453 72,429	South Dakota	19	19 14	273 583	3,022 2,462	15 28	87	3 (1)	1,165
Kentucky		19	28 5,36 55 5,8	09 1,29	91 10 5	76 45 76 (1)		Tennessee		)19 )14	124 21	7,585 5,961	114 510	24	5 (1)	11,014
Louisiana		19	22 2 51 4	68 73		10 30 92 (1)		Texas		019 014	422 244	3,936 2,964	30		4 (1)	75,875
Maine	19		143 1,6 488 1,4	82 21		55 1. 01 (¹)		8 Utah		919 914	372	1,544 1,042	1		(1)	1
Maryland	19	19 1,	447 7,4 697 5,6	74		10 4 45 (¹)	78 13,27 15,73	Vermont		919 914	663 700	363 93	1	8	17 (1)	1 '
Massachusetts	1	7.	764 22,4 405 24,	386 303	111 10,4	26 1 41 (1)	18 89,02 124,82	Virginia		919 914	603 1,144	5,924 3,671	9	8 3	25 (1)	1
Michigan	- 1	ii .	086 16, 807 15,	- II	347 1,1 432 1,5	149 1,5 262 (i	35,46 51,46	- 11	1	1919 1914	18 24	1,743 1,335	11	29 3 17 7	62 (1)	1
Minnesota	1	. 1	890 10, 459 8,	- 1	178 208	79 1,4 336 (1	38,6 25,2	West Virginia		1919 1914	10	688 549	- 11	1	.58 (1)	1
Mississippi	1	919 914		428 606	4 5	39 363 (1	118 1,3 2,5	Wisconsin		1919 1914	1,228 1,849		11	. 1	323 (1	1
Missouri		919 1914	492 21, 572 26,	150 535	921 17, 45 13,	325 1, 548 (	599 77,4 65,5	Wyoming		1919 1914	15 77	738 460	0	1	27 (1	1,88

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.

	4040		4		CEN'					1000		CENT	
PRODUCT.	1919	1914	1900	1909- 1919	1914- 1919	1909- 1914	PRODUCT.	1919	1914	1909			1909- 1914
Number of establishments.  Book and Job.  Music.  Newspapers and periodicals.	30, 611 13, 080 160	12, 115 180	178	10. 1	8.0	13.1 1.1	Publications—Contd.  Books and psm- phlets— Published, or print- ed and published Printed for publica-	\$132,699,383	\$68, 587, 778	.,			
	\$1,536,408,283				-	===	tion by others Sheet music and books of music—	32, 861, 475	19,049,651	10, 209, 509	221.0	72. 5	86.6
Publications: Newspapers and periodicals Subscriptions and sales Advertising	278, 006, 382 528, 209, 378	419, 209, 701 163, 577, 090 255, 632, 611	135, 063, 043 202, 533, 245	105.8 160.8	70.0 106.7	21.1 26.2	Published, or printed and published. Printed for publication by others Other products for sale and in execu-	12,509,981 3,766,908			1		Ī
Newspapers Subscriptions and sales Advertising Periodicals other than newspapers	506, 321, 409 192, 819, 519 373, 501, 890 239, 984, 351	99, 541, 860 184, 047, 106	84, 438, 702 148, 554, 892	128.4 151.4	93.7 102.9	17.9 23.9	tion of orders— Job printing Machine composition for others Bookbinding and blank books	465, 410, 994 12, 487, 551 23, 911, 103	5, 682, 098			110.8	22.3 
Subscriptions and sales Advertising Ready prints (patent insides and outsides)	85, 186, 803 154, 797, 488	64,035,230 71,585,505	50, 624, 341 53, 978, 853	68.3 186.8	33.0 116.2	26.5	Electrotyping en- graving, litho- graphing, etc All other products		0,698,641	8, 201, 398			

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.

# MANUFACTURES.

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

		1	NEWSPA	APERS.	PERIODICALS NEWSP	(OTHER THAN APERS).	NEWSPAPERS AND PERIODICALS.	BOOKS AND P	AMPHLETS.
DIVISION AND STATE.	Number of establish- ments.	Total value.	Printed and published, by e repor	published, or stablishments ting.	Printed and published, by e	published, or establishments rting.	Printed for publication	Printed and published, or published, by	Printed for publication
÷			Subscriptions and sales.	Advertising.	Subscriptions and sales.	Advertising.	by others.	establishments reporting.	by others.
United States	80,611	1 \$1, 536, 408, 283	\$192,819,519	\$373,501,890	\$85, 186, 863	\$154, 797, 488	\$22, 913, 267	\$132,699,383	<b>\$32,</b> 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. New Hampshire. Vermont. Massachusetts. Rhode Island. Connecticut.	166 128 106 1,195 141 389	5,765,370 2,454,938 1,715,263 90,136,994 7,004,948 13,760,215	624, 242 343, 616 259, 142 12, 485, 975 797, 608 1, 780, 021	1, 311, 994 707, 797 441, 367 22, 527, 505 2, 611, 697 4, 335, 651	1,059,542 28,541 20,079 4,155,310 40,507 201,448	1, 171, 824 37, 451 41, 401 2, 941, 863 183, 770 121, 639	24, 059 325, 537 52, 002 895, 755 15, 528 81, 083	31, 825 15, 880 35, 970 19, 410, 977 11, 064 948, 311	49, 276 199, 256 57, 53 2, 086, 76 538, 21 594, 79
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, 80
New York. New Jersey Pennsylvania	4, 179 718 2, 269	411, 077, 645 21, 972, 904 153, 552, 132	49, 535, 807 2, 026, 481 16, 062, 244	63, 889, 825 7, 310, 624 33, 249, 476	38, 662, 218 368, 479 9, 914, 443	62, 221, 442 153, 614 37, 822, 016	8, 775, 043 632, 314 715, 820	61, 263, 522 1, 358, 473 10, 889, 919	12, 639, 81 733, 14 1, 925, 84
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, 90
Ohio Indiana Illinois Michigan Wisconsin	1,676 841 2,470 1,004 790	98, 216, 156 29, 943, 217 201, 044, 228 42, 772, 195 22, 610, 238	10, 533, 968 4, 011, 292 24, 240, 370 5, 461, 753 3, 587, 372	28, 236, 258 9, 965, 256 30, 469, 318 13, 558, 379 6, 592, 026	6, 846, 756 1, 623, 978 5, 741, 570 1, 097, 632 517, 000	8, 291, 073 1, 119, 467 16, 500, 979 1, 338, 348 1, 128, 750	1, 055, 699 588, 557 3, 958, 802 410, 362 201, 587	4, 542, 168 671, 576 19, 653, 227 1, 047, 353 1, 065, 015	704, 45 407, 86 7, 668, 05 429, 86 147, 66
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	1,378,7
Minnesota. Iowa. Missouri. North Dakota. South Dakota. Nebraska. Kansas.			4, 480, 091 3, 479, 150 6, 903, 708 639, 926 633, 516 2, 251, 176 1, 856, 768	9,039,831 7,811,242 16,696,502 1,171,017 1,280,476 5,342,148 4,113,111	685, 931 1, 294, 366 1, 303, 637 93, 677 85, 508 610, 882 922, 425	405,256	360, 946 3, 777 5, 953 441, 104	1, 936, 151 306, 883 2, 315, 442 2, 500 7, 020 445, 357 66, 318	458, 5 84, 3 668, 3 8, 4 11, 8 43, 3 103, 8
SOUTH ATLANTIC	2,818	85, 866, 410	11, 088, 685	28, 250, 240	5, 361, 379	3, 478, 374		2, 494, 115	1, 237, 0
Delaware. Maryland District of Columbia. Virginia. West Virginia. North Carolina. South Carolina. Georgia. Florida.	56 353 169 372 224 319 174 414 237	1, 438, 207 20, 065, 229 15, 872, 531 18, 038, 715 4, 837, 019 6, 404, 177 4, 004, 633 14, 092, 432 5, 618, 466	189, 443 2, 094, 455 1, 545, 807 1, 322, 966 867, 282 1, 175, 141 670, 529 2, 388, 259 829, 303	1,707,667 5,229,91	13,532 327,231 4,028,279 2 342,407 3 40,325 4 138,363 7 129,652 278,235 6 63,355	110,814 41,086 1,046,071	229, 784 288, 489 25, 047 8, 211 24, 697 29, 569	434, 434 401, 353 1,448, 826 22, 837 68, 805 6, 805 59, 378 51, 980	3, 1 320, 7 430, 1 107, 0 135, 8 33, 114, 3 41, 51, 4
EAST SOUTH CENTRAL	1,151	35, 497, 200	4, 862, 632	11, 187, 97	1,992,811	1,504,07			391,
Kentucky Tonnessee Alabama. Mississippi	232	10, 605, 320 15, 832, 846 7, 049, 538 2, 009, 496	1, 518, 393 1, 916, 271 1, 124, 075 303, 893	1 2,822,62	7 353,011 1,471,897 8 164,133 3,770	266, 523 601, 163 633, 273 8, 12	40,319 77,633 2 80,001 1 26,121	36,688 1,441,110 10,504 6,825	261,
WEST SOUTH CENTRAL	2,136	55, 184, 441	7,623,504	21, 737, 43	9 875, 131	1,766,65			
Arkansas. Louisiana. Oklahoma Texas.	) 507	10, 212, 273	7 784,794 1,255,697 2 1,384,644 2 4,198,369	1,840,99 3,081,09 4,463,48 12,351,86	5 82,65 6 90,56 1 150,87 7 551,53	81,09 9 222,54 2 499,46 5 963,55	1 57,956 1 82,739 9 62,433 0 143,789	10, 900 15, 911 2 61, 430 548, 520	37, 5 96, 0 97, 0 57,
MOUNTAIN	1,818	27, 795, 68	_				·	_	
Montana. Idaho W yoming. Colorado. New Mexico. Arizona. Utah. Nevada.		2, 175, 15 1, 227, 20 11, 519, 20 900, 53 2, 086, 39 4, 513, 80	1,621,676 149,95 311,81- 9 885,37	1,058,42 1,706,63	9 15,64 0 143,06 3 2,31 20 32,08 35 33,10	2 40, 54 5 63, 86 2 23, 98 8 168, 88 3 8, 46 8 23, 98 6 55, 22	24, 19 60 4, 76 55 2, 51 55 329, 90 89 3, 07 15 28, 82 23 29, 38 1, 04	8 4,25, 0 2,15, 0 99,24, 9 12,28, 6	8 27 0 7 1 246 9 17
PACIFIC				2 30, 175, 73	1,366,65	3,540,5	76 1,630,33	8 1,782,10	
Washington Oregon California.		16,672,16 9,804,20	9 2,919,09 7 1,485,85	4 7,029,34 5 3,635,28					1 172

<sup>&</sup>lt;sup>1</sup> 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.

	SHEET MU BOOKS OF		Engrav-	Ready prints							
DIVISION AND STATE.	Printed and published, or pub- lished, by establish- ments reporting.	Printed for pub- lication by others.	ings, litho- graphs, etc., printed for publi- cation by others.	(patent insides and out- sides) for publica- tion by others.	Stereo- typed plates for use by others.	Job printing, not else- where included.	Machine composi- tion done for others.	Book- binding,	Blank books.	Electro- typing, engraving, etc.	All other products.
UNITED STATES	\$12,509,981	\$3,766,908	\$9,621,607	\$2,010,506	\$2,292,512	\$442,506,727	<b>\$</b> 12, 487, 55 <b>1</b>	\$16, 957, 313	<b>\$</b> 6,953,790	\$1,716,222	\$30, 805, 28
NEW ENGLAND		49, 545	533, 104	42, 865	76, 338	30, 229, 486	663, 112	2, 520, 684	139, 639	258, 388	1,068,42
Maine			15,655			1,366,277 774,281 774,072	15, 917 2, 018 7, 934	36, 120 11, 034 9, 625	26, 150	5, 282	17, 20
Maine. New Hampshire. Vermont Massachusetts Rhode Island. Connectient	1,642,327	49, 265 280	175,909 341,540	42, 865	500 75,838	774, 072 20, 317, 144 1, 849, 417 5, 148, 295	7, 934 457, 691 8, 000 171, 557	9, 625 2, 014, 730 273, 731 175, 444	10, 500 12, 349 8, 346 82, 294	241,553 11,553	9, 5, 5, 1 603, 1 325, 5 107, 8
MIDDLE ATLANTIC	1	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, 7
New York. Now Jersey. Pennsylvania.	8, 022, 244 3, 704 344, 929	1,602,150 3,067 1,208,691	1,683,793 7,244 669,415	102, 963 55 50, 484	403, 107 9, 519 211, 363	81, 979, 764 8, 866, 973 35, 073, 429	4,799,282 134,316 695,991	4, 026, 135 277, 478 608, 758	1,141,068 9,441 1,489,819	550, 992 127 135, 031	9, 178, 4 77, 8 2, 536, 4
EAST NORTH CENTRAL	1	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, 6
Ohlo. Indiana. Illinois. Michigan Wisconsin	434, 624 17, 298 975, 400 8, 696	330,768 375,800 117,865 2,197	1,143,621 120,876 197,765 265,893 307,875	79, 815 91, 665 105, 223 68, 390 99, 769	123, 565 64, 129 448, 276 37, 568 30, 891	31, 764, 355 9, 793, 448 75, 253, 026 16, 607, 055 8, 169, 214	720, 713 422, 752 1, 876, 766 81, 830 152, 568	882, 092 166, 387 4, 318, 242 433, 687 117, 104	1,148,890 205,006 850,835 39,404 33,878	110,064 401,968 46,948 24,272	1, 267, 2 673, 6 8, 008, 5 1, 718, 1 433, 0
WEST NORTH CENTRAL	296, 211	33,907	1,882,815	745,951	391,835	51, 289, 005	1,363,955	1, 171, 904	641,605	101, 495	1, 864, 1
Minnesota Iowa Missouri North Dakota South Dakota Nebraska Kansas	2,208 285,303	951 32,956	561, 233 55, 971 1, 002, 327	122,784 174,250 194,842 64,417	84, 270 62, 005 111, 942 35, 064	11, 241, 483 7, 081, 013 22, 300, 071 1, 176, 920	499, 733 89, 993 558, 654 6, 780 3, 243	1 150	56, 804 37, 926 445, 983 25	92,087	366, 3 397, 1 626, 9
South Dakota Nebraska Kansas	8,700		2,622 150,649 110,018	25, 836 104, 661 59, 161	19, 242 49, 929 29, 383	1,176,920 1,206,656 4,684,207 8,598,745	152, 984 52, 568	24, 182 69, 777 115, 800	53, 444 29, 140 18, 283	8,662 746	3, 5 18, 4 287, 4 164, 2
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, (
Delaware. Maryland. District of Golumbia. Virginia. West Virginia. North Carolina. South Carolina. Georgia. Florida.	11,000	120	557, 081 233, 513 52, 156 9, 462 59, 644 193, 250 3, 839	37, 524 600 30, 457 23, 549	71, 232 34, 621 43, 594	506, 198 7, 999, 959 3, 303, 766 5, 144, 606 1, 773, 604 2, 272, 559 1, 028, 194 4, 509, 495 2, 008, 796	31, 274 51, 250 60, 701 150 17 37, 284 41, 596	227, 675 104, 190 45, 177 1, 712 120, 121 39, 330 1, 548	473, 219 23, 292 26, 678 1, 832 42, 109 5, 658 150	12, 830 12, 750	962, 3, 322, 2, 16, 27, 74, 3,
EAST SOUTH CENTRAL			214,701	86,242	59, 255	12,775,059	191,471	171,969	100, 125	3,523	197,
Kentucky Tennessee Alabama Mississippi		40,000	214,701	58,356 27,886	39, 199 20, 056	4, 873, 140 5, 027, 634 1, 956, 713 917, 572	24, 935 134, 819 31, 647 70	9,889 144,813 14,267 3,000	74,808 25,317	3,523	93, 25, 78,
West South Central	, 72,433	668	342,960	247, 207	119, 502	19, 292, 236	282, 597	312,217	326,051	5,000	908,
Arkansas Louisiana. Oklahoma Texas	1.680		200 5,240 27,735 309,785	51,810 94,847 100,550	27, 239 33, 706 58, 557	1,338,815 2,720,115 3,223,698 12,009,608	12, 120 51, 276 42, 278 170, 923	17, 103 113, 085 19, 303 162, 726	25, 135 25, 360 44, 005 231, 551	5,000	378, 159, 7, 362,
Mountain			392,855	163,731	55, 541	8, 479, 235	118,054	465, 621	81,130		199,
Montana Idaho. Wyoming			12,730	51,294	960 510	1,517,131 748,394 391,691 3,466,179 296,844	38,829 3,000 1,135 42,321	17,884 30,737 7,000 351,225	47, 344 29, 897 3, 000		134.
Colorado New Mexico Arizona Utah Nevada			103,000	75, 968 36, 469	34, 413 19, 658	296, 844 604, 018 1, 225, 545 229, 433	7,550 25,219	. 10.323			134, 1, i,
Pacific				34,016	112, 176	24, 387, 177	752,872	938, 282	223, 901	52,834	1, 260,
Washington Oregon California	7, 869	50	. 110, 425	13, 258 20, 758	. 36,287	4,390,462 3,241,677 16,755,038	149, 739 166, 506 436, 627	130,957 35,034 772,291	133, 843 43, 046 47, 012	13,013 39,821	46, 101, 1,112,

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 Massa-

chusetts 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.

				BOOKS AND I	AMPHLETS.	Music, printed						
STATE.	Cen- sus year.	Total value of products.	Newspapers and periodicals printed for publication by others.	Printed and published or published only.	Printed for publication by others.	and pub- lished, pub- lished only, or printed for publi- cation by others; engravings, lithographs, ready prints, and plate matter.	Job printing, not elsewhere included.	Machine composi- tion done for others.	Book- binding.	Blank books.	Electro- typing, engraving, etc.	All other products.
United States	1919 1914 1909	\$597, 663, 228 307, 330, 861 250, 925, 934	\$19,106,326 7,407,590 6,681,624	\$93,618,836 49,595,482 44,394,621	\$30, 385, 972 17, 662, 613 9, 169, 643	\$14,976,483 6,665,123 5,053,128	\$382,422,718 196,682,104 157,099,380	5, 270, 868	\$15,131,776 9,498,144 12,241,819	\$6,658,071 3,772,649 4,748,250	\$1,421,684 3,451,780 3,943,591	\$23,956,134 7,324,508 7,593,578
California	1919 1914 1909	19,871,377 9,885,477 7,438,072	836, 549 187, 684 218, 417	588,042 802,031 453,172	712,739 207,474 132,616	732,791 231,841 73,776	14,351,737 7,393,594 5,812,574	430,918 261,716	775,745 504,420 478,979	44,472 55,030 79,918	39,821 143,909 91,243	1, 358, 563 97, 778 97, 377
Illinois	1919 1914 1909	110,886,458 54,625,954 39,474,143	3,112,353 359,811 405,027	15, 379, 396 7, 479, 963 7, 783, 151	7,660,892 8,184,261 581,038	2,916,453 1,017,379 518,685	69,607,298 32,541,930 25,306,538	1,856,429 923,919	3,497,471 1,550,256 2,243,465	846,435 586,127 614,592	297, 812 926, 755 927, 565	5,711,919 1,055,553 1,034,082
Indiana	1919 1914 1909	10,741,232 6,237,228 5,680,867	456,299 166,039 21,190	565,410 633,950 813,031	387,660 69,895 164,009	276,020 70,598 47,073	7,807,360 4,116,330 3,608,386	288,528 160,221	165,775 247,144 389,111	139,077 217,692 209,800	99,800 296, <b>5</b> 73	655,103 455,559 131,694
Maryland	1919 1914 1909	10,690,650 5,546,639 3,657,154	99, 991 39, 499 77, 511	396,409 316,502 444,131	308,518 497,351 192,000	665,957 277,868 500	7,528,505 3,680,889 2,318,131	43,053 50,298	227, 155 256, 732 231, 929	472,954 192,905 58,640	2,201 172,636	948, 108 232, 394 161, 676
Massachusetts	1919 1914 1909	41,626,859 20,245,246 17,138,951	661,689 336,769 329,126	17, 126, 097 6, 507, 223 5, 158, 126	1,971,473 1,494,866 1,334,841	263,258 70,234 125,753	18,548,172 10,226,954 8,604,920	411,571 272,711	2,013,030 973,272 1,215,935	7,299 20,916 18,883	241,553 250,423 220,873	382,717 91,888 130,494
Michigan	1919 1914 1909	17,675,925 9,380,560 6,185,479	371,495 74,300 139,373	933,295 428,910 494,438	358,265 260,444 92,288	369,701 409,042 192,958	14,049,089 7,016,854 4,762,349	557, 172 308, 507	433,662 291,764 130,397	22,047 23,050 54,128	46,948 335,800 166,429	533,651 231,889 153,119
Minnesota	1919 1914 1909	12,994,804 7,652,223 4,602,128	383,173 99,333 85,168	1,867,229 1,861,259 235,471	437,760 106,701 99,280	693,844 246,438 276,545	8,336,129 4,674,802 3,469,377	485,151 246,687	478,866 160,535 188,667	43,675 82,939 163,994	47,679 29,145	268,977 125,850 54,481
Missouri	1919 1914 1909	25, 880, 461 12, 434, 192 12, 240, 660	315, 231. 155, 218 99, 577	866,798 611,452 658,011	593, 240 322, 851 185, 798	1	20,429,656 9,490,658 9,214,409	443,404 322,175	198,661 138,678 259,710	439,827 383,529 632,541	39,876 186,958	1,265,287 445,283 524,964
New Jersey	1919 1914 1909	9,569,344 4,291,465 3,655,413	555,970 106,829 10,816	34,136 219,670	666,919 839,884 62,573	8,617 317 3,049	7,201,593 3,223,971 3,054,911	119,447 38,281	277,018 8,296 165,724	9,441 15,073 48,972	30 29,602	732,339 24,648 60,096
New York	1919 1914 1909	149,123,975 78,841,261 69,706,292	8,136,568 4,372,296 3,722,464	40,983,983 23,214,259 19,196,562	11,612,157 2,771,244 3,391,799	2,194,185 1,519,528 1,191,972	74,408,718 40,885,335 35,229,938	2,717,141 1,292,488		1,134,683 357,802 641,119	į į	3,788,831 1,391,731 2,509,846
Ohio	1919 1914 1909	39, 201, 684 19, 915, 250	910, 916 225, 048 327, 614	3,487,106 1,631,240 2,812,093	719,338 195,897 553,460			I		1,140,042 431,404 307,916		1,033,833 708,947 303,762
Pennsylvania	1919 1914 1909	25, 285, 844	555,396 250,830 311,449	8,307,940 4,288,249 4,122,762	1,472,240 881,672 1,018,603		1			1, 393, 797		2,051,185 545,093 504,045
Texas	1919 1914 1909	12, 233, 688 4, 711, 163	105,659 45,839 15,614	522 526	40 119	1	1.0		1			1
Wisconsin	. 1919 1914 1909	4, 239, 861	74,187 69,270 10,917	239,065 252,766 126,383	1	433,131 229,750	1	1				62,979
All other states	1919 1914 1909	83, 043, 688 44, 038, 498		2, 355, 540					1,888,039 1,610,249	1	66,090 431,328	1

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

-				PER	CENT	OF.
CHARACTER.	NUMBER	OF COPIES	PRINTED.		CTAL.	,
	1919	1914	1909	1919	1914	1909
Total	252, 068, 816	175, 166, 698	161, 361, 844	100. 0	100.0	100. 0
Education Fletion History Juvenile	75, 075, 335 24, 317, 643 6, 280, 483 24, 434, 912	51, 069, 521 39, 598, 501 2, 458, 912 16, 399, 881	41,636,847 46,942,399 2,923,187 10,184,030	29. 8 9. 6 2. 5 9. 7	29. 2 22. 6 1. 4 9. 4	25. 8 29. 1 1. 8 6. 3
Law Medicine and hygiene Philosophy Poetry and drama	2, 254, 861 13, 539, 464 538, 775 2, 682, 568	1,701,602 2,337,312 189,996 1,926,892	1,496,194 1,519,480 265,077 1,980,824	0.9 5.4 0.2 1.1	1.0 1.3 0.1 1.1	0.9 0.9 0.2 1.2
Religion and theology (in- cluding Bibles). Scientific and similar as- sociations. Works of reference. All others.	36, 496, 230 1, 149, 946 15, 832, 195 49, 466, 404	24, 411, 502 1, 279, 427 11, 032, 385 22, 760, 767	23,608,230 1,258,562 7,799,590 21,747,424	14.5 0.5 6.3 19.6	13.9 0.7 6.3 13.0	14. 6 0. 8 4. 8 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.

		TOTAL.			R CENT CREASE			SHEET MU	JSIC AND B	ooks of l	rusic.		ALL OTE	ier proi	OUCTS.
STATE.	1919	1914	1909	1909- 1919	1914- 1919	1909- 1914	Printed a publishe reportin	and publi ed, by estab g.	shed, or dishments	Printed l for public	y music ation by	houses others.2	1910	1914	1909
				1010	919 1919		1919	1914	1909	1919	1914	1909			
United States	\$14,592,177	\$7,271,266	\$5, 575, 903	161.7	100.7	30. 4	\$12,500,981	\$6,088,740	\$4,581,342	\$1,923,546	\$712,569	\$848,038	\$158,050	\$469,951	\$146,523
Illinois	975,400 1,642,327	1,042,794 530,264	948,517 352,312	3.1 366.2	-6.5 209.7	10, 2 50, 5	975,400 1,642,327	879, 905 530, 264	352, 312						23,070
New York	9,844,268	3,631,522 484,344	3,110,433 384,537	216. 5 13. 0	171.1 -10.3	16.8 26.0	8,622,244 434,624	3,051,953 409,544 310,320	2,583,342 309,605	1,222,024	567, 117	412,781 74,932		74,800	114,810
PennsylvaniaAll other states 4	344,929 1,350,629	364,194 1,218,148	875,823 406,281	8.2 232.4	-5.3 10.9	-3.1 199.8	344,029 490,457	906,760	261, 917 184, 700	701,522	46,928	214, 245	158,650	264,460	1,807 7,33 <b>6</b>

1 A minus sign (—) denotes decrease.
1 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.
1 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 \$31,77, 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 \$10,356, and other products to the value of \$21,940; 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 \$7,219, and other products to the value of \$43,792.
1 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 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 "Religion" 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.

	1919		1914	1909	PER CEN	T OF INCE	EASE,
KIND.	Value,	Per cent of total.	Value.	Value.	1909- 1919	1914- 1919	1909- 1914
Total		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	837, 549, 528	138.9	92.5	24,
Advertising. Subscriptions and sales.	, 528, 299, 378 278, 006, 382	57.2 30.1	255, 421, 144 103, 427, 563	202, 527, 925 135, 021, 603	160.8 105.9	106.8 70.1	26.1 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. Sheet music and books of music. Engravings, lithographs, etc. Ready prints. Sterootyped plates. Job printing, not elsewhere included	37, 066, 164 1, 115, 880 811, 597 68, 593 40, 646 65, 920, 197	4.0 0.1 0.1 (2) (2) (2) 7.1	20, 357, 413 638, 393 301, 118 252, 131 160, 260 45, 889, 699	19, 516, 591 903, 089 374, 230 744, 497 74, 202 40, 408, 905	89.9 23.4 116.9 90.8 45.2 63.1	82.1 74.8 169.5 72.8 74.6 43.6	4.3 -29.4 -19.1 -66.1 116.6
All other products or work		1.4	9, 458, 227	6, 518, 180	96.7	35.6	45.
Bookbinding Blank books Electrotyping, engraving, etc. Machine composition Miscellaneous	1,844,846	0, 2 (2) (2) (2) (2) 1, 1	1, 489, 831 380, 599 904, 250 411, 230 6, 322, 317	1, 340, 131 442, 973 471, 676 (8) 4, 263, 400	37.7 -26.9 -43.8	28.1 -15.0 -70.7 -15.0 58.8	7. 4 -14. 1 91. 7

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

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

	 			1				ı		·		Manager and the second			
CHARACTER OF PUBLICATION, AND		UMBE	R.	CHARACTER OF PUBLICATION, AND		NUMBE	R.	CHARACTER OF FUBLICATION, AND	1	NUMBE	er.	CHARACTER OF	N	UMBE	a.
STATE.	1919	1914	1909	STATE.	1919	1914	1909	STATE.	1919	1914	1909	PUBLICATION, AND STATE:	1919	1914	1909
NEWS, POLITICS, AND FAMILY READING.			,	COMMERCE, FI- NANCE, INSURANCE,				LABOR.				RELIGION.			
United States	15, 746	17,574	17,698	RAILROADS, ETC.				United States	182	163	(\$)	United States	1,162	1,412	1, 251
CaliforniaIllinois.	690 998	705 1.094	674	United States	294	323	264	California. Illinois.	10 17	13 13		Illinois	131 63	153 76	123 55
Indiana	550	655	1,169 718	Illinois Michigan	25 7	35 11	23 5	Massachusetts Michigan	1 2	8 7		New York	119 116	148 140	135 142
Iowa Kansas	805	838 656	891 679	New York Pennsylvania	90 20	86 27	91 24	Missouri New York	10 23	12 12		Pennsylvania Tennessee	173	276	252
Massachusetts Michigan	525	367 600	326 634	All other states	152	164	121	Ohio Pennsylvania	19 10	13 15	•••••	All other states	85 <b>47</b> 5	75 544	53 491
Minnesota Missouri	680	660 779	643 797	EDUCATION AND HISTORY.		1		All other states	88	70		SCIENCE AND MECHANICS.			
Nebraska New York Ohio	966	577 1,075	558 1,080 882	United States	184	231	202	LAW.				United States	246	135	139
Oklahoma Pennsylvania	454	815 562 937	573	Illinois	20	27	33	United States	59	65	56	District of Columbia Illinois	9 24	9 21	4 26
South Dakota Texas.	343	369 898	1,013	New York	16 33	21 51	18 37	Illinois Massachusetts	3	5	10 3	New York. Pennsylvania	104 19	46 12	52
Washington Wisconsin	207	356	857 322	Pennsylvania All other states	10 105	19 113	15 99	Michigan Missouri	6	2 4 3	4	All other states	50	47	20 37
All other states	4, 591	558 5,073	596 4,902	FRATERNAL, ETC.				New York	12 32	8 43	8 27	SOCIETY, ART, MUSIC, AND FASHION.			
AGRICULTURE, HOR-				United States	314	312	1 419	MEDICINE AND		_	-	United States	227	212	164
TICULTURE, DAIRY- ING, STOCK RAISING,				Illinois	36	32	49	SURGERY.			. :	Illinois Massachusetts	25 14	14 7	10
ETC.	1			Indiana	11 12	10 5	17 10	United States	185	178	197	New York Pennsylvania	114	95 10	75 12
United States	334	346	816	Massachusetts Nebraska	11	13 6	22 10	IllinoisMichigan	26 6	17	20 11	All other states	65	80	58
Illinois	01	35 12	36 21	New YorkOhio	25 23	30 15	37 30	Missouri	14 42	7 13 42	19 42	TRADE JOURNALS. United States	767	873	685
New York. Ohio.	1 32	34 10	28	All other states	185	201	244	Pennsylvania All other states	19 78	42 16 83	18 87	Illinois	127	134	102
Pennsylvania	14	13 242	12 212	GENERAL LITERATURE.				REFORM AND				Massachusetts Michigan	29 13	46 18	25 15
COLLEGE AND SCHOOL	1	###	212	United States	220	284	340	SOCIAL SCIENCE.				Missouri New York	32 231	36 285	37 191
PERIODICALS.	1			Illinois	24	28	36	United States	85	179	(3)	Ohio Pennsylvania	51 57	46 69	42 62
United States		303	271	Iowa Kansas	7	2	- 6 5	California Illunois	9	17 13		All other states	227	239	II 211
Illinois Massachusetts	21 35	14 24 34	28	Maine Massachusetts	2 9	6 15	10 18	Massachusetts	6	7 8		MISCELLANEOUS. United States	ar.	101	100
New York Pennsylvania	37	34 35	17 26 29	Missouri. New York	10 88	7 116	14 112	New York	19 5	44 30		Illinois	69	164	139
Texas	10	10 186	13	Pennsylvania	8	17 10	14 17	Pennsylvania	6 31	11 49	• • • • • •	Massachusetts New York	3	22	17 9
Asmor photog	204	190	158	All other states	63	79	108			70		All other states	19 43	22 114	39 74
1 Triebade						•		<u> </u>			1	<u>                                     </u>			1

<sup>2</sup> Less than one-tenth of 1 per cent.

<sup>&</sup>lt;sup>a</sup> Not reported separately.

Includes a number of labor publications.
Included in "Fraternal"
Included in other classifications, principally "Religion," "Medicine and surgery," "Law," "Education and history," and "Miscellaneous."

Newspapers and periodicals, number and circulation per issue.—Table 19 shows the number and circulation of the various 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 CE	NT OF INC	REASE.1		PER CENT STRIBUTIO	n.
				1909-1919	1914-1919	1909-1914	1919	1914	1909
All classes: NumberAggregate circulation per issue	20,489 222,481,983	22,754 205,594,907	22, 141 164, 463, 040	-7.5 35.3	-10,0 8,2	2. 8 25. 0	100. 0 100. 0	100.0 100.0	100.0 100.0
Daily: Number	2,441 33,028,630	2,580 28,777,454	2,600 24,211,977	-6.1 36.4	-5.4 14.8	-0.8 18.9	11.9 14.8	11.3 14.0	11.7 14.7
Sunday: Number. Aggregate circulation per issue. Triweekly:	604 19, 368, 913	571 16,479,943	520 13, 347, 282	16. 2 45. 1	5.8 17.5	9. 8 23. 5	2. 9 8. 7	2. 5 8. 0	2.3 8.1
Number. Aggregate circulation per issue. Semiweekly:	93 492,286	549, 495	73 335,389	27.4 46.8	10.7 10.4	15, 1 63, 8	0. 5 0. 2	0.4 0.3	0,3 0.2
Number Aggregate circulation per issue. Weekly:	2,020,165	583 2, 483, 629	635 2, 312, 919	-28.8 -12.7	-22, 5 -18, 7	-8.2 7.4	2. 2 0. 9	2.6 1.2	2, 9 1, 4
Number Aggregate circulation per issue. Monthly:	13,375 51,902,121	15, 172 50, 336, 963	15,097 40,822,965	-11.4 27.1	-11.8 3.1	0. 5 23. 3	65. 3 23. 3	66.7 24.5	68. 2 24. 8
Number. Aggregate circulation per issue. Quarterly:	2,647 91,681,807	2,822 79,190,838	2, 491 63, 280, 535	6.3 44.9	-6.2 15.8	13. 3 25. 1	12.0 41.2	12. 4 38. 5	11, 3 38, 5
Number. Aggregate circulation per issue. All other classes:	489 18, 920, 544	500 18,853,901	361 16, 058, 099	35.5 17.8	-2.2 0.4	38. 5 17. 4	2. 4 8. 5	2. 2 9. 2	1.6 9,8
Number. Aggregate circulation per issue.	388 5, 067, 517	8,922,684	4,093,874	6.6 23.8	$-12.2 \\ -43.2$	21. 4 118. 0	1. 9 2. 3	1.9 4.3	1.6 2.5

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

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

CHARACTER OF PUBLICATION, AND STATE.	Num- ber.	CHARACTER OF PUBLICATION, AND STATE.	Num- ber.	CHARACTER OF PUBLICATION, AND STATE.	Num- ber.	CHARACTER OF PUBLICATION, AND STATE.	Num- ber.
AERONAUTICS.		ARCHITECTURE AND BUILDING.		BUSINESS THEORY AND OFFICE ECONOMY.		COLLEGE AND SCHOOL PERIODICALS—continued.	
United States	4	United States	47				
New York	4	California	3	United States	16	Vermont	3
	-	Georgia	3	Illinois	5	Washington	Ç.
AGRICULTURE, HORTICULTURE, STOCK AND POULTRY RAIS-		Illinois. New York	5 18	New York	6	West Virginia	14
ING, ETC.		Ohio	4	TALL COLLOS BUGBOGA		All other states	
United States	334	Pennsylvania	3 11	COLLEGE AND SCHOOL			1
Alabama	3	ART, MUSIC, AND DRAMA.		PERIODICALS.		COMMERCE, FINANCE,	1
Arizona	4	1		United States	415	INSURANCE, ETC.	
California	14	United States	63	Alabama	3		Į
District of Columbia	. 3	Illinois	7	Arkansas	5	United States	178
FloridaGeorgia	3 4	Massachusetts	9 22	California	12	California	10
Illinois	39	Ohio	6	Connecticut	13	Colorado	4
Indiana	14 21	All other states	19	District of Columbia	5 3	Connecticut	2
Kansas	9	AUTOMOBILES, MOTOR BOATS,		Illinois	21	Illinois	1
Kentucky Louislana	5	GAS ENGINES, ETC.		Indiana	11	Indiana	
Maine	š	United States	57	Kansas	16	Massachusetts	1
Maryland	5 10	California	3	Kentucky Louisiana	8 4	Michigan Missouri	1.
Michigan.	13	New York	20	Moryland	8	Nebraska	ĺ :
Minnesota	15 16	Ohio		Massachusetts	35 14	New Jersey New York	
Montana	8	Rhode Island	4	Minnesota	11	Oklahoma	. 4
New Hampshire	10	Wisconsin All other states	12	Mississippi	3 17	OhioOregon.	
New Jersey	.4			Nebraska	15	Pennsylvania	1 1
New York. Oklahoma	32 3	BLIND (IN RAISED TYPE).		New Hampshire New Jersey	7	Texas	16
On10	9	United States	5	New York North Carolina	37		
Oregon	11 14	All states	5	Ohio	22	DOMESTIC ECONOMY,	
South Dakota	7			Oregon Pennsylvania	3 28	COOKERY, ETC.	
Texas Utah.	13 4	BOOK REVIEWS, LIBRARY ECONOMY, ETC.	1	South Carolina	10	·	
Virginia	3		8	South Dakota	5	United States	1
Washington Wisconsin	5	United States		Tennessee	10	New York	
All other states	16	All states	6	Utah		All other states	.  !

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

CHARACTER OF PUBLICATION, AND STATE.	Num- ber.	CHARACTER OF PUBLICATION, AND STATE.	Num- ber.	CHARACTER OF PUBLICATION, AND STATE.	Num- ber.	CHARACTER OF PUBLICATION, AND STATE.	Num ber
EDUCATION, PHILOLOGY, AND LITERARY TECHNIQUE.		LABOR (BY LABOR ORGANIZATIONS).		BACE PAPERS, INDIAN, NEGRO, ETC.		SPORTS, GAMES, AND AMUSEMENTS.	
United States	119	United States	182	United States	32	United States	
istrict of Columbia	4	California	10	New York	4	California	
llinois	18	District of Columbia	6	Ohio	3	Illinois	
W8	3	Illinois	17	All other states	25	Massachusetts	İ
aryland	6	Indiana	19			Missouri	1
assachusetts	12	Kansas	5		i	Naw York	1
issouri	3	Kentucky	5		Į.	Ohio Pennsylvania. All other states	1
ew York	21	Maryland	3	RELIGION.	ŀ	Pennsylvania	1
hio	5	Michigan		77 U 2 Minton		All other states	l
ennsylvaniaennessee	3	Minnesota	3 10	United States	1,162		j
Visconsin	8	Nebraska.	3	Alabama		TRADE JOURNALS, NOT	}
Il other states	30	New Jersey	5	Arkansas	9	ELSEWHERE SPECIFIED.	!
		New York	23	California	36		1
ENGINEERING.		North Carolina	3	Colorado	8	United States	} ;
		Okiahoma	3	Connecticut	š		
United States	62	Ohio	19	District of Columbia	13	California	
11-a - I a		Oregon	3	Florida	5	Colorado	l
llinois	8	Pennsylvania	10	Georgia	14	Connecticut	1
lew York	40	Tennessee	4	Illinois	131		
THE CONTROL BROWNING	14	Texas	6	Indiana	34	FloridaGeorgia	1
FICTION (WHOLLY).		Washington All other states	3	Iowa	35	Illinois	
TIOTOT (HITOURY)	1	TALE OUTOE STORES	19	Kansas	10	Indiana	
United States	48	II	1	Kentucky	11	Iowa	
	- 10	LAW.		Louisiana	12	Kansas	3
alifornia	3	YT-14-3 (14: 1:-		Massachusetts	63	Louisiana	
llinois	! 4	United States	59	Michigan	20	Maryland	.]
lew York	34	Tillmata		Minnesota	20	Massachusetts	.)
Il other states	5	Illinois	3	Mississippi	4	Michigan	
		Michigan Missouri	6	Missouri	65	Minnesota	. j
FRATERNAL ORDERS, CLUBS,	į	New York	12	Nebraska	ii	Missouri	-1
AND SOCIETIES.		Ohio	5	New Jersey	10	Nebraska	
United States	314	Pennsylvania	16	New York	119	New York	
		All other states	12	North Carolina	22	North Carolina	•1
Arkansas	4	1		Oklahoma	. 5	Oklahoma	1
California		MANDAGENE GERGERY IND		Ohio	116	Ohio Oregon	1
Colorado	4	MEDICINE, SURGERY, AND DENTISTRY.		Oregon	10	Pennsylvania	1
Connecticut	4	DENTISITET.		Pennsylvania		Rhode Island.	•
District of Columbia	. 5	United States	150	South Carolina South Dakota	18	Texas.	1
Illinois	36	Omitor Deates	100	Tennessee	.3 85	Washington	
Indiana Iowa	11 12	California	. 5	Texas	12	Wisconsin	
Kansas	5	Illinois		Utah	10	All other states	
Kentucky	3	Kentucky	4	Virginia	18		1
Louisiana	4	Louisiana	. 3	Washington	7	TRANSPORTATION, RAILROADS,	1
Massachusetts	11	Maryland	4	Wisconsin		WATERWAYS, ETC.	1
Michigan	11	Michigan	3	All other states	11	WAIDINIIID, 2101	
Minnesota	14	Missouri	14			United States	_
Missouri	11	Nebraska		<u> </u>	ļ· !		-
Nebraska	11	New Jersey	3 29			Illinois	
New Jersey	7	Ohio	. 6	SCIENCE AND PHILOSOPHY.	ł	Massachusetts	.1
New York	25	Pennsylvania	16	United States	73	Michigan	-
Ohio Oregon		Tennessee	3	United States	10	Missouri	-1
Pennsylvania		Texas	. 9	California	5	New York	•
Texas	12	All other states	. 24	California. District of Columbia	4	Ohio Pennsylvania	•
Virginia.	4	i		II IIIITOIS		Pennsylvania	•
Washington,	6	MILITARY AND NAVAL		Maryland	12	Washington	•
Washington West Virginia	4	APFAIRS.		Massachusetts	. 3	ALL OULD SONOS	1
Wisconsin	13	Tinited States	-	Minnesota	. 3		
All other states	20	United States	. 20	New Jersey	. 2	TECHNOLOGY.	1
	1	District of Columbia	-	New York	21	TT-14-3 Gtat	!
H <b>ealth,Hygiene,And</b> Nursing	1	New York	) 3	Pennsylvania	8	United States	-
United States	35	Virginia.	. 4	All other states	6	All states	
		All other states.	7	11	1	1 114 010 00	1
District of Columbia	4	1	1 '	il	1		1
Massachusetts		MOTION PICTURES.		SOCIETY, FASHION, BEAUTY	1.	TRAVEL, DESCRIPTION, OUT-OF- DOORS, ETC.	
Michigan		II	1	CULTURE, ETC.	1	DOORS, ETC.	1
New York Pennsylvania	13	United States	. 20	United States	. 71	United States	.1
All other states	3 7	Now Work		Office Brates	/1	OHIVEU DURIUS	-
WHAVE DIRECTOR	7	New York	. 9	New York	. 53	California	-
HISTORY AND GENEALOGY.		Pennsylvania	. 3	All other states	18	New York	
		Harman States St	1 8		1	Pennsylvania	
United States	27	NEWS SUMMARIES. GENERAL				All other states	-[
Massachusetts		NEWS SUMMARIES, GENERAL LITERATURE, AND FAMILY	1	SOCIOLOGY PROPORTED INTO			1
New York	3 5	READING.		BOCIOLOGY, ECONOMICS, AND POLITICAL THEORY.		MISCELLANEOUS.	
Pennsylvania	4		1	I JUNEAU THEORY.	}	ELIQUIDAREOUS.	1
All other states	15	United States	. 154	United States	. 85	United States	
				1			
JUVENILE, BOY SCOUTS, ETC.	1	California	- 11	California	. 9	California	
		Dlinois	. 19	Illinois	. 6	Illinois	
United States		Iowa	- 3	Massachusetts	. 6	Indiana	
Indiana	4	Massachusetts		Missouri	. 3	Massachusetts	
lows	4	Minnesota	8	New Jersey	. 3	Minnesota	1
Missouri.	4	Missouri	. 5	New York	. 19	Missouri	1
Nebraska.	4	New York	. 55	North Carolina	. 4	Nebraska	
New York	4	Ohio		Ohio		New York	
Ponnsylvania	3	Pennsylvania. Texas All other states	- 9	Pennsylvania	. 6	Ohio. Pennsylvania.	• •
	, 0	. 0440	- 5	Wisconsin	- 4	# Pennsylvania	1
All other states	9	All other states	. 29	All other states	. 20	All other states	· ·

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, NUMBER, BY GEOGRAPHIC DIVISIONS AND STATES: 1919, 1914, AND 1909.

		TOTAL		мо	RNIN	G.	E	VENIN	э.	·		TOTAL	•	м	ORNIN	īG.	E	ENING	<del></del>
DIVISION AND STATE.	1919	1914	1909	1919	1914	1909	1919	1914	1909	DIVISION AND STATE.	1919	1914	1909	1919	1914	1909	1919	1914	1909
United States				720	794			1,786		South Atlantic—Con. West Virginia	31	33 29	34	10	11 12	11	21	22 17	23
NEW ENGLAND Maine Massachusetts Rhode Island Connecticut	12 84 12 36	179 15 98 12 36	172 14 80 12 38	41 5 18 3 8	41 7 18 2 9	45 7 15 4 11	128 7 66 9 28	138 8 75 10 27	127 7 71 8 27	West Virginia North Carolina South Carolina Georgia Florida Delaware and District	30 35	16 29 26	34 31 13 27 19	9 7 10 11	12 11	9 5 14 7	24 10 20 24	8 17 15	23 22 8 13 12
New Hampshire and Vermont	25	23	22	7	. 5	8	18	18	14	of Columbia	- 9	14	12	5 26	34	7 20	4 62	6 57	5 58
MIDDLE ATLANTIC	214	504 234 46 224	508 231 54 223	155 86 11 58	165 88 13 64	166 84 19 63	300 128 29 143	339 146 33 160	342 147 35 160	Kentucky. Tennessee Alabama Mississippi	88 32 18 24 14	91 33 17 24 17	95 35 16 26 18	26 12 6 5	16 8 5 5	39 16 7 11 5	20 12 19 11	17 9 19 12	56 19 9 15 13
EAST NORTH CENTRALOhioIndianaIllinoisMichiganWisconsin	165 138 168	671 181 160 184 80 66	702 184 172 194 87 65	144 37 31 50 17	160 44 38 47 19 12	156 37 38 51 20 10	457 128 107 118 56 48	511 137 122 137 61 54	546 147 134 143 67 55	WEST SOUTH CENTRAL Arkansas. Louisiana Oklahoma Texas.	226 32 17 62 115	218 33 19 59 107	218 29 23 67 99	65 11 5 11 38	60 7 7 11 35	53 6 6 15 26	161 21 12 51 77	158 26 12 48 72	165 23 17 52 73
West North Central Minnesota Iowa Missouri Nebraska	322 50 58	339 51 68 89 34 69	344 42 68 91 34	88 12 13 21	102 17 18 30 11	77 10 15 20 11	234 38 45 60	237 34 50 59 23	267 32 53 71 23	MOUNTAIN.  Montana Colorado Arizona Nevada Idaha Wyoming Naw	133 22 44 20 7	125 21 44 16 11	137 17 53 19 15	49 11 14 8 4	51 10 18 7 3	54 6 19 8 7	84 11 30 12 3	74 11 26 9 8	83 11 34 11 8
North Dakota and	1 70	1	78	1	17	12	53	52	66	Idaho, Wyoming, New Mexico, and Utah	40	33	33	12	13	14	28	20	19
South Dakota SOUTH ATLANTIC	204	19	186 18 32	72 7 13	9 84 9 13	75 9 13	132 11 18	114 10 19	22 111 9 19	PACIFIC	243 42 33 168	255 43 34 178	238 41 31 166	80 14 8 58	97 17 12 68	95 17 13 65	163 28 25 110	158 26 22 110	143 24 18 101

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.

		AVERAGE CIRCULATION PER ISSUE. PER CENT OF TOTAL.																
			Morning.						Evening.				М	Cornin	g.	Œ	venin	g.
CITY.I		404.6	4000		r cent icrease		1010	****	1000		r cent crease		1919	1014	1909	1010	1014	1000
	1919	1914	1909	1909- 1919	1914- 1919	1909- 1914	1919	1914	1909	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, 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 1,319,038 626,966 191,349	2, 393, 961 813, 528 797, 813 124, 801	1, 806, 820 755, 683 753, 309 70, 595	30. 2 74. 5 -16. 8 171. 1	-1.7 62.1 -21.4 53.3	32. 5 7. 7 5. 9 76. 8	2, 453, 547 1, 238, 839 744, 994 354, 574	2, 121, 609 1, 234, 474 545, 003 295, 049	2, 284, 102 1, 053, 642 780, 288 213, 485	7. 4 17. 6 4. 5 66. 1	0.4 36.7	30, 2	51.6 45.7	53. 0 39. 7 59. 4 29. 7	49.1	48. 4 54. 3	40.6	58. 2 50. 9
Cleveland, OhioSt. Louis, MoBoston, MassBaltimore, Md.	199, 312 358, 354 731, 519 159, 993	222, 137 287, 548 709, 878 183, 322	158, 920 284, 816 560, 663 164, 447	25. 8 30. 5	-10.3 24.6 3.0 -12.7	26.6	717, 241	355, 147 326, 790 828, 054 174, 778	244, 231 341, 419 739, 406 120, 553	101.8 2.8 -3.0 94.5	38. 8 7. 4 13. 4 34. 1	45.4 -4.3 12.0 45.0	50.5	38.5 46.8 46.2 51.2	39. 4 45. 5 43. 1 57. 7	71.2 49.5 49.5 59.4	53. 2 53. 8	56.9
Pittsburgh, Pa Los Angeles, Calif Buffalo, N. Y San Francisco, Calif	205, 558 136, 012	220, 391 190, 533 108, 922 274, 647	81,900 89,239	6. 4 151. 0 52. 4 20. 7	7.9 24.9	22, 1	225, 905 240, 496	205, 154 273, 534	81,070 221,892	16.3 178.7 8.4 58.7	10.1 10.1 -12.1 -14.4	153.1 23.3	47.6 36.1	39.0 48.2 28.5 49.0	51 28.7	62.9 52.4 63.9 42.0	51.8 71.5	49.7 71. 3

Cities listed according to their rank in population.

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 per-

centage 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 onefourth of the total for the morning, and nearly onefifth for the evening circulation. Pennsylvania was second in morning and Illinois in evening circulation.

			AVE	rage cu	CULATION PR	er issue, ex	CLUSIVE OF S	UNDAY EDITIO	ons.			
DIVISION AND STATE,		То	tal.		Mor	ning.	Eve	ning.	morn	nt which ing and c sents of	evening	ation o
	1919	Per cent of total,	1914	Per cent of in- crease,1	1919	1914	1919	1914	19	19	19	14
		1919.		1914- 1919.					Morn- ing.	Even- ing.	Morn- ing.	Even ing.
United States		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.
EW ENGLAND		8.7	2,711,635	8.1	1,078,244	990,774	1,799,189	1,720,861	37.5	62. 5	36.5	63.
Maine. Massachusetts. Rhode Island. Connecticut. New Hampshire and Vermont.	122,076 2,085,287 191,762 351,200 127,108	0.4 6.3 0.6 1.1 0.4	117, 842 2, 060, 343 148, 895 275, 773 108, 782	3. 6 1. 2 28. 8 27. 4 16. 8	52, 652 854, 217 37, 967 94, 403 39, 005	64, 094 793, 403 23, 429 73, 612 36, 236	69, 424 1, 231, 070 153, 795 256, 797 88, 103	53, 748 1, 266, 940 125, 466 202, 161 72, 546	43.1 41.0 19.8 26.9 30.7	56. 9 59. 0 80. 2 73. 1 69. 3	54. 4 38. 5 15. 7 26. 7 83. 3	45. 61. 84. 73. 66.
LIDDLE ATLANTIC		31. 9	9, 278, 023	18.7	4, 361, 566	4, 198, 662	6, 186, 857	5, 079, 361	41.3	58.7	45.3	54,
New York New Jersey Pennsylvania	6,919,325 581,851 3,047,247	20.9 1.8 9.2	5,874,207 451,681 2,952,135	17. 8 28. 8 3. 2	3, 111, 151 96, 000 1, 154, 415	2,756,251 88,469 1,353,942	3, 808, 174 485, 851 1, 892, 832	3, 117, 956 363, 212 1, 598, 193	45. 0 16. 5 37. 9	55. 0 83. 5 62. 1	46. 0 19. 6 45. 9	53, 80. 54.
AST NORTH CENTRAL		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	84.
Ohio Indiana Illinois Michigan Wiscousin.	2, 497, 955 909, 953 3, 241, 254 1, 020, 649 605, 213	7.6 2.8 9.8 3.1 1.8	2, 484, 548 777, 435 2, 620, 661 888, 981 515, 219	0.5 17.0 23.7 14.8 17.5	564, 883 312, 339 1, 481, 980 274, 911 77, 720	995, 999 259, 870 981, 351 244, 762 105, 550	1, 933, 072 597, 614 1, 759, 274 745, 738 527, 493	1, 488, 549 517, 565 1, 639, 310 644, 219 400, 669	22. 6 34. 3 45. 7 26. 9 12. 8	77. 4 65. 7 54. 3 73. 1 87. 2	40, 1 33, 4 37, 4 27, 5 20, 5	59. 66. 62. 72. 79.
YEST NORTH CENTRAL	3, 890, 214	11.8	3, 373, 427	15.3	1, 393, 610	1, 275, 760	2, 496, 604	2,007,667	35.8	64.2	37.8	62.
Minnesota Iowa Missouri Nebraska Kansas North and South Dakota	1, 608, 606 371, 309 333, 573 166, 843	2.1 2.2 4.9 1.1 1.0 0.5	655, 070 587, 268 1, 432, 219 329, 840 267, 463 101, 567	5.7 22.2 12.3 12.6 24.7 64.3	183, 019 185, 352 672, 797 146, 361 140, 284 65, 797	233, 443 153, 185 622, 759 109, 658 109, 438 47, 277	509, 257 532, 255 935, 809 224, 948 193, 289 101, 046	421, 627 434, 083 809, 460 220, 182 158, 025 54, 290	26. 4 25. 8 41. 8 39. 4 42. 1 39. 4	73. 6 74. 2 58. 2 60. 6 57. 9 60. 6	35.6 26.1 43.5 33.2 40.9 46.5	64. 78. 58. 66. 59.
OUTH ATLANTIC	1, 894, 105	5.7	1,565,078	21.0	815, 800	737, 092	1, 078, 805	827, 986	43.0	57.0	47.1	52,
Maryland Virginia. West Virginia. North Carolina. South Carolina. Georgia. Florida Delaware and District of Columbia.	438, 635 257, 207 156, 050 170, 406 116, 722 298, 728 165, 824 281, 533	1.3 0.8 0.5 0.5 0.4 0.9 0.5 0.9	400, 680 233, 975 123, 722 120, 823 83, 885 265, 416 119, 102 217, 475	9. 5 9. 9 26. 1 48. 5 39. 1 12. 6 39. 2 29. 5	173, 908 97, 477 77, 110 95, 217 65, 176 121, 177 84, 280 100, 955	198, 620 105, 354 60, 948 73, 802 52, 570 104, 581 63, 616 77, 601	264,727 159,730 78,940 84,189 51,546 177,551 81,544 180,578	202, 060 128, 621 62, 774 47, 021 31, 315 160, 835 55, 486 130, 874	39.6 37.9 49.4 53.1 55.8 40.6 50.8 35.9	60. 4 62. 1 50. 6 46. 9 44. 2 59. 4 49. 2 64. 1	49, 6 45, 0 49, 3 61, 1 62, 7 39, 4 53, 4 35, 7	50. 55. 50. 38. 37. 60. 46.
Cast South Central	990, 290	3.0	845, 080	17. 2	417, 524	347, 634	572,786	497, 446	42. 2	57.8	41.1	58.
Kentucky Tennessee Alabama. Mississippi	315, 851 387, 329 230, 630 56, 480	1.0 1.2 0.7 0.2	311, 019 301, 583 186, 686 45, 792	1.6 28.4 23.5 23.3	145, 660 166, 940 78, 552 26, 372	128, 851 146, 818 56, 111 15, 854	170, 191 220, 389 152, 078 30, 108	182, 168 154, 765 130, 575 29, 938	46.1 43.1 34.1 46.7	53. 9 56. 9 65. 9 58. 3	41. 4 48. 7 30. 1 34. 6	58. 51. 69. 65.
VEST 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.
Arkansas. Louislana Oklahoma Texas	127, 985 233, 160 347, 673 738, 412	0. 4 0. 7 1. 1 2. 2	87, 614 139, 686 242, 305 610, 445	46, 1 66, 9 43, 5 21, 0	71, 015 91, 728 130, 409 300, 965	43, 699 70, 287 78, 553 266, 299	56, 970 141, 432 217, 264 437, 447	43, 915 69, 399 163, 752 344, 146	55. 5 39. 3 37. 5 40. 8	44. 5 60. 7 62. 5 59. 2	49. 9 50. 3 32. 4 43. 6	50, 49, 67, 56,
OUNTAIN	747, 166	2.3	539, 917	38.4	285, 292	238, 223	461,874					
Montana. Colorado Arizona Nevada Idaho, Wyoming, Now Mexico, and	111, 518 287, 982 56, 995 14, 810	0.3 0.9 0.2 0.1	87, 113 249, 465 32, 875 15, 179	28, 0 15. 4 73. 4 -2. 4	67, 121 86, 187 28, 237 7, 448	50, 774 83, 012 16, 852 6, 476	44,397 221,795 28,758 7,362	36, 389 166, 453 16, 023 8, 703	60. 2 23. 0 49. 5 50. 3	39.8 77.0 50.5 49.7	58.3 33.3 51.3 42.7	55. 41. 66. 48. 57.
Ought	275, 861	0.8	155 <b>, 2</b> 85	77.6	116, 209	81, 109	159, 562	74, 176	42.2	57.8	52. 2	47.
ACIFIC.	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.
Washington, Oregon California	518, 628 293, 204 1, 546, 913	1.6 0.9 4.7	456, 489 218, 449 1, 422, 462	13.6 34.2 8.7	141, 932 90, 870 692, 553	146, 251 77, 626 633, 976	376, 696 202, 334 854, 360	310, 238 140, 823 788, 486	27. 4 31. 0 44. 8	72. 6 69. 0 55. 2	32.0 35.5 44.6	68. 64. 55.

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.

		NUMBER.		AVERAGE COMBINED CIRCULATION.							
STATE.	1919	1914	1909	1919	1914	1909	Per cent of increase.1				
	1010	1914	TMA	1919	1914	1000	1909-1919	1914-1919	1909-1914		
United States	154	160	137	2,710,265	2, 598, 827	1,786,281	51.7	4. 3	45.5		
California Illinois Indiana Massachusetts Michigan Missouri	$\begin{array}{c} 27 \\ 1 \\ 12 \end{array}$	16 25 3 6 5	13 21 5 5 5	150, 986 617, 256 3, 128 78, 386 66, 000 46, 269	81, 655 343, 688 19, 687 26, 547 39, 247 41, 512	48, 683 271, 500 17, 766 16, 200 18, 975 141, 151	210. 5 127. 4 -82. 4 383. 9 247. 8 -67. 2	84. 9 79. 6 -84. 1 105. 3 68. 2 11. 5	67. 9 26. 6 10. 8 63. 9 106. 8 -70. 6		
New York Ohio Pennsylvania Wisconsin All other states	12 7 6	40 12 11 6 33	35 11 8 6 22	1,258,704 189,728 75,997 S9,650 134,161	1,509,093 130,965 151,745 100,801 147,887	968, 340 89, 665 75, 649 58, 433 79, 969	30, 0 111. 6 0. 5 53. 4 67. 8	-16.6 44.9 -49.9 -16.1 -9.3	55.8 46.1 100.6 82.8 84.9		

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

Dailies in foreign languages, by circulation.—Table 25 shows the circulation of each of the leading foreignlanguage 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.

The state of the s	AVI	RAGE COMI	SINED CIRCU	LATION I	er issui	o.		AVER	AGE COMBI	NED CIRCUL	ATION P	en Issue	).
LANGUAGE.				Per c	ent of inc	crease.1	LANGUAGE.				Per ce	at of inc	rease.t
	1919	1914	1909	1909- 1919	1914- 1919	1909- 1914		1919	1914	1909	1909- 1919	1914- 1919	1908- 1914
Total				51.7	4.3	45. 5	Italian	47, 815	269, 674 39, 961	160, 300 24, 603	68.7 94.3	0.3 19.7	68, 2 62, 4
Bohemian Chinese French German Hungarian	76, 950 73, 494 384, 996	73, 688 16, 569 52, 660 823, 062 103, 245	52, 143 9, 500 40, 230 753, 116 54, 300	27. 0 710. 0 82. 7 -48. 9 59. 9	-10. 1 364. 4 39. 6 -53. 2 -15. 9	41. 3 74. 4 30. 9 9. 3 90. 1	Polish. Spanish. Yiddish. All other languages 3.	44,714 676,145	207, 380 28, 150 762, 910 221, 528	88, 937 3, 400 524, 900 74, 852	305. 0 1, 215. 1 28. 8 731. 7	73,7 58.8 -11.4 181.0	133. 2 727. 9 45. 3 196. 0

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, the reports showed that 71, with an aggregate circulation of 1,530,819, were printed

languages other than English. Eighteen, with a circulation of 297,231, were printed in German; 10, with a circulation of 600,469, in Yiddish; and 8, with a circulation of 236,085, in Italian.

¹ A minus sign (—) denotes decrease.
² Includes English-and-Gorman.
² Includes English-and-Gorman.
² 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.

## MANUFACTURES.

TABLE 26.—SUNDAY NEWSPAPERS, NUMBER AND CIRCULATION: 1919, 1914, AND 1909.

		NUMBER.			AVE	RAGE COMBINED	CIRCULATION F	er issue.		
DIVISION AND STATE.	1919	1914	1909	1919	Per cent	1914	1909	Per c	ent of incre	ase.1
					1919.			1909-1919	1914-1919	1909-1914
United States	604	671	520	19, 368, 913	100.0	16, 479, 943	13, 347, 282	45.1	17.5	23. 8
NEW ENGLAND	30	34	29	1,653,607	8.5	1, 439, 928	1, 267, 440	80.5	14.8	13.
Massachusetts Connecticut Maine and Rhode Island 3	17 8 5	21 8 5	15 10 4	1, 444, 846 119, 765 88, 996	7.5 0.6 0.5	1, 271, 453 100, 581 67, 894	1, 122, 049 86, 261 59, 130	28. 8 38. 8 50. 5	13.6 19.1 31.1	13. 3 16. 4 14. 8
Middle Atlantic	92	101	81	6,227,902	32.2	5, 761, 587	4, 509, 679	38, 1	8.1	27,
New York. New Jersey Pennsylvania	54 9 29	55 7 39	48 6 27	4, 469, 074 146, 713 1, 612, 115	23.1 0.8 8.3	3, 917, 088 83, 995 1, 760, 504	2, 957, 727 70, 670 1, 481, 282	51. 1 107. 6 8. 8	14.1 74.7 -8.4	32, 18, 18,
East North Central	109	118	108	4,001,786	20.7	3, 269, 351	2, 855, 912	40.1	22.4	14.
Ohio Indianė. Illinois. Michigan. Wisconsin.	29 18 41 14 7	28 18 48 14 8	25 20 38 15 8	1, 087, 733 276, 880 1, 886, 084 507, 916 243, 173	5.6 1.4 9.7 2.6 1.3	830, 219 254, 126 1, 635, 121 342, 103 207, 722	645, 869 206, 176 1, 616, 506 256, 583 130, 778	68. 4 34. 3 16. 7 98. 0 85. 9	31.0 9.0 15.3 48.4 17.1	28. 23. 1. 33. 58.
WEST NORTH CENTRAL	69	65	64	2, 361, 954	12.2	2,004,978	1,649,780	43.2	17.8	21.
Minnesota Towa Missouri Nebraska Kansas North Dakota and South Dakota <sup>2</sup>	9 14 18 9 11 8	7 14 23 12 5 4	7 14 21 8 6	444,523 266,152 1,205,673 255,702 128,997 60,907	2,3 1,4 6,2 1,3 0,7 0,3	369, 912 200, 666 1, 131, 459 187, 287 86, 727 28, 927	237, 205 169, 678 978, 377 129, 050 88, 044 47, 426	87. 4 56. 9 23. 2 98. 1 46. 5 28. 4	20. 2 32. 6 6. 6 36. 5 48. 7 110. 6	55, 18. 15. 45. -1. -39.
SOUTH ATLANTIC	75	65	55	1,471,480	7.6	1,100,039	751, 231	95.9	33.8	46.
Maryland Virginia West Virginia North Carolina South Carolina Georgia Florida Delaware and District of Columbia?	11 9 14 13	4 9 9 12 7 10 9 5	5 8 7 7 4 13 6 5	339, 196 179, 338 73, 561 116, 753 70, 606 335, 912 89, 177 257, 937	1.8 0.9 0.4 0.6 0.4 1.7 0.5	265, 817 117, 531 56, 143 87, 833 63, 783 259, 108 83, 171 166, 653	182, 582 79, 258 44, 939 39, 281 32, 447 172, 039 48, 539 152, 146	85.8 126.3 63.7 197.2 145.3 95.3 83.7 69.5	27. 6 52. 6 31. 0 32. 9 24. 8 20. 6 7. 2 54. 8	45. 48. 24. 123. 96. 50. 71. 9.
EAST SOUTH CENTRAL	t .	34	35	631, 304	3.3	437, 205	414, 052	52. 5	44.4	б.
Kentucky Tennessee Alabama Mississippi.	11 6 10 5	9 6 12 7	12 7 9 7	169, 396 241, 792 182, 761 37, 355	0. 9 1. 2 0. 9 0. 2	88, 246 171, 558 144, 830 32, 571	115, 855 183, 196 78, 679 36, 322	32.0 132.3	40.9 26.2	-6. 84,
WEST SOUTH CENTRAL	. 79	58	58	1,079,974	5.6	821, 241	583, 028	85.2	31. 5	40,
Arkansas Louisiana Oklahoma Texas	. 20	5 7 12 32	7 8 11 30	83, 685 247, 556 187, 199 561, 534	1.3	178, 168 117, 158	50, 593 152, 920 77, 326 302, 189	61, 9 142, 1	38. 9 59. 8	16, 51,
MOUNTAIN	. 48	44	39	551,994	2.8	445, 670	362, 439	52.3	23. 9	23.
Montana. Idaho. ColoradoArizona Utah. Wyoming, New Mexico, and Nevada <sup>2</sup>	7 11 9	8	9	88, 003 44, 251 252, 981 32, 126 100, 076 28, 467	0. 2 1. 3 0. 2 0. 5	34, 566 214, 916 18, 244	48, 088 13, 884 223, 008 17, 400 45, 428 14, 651	83. 2 219. 2 13. 4 84. 6 133. 5 94. 3	28. 0 17. 7 76. 1 14. 6	149 -3 4 103
PACIFIC		56	55	1,388,912	7.2	1, 199, 944	953, 721	45.6	1.5. 7	25
Washington Oregon California	13 11 46	12 7 37	13 6 36	288, 724 191, 330 908, 858	1.5 1.0 4.7	276, 212 146, 975 776, 757	243, 663 93, 142 616, 910	18, 5 105, 4 47, 3	30.2	57

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

<sup>&</sup>lt;sup>3</sup>Can not be shown separately without disclosing the circulation of individual papers.

Sunday newspapers in 12 leading cities.—Table 27 shows the number and average 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.

		NUMBER.			AVERAGE	CIRCULATION PER	aueri .		
CITY.1							Per c	ent of incre	350. <sup>7</sup>
	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 Chicago, Ill Philadolphia, Pa Detroit, Mich	35 20 13 5	31 20 18 3	32 15 13 4	3,752,383 1,665,740 1,035,307 425,443	3,165,139 1,454,637 1,015,984 243,259	2,744,990 1,473,597 1,052,052 142,976	36. 7 13. 0 -1. 6 197. 6	18.6 14.5 1.9 74.9	15.3 1.3 3.4 70.1
Cleveland, Ohio. St. Louis, Mo. Boston, Mass Baltimore, Md	3 6 6 3	4 6 4 4	5 7 4 6	448, 544 696, 156 1, 275, 814 339, 196	280, 195 677, 320 1,095, 956 265, 817	186, 340 670, 101 992, 332 184, 378	140. 7 3. 9 28. 6 84. 0	60, 1 2, 8 16, 4 27, 6	50. 4 1. 1 10, 4 44. 2
Pittsburgh, Pa Los Angeles, Calif. Buffalo, N. Y San Francisco, Calif.	6 5 5 7	6 4 5 7	6 4 7 7	465, 917 296, 358 349, 068 417, 310	410, 054 298, 755 253, 678 369, 949	385, 305 208, 500 241, 876 359, 736	20. 9 42. 1 44. 3 16. 0	13.6 -0.8 37.6 12.8	6. 4 43. 3 4. 9 2. 8

<sup>&</sup>lt;sup>1</sup> Cities listed according to their rank in population.

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.

<sup>3</sup> A minus sign (-) denotes decrease.

TABLE 28.—WEEKLY NEWSPAPERS AND PERIODICALS, NUMBER AND CIRCULATION, BY GEOGRAPHIC DIVISIONS AND STATES: 1919, 1914, AND 1909.

		WIND	DIAILDO.	1919, 1914, A	11D 1300.				
		NUMBER.			AVERAGE COM	IBINED CIRCULAT	ON PER ISSU	Jr.	
DIVISION AND STATE,	1919	1914	1909	1919	1914	1909	Per	cent of incre	1986,1
							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.
NEW ENGLAND	539	609	590	1,894,228	3, 105, 093	2,500,606	24. 2	39.0	24.
Maine	54 54 56 284 16 75	73 60 59 322 22 73	87 66 67 271 21 78	96, 205 72, 024 64, 289 1, 493, 362 25, 450 142, 899	162, 139 109, 806 82, 103 2, 552, 499 48, 928 149, 618	186,616 141,287 92,355 1,911,486 34,013 134,849	-48. 4 -49. 0 -30. 4 -21. 9 -25. 2 6. 0	-40.7 -34.4 -21.7 -41.5 -48.0 -4.5	-13. -22. -11. 33. 43. 11.
MIDDLE ATLANTIC	1,785	2,040	2,069	21,941,158	16,409,602	12, 458, 495	76. 1	33. 7	31.
New York New Jersey. Pennsylvania	902 230 653	1,006 246 788	975 247 847	15,433,740 353,006 6,154,412	9,872,226 391,044 6,146,332	6,756,243 383,231 5,319,021	128. 4 7. 9 15. 7	56. 3 9. 7 0. 1	46. 2. 15.
EAST NORTH CENTRAL	2,699	3,096	3,272	12,536,262	12, 386, 400	10,466,986	19.8	1.2	18.
Ohio. Indiana. Illinois. Michigan. Wisconsin.	543 407 866 443 440	641 485 967 517 486	699 517 1,018 526 512	3,282,812 1,495,279 5,551,012 1,104,022 1,103,137	3,110,883 1,291,735 6,216,667 793,176 973,948	2,913,730 781,866 5,008,590 750,298 1,012,502	12, 7 91, 2 10, 8 47, 1 9, 0	5. 5 15. 8 -10. 7 39. 2 13. 3	5. 05. 24. 5. -3.
WEST NORTH CENTRAL	3,554	3,872	3,925	7,710,362	9,902,113	7,575,538	1.8	-22.1	80.
Minnesota. Iowa Missouri North Dakota. South Dakota Nobraska Kansas.	616 657 611 205 320 515 540	620 738 721 315 347 538 593	614 784 781 310 360 521 605	1,685,983 1,190,932 2,258,690 305,704 260,289 924,630 1,084,134	1,790,318 1,459,849 3,542,326 265,981 268,243 916,257 1,658,639	1,269,856 1,419,709 1,871,585 259,675 277,127 1,074,554 1,403,082	32. 8 -16. 1 20. 7 17. 7 -6. 1 -14. 0 -22. 7	-5.9 -18.4 -36.2 14.9 -3.0 0.9 -34.6	41. 2. 80. 2. -3. -14. 18.
SOUTH ATLANTIC	995	1,129	1,116	2,643,164	2, 156, 791	2,067,315	27. 9	22. 6	4.
Delaware. Maryland. District of Columbia. Virginia. West Virginia. North Carolina. South Carolina. Georgia. Florida.	28 104 18 151 136 147 85 201 127	24 125 17 165 158 172 91 241 141	23 120 15 161 156 178 90 246 127	38, 932 205, 373 1, 049, 440 356, 735 175, 502 240, 158 150, 308 262, 075 155, 461	29, 632 161, 045 301, 339 429, 016 222, 504 329, 922 148, 597 363, 121 171, 615	25, 950 185, 554 186, 246 392, 106 187, 822 395, 682 133, 240 423, 897 137, 818	50, 0 10, 7 466, 5 -9, 0 -6, 5 -39, 3 19, 6 -38, 2 12, 8	31. 4 27. 5 248. 3 -16. 8 -21. 1 -27. 2 7. 3 -27. 8 -9. 4	11. -14.
EAST SOUTH CENTRAL		788	810	1,430,524	1,924,940	1,905,125	-24.9	-25.7	1.
Kentucky Tennossee Alabama. Mississippi	185 182 127 138	221 224 174 189	226 223 179 182	346,491 580,548 392,023 111,462	348,342 923,117 491,616 161,805	481,957 923,481 278,245 221,492	28. 1 37. 1 40. 9 49. 7	-0.5 -37.1 -20.3 -31.1	(²) 76.
WEST SOUTH CENTRAL	1,346	1,659	1,602	1,606,124	2,047,776	1,894,359	-15.2	-21.6	8.
Arkansas. Louistana Oklahoma Taxas.	217 117 376 636	248 157 497 762	234 141 499 728	243,723 125,262 342,745 894,394	273, 078 148, 987 500, 335 1, 125, 376	241, 413 176, 193 512, 229 964, 524	1. 0 -28. 9 -33. 1 -7. 3	15.9 31.5	2
MOUNTAIN	900	942	774	828, 395	1,095,355	742,136	11.6	-24. 4	47
Montana Idaho. Wyoming. Colorado. New Mexico. Arizona. Utah. Nevada.	124 72 283 81 47	203 134 67 293 90 46 82 27	101 108 55 278 86 41 65 40	186, 202 89, 832 60, 551 279, 544 69, 273 35, 257 83, 701 13, 945	292, 746 102, 226 51, 847 430, 727 69, 802 41, 420 01, 339 15, 248	92,027 01,134 39,227 338,002 62,825 24,675 71,542 22,613	54. 4 17. 3 10. 3 42. 9 17. 1	-2.3 16.8 -35.1 -0.8 -14.9	12 32 27 11 67 27
PACIFIC		1,037	, 988	1,311,904	1,308,884	1,212,405	8, 2	0.2	
Washington. Oregon. California	255 174 496	307 201 529	268 176 495	313,718 281,324 716,862	276, 979 349, 363 682, 542	252, 396 229, 585 730, 424	24.3 22.5 -1.9	13.8 19.8 5.0	52

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

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

 $<sup>\</sup>ensuremath{^{2}}$  Decrease of less than one-tenth of 1 per cent.

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 news-

papers 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.

		NUM	BER C	of Weel	KLY—					AVERA	E COMI	SINED C	IRCULATIO	n per issi	JE.		<del></del>	
	Pe	riodica	ls.	Ne	wspape	rs.			Periodical	3.				:	Newspaper	3.		
STATE.										Per ce	nt of inc	rease.1				Per ce	nt of inc	Crease.1
•	1919	1914	1909	1919	1914	1909	1919	1914	1909	1909- 1919	1914- 1919	1909 1914	1919	1914	1909	1909- 1919	1914- 1919	1900- 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	57 117 31 28 24	75 145 34 23 19	61 121 19 27 21	439 749 376 629 516	715	434 897 498 757 584	3,097,392 797,820 505,920	3,982,208 714,990 250,975	3,159,772 206,060 565,962	287.2 -10.6	-22.2 11.6 101.6	8. 1 26. 0 247. 0 -55. 7 -9. 8	697, 459	2,234,459 576,745 1,208,874	1,848,818 575,806 853,747	32. 7 21. 1 -19. 8	9.8 $20.9$ $-43.3$	20. 9 0. 2 41. 6
Kentucky	12 53 17 36 48	14 77 37 25 66	22 54 26 27 58	173 231 426 580 563	245 480	204 217 500 587 673	516, 835 130, 877 528, 142	2,124,440 208,887 646,651	1,483,153 171,602 161,665	-65.2 -23.7 226.7	-75.7 -37.3 -18.3	21.7 300.0	276, 355 976, 527 973, 145 1,157, 841 1,143, 048	428,059 584,289 1,144,167	428,333 578,696 1,108,191	128. 0 68. 2	128, 1 66, 6 1, 2	-0.1 1.0 3.2
Nebraska New York North Carolina Ohio Pennsylvania	26 249 18 81 127	25 267 16 84 157	21 223 19 86 132	489 653 129 462 526	156 557	500 752 159 613 <b>7</b> 15	14,015,656 77,048 2,208,252	7,974,662 83,300 1,856,280	5,090,589 165,406 1,687,358	175.3 -53.4 30.9	75.8 -7.5 19.0	-49.6 10.0	1,418,084 163,110 1,074,560	1,897,564 246,622 1,254,603	1,665,654 230,276 1,226,372	-14.9 -29.2 -12.4	-25.3 -33.9 -14.4	13. 9 7. 1 2. 3
Tennessee	26 23 18 11 228	31 32 23 21 208	25 28 15 12 197	156 613 133 429 3,873	730 142 465	198 700 146 500 4, 269	238,084 196,720 226,240	236,765 360,749	207, 450 193, 367 167, 036	14.8 1.7 35.4	-8.2 -16.9 -37.3	22, 4 116, 0	650,310 160,015 876,897	805,995 192,251 613,199	757,074 198,739 845,466	-13.3 -19.5 3.7	-24, 2 -16, 8 43, 0	14.4 -3.3 -27.5

<sup>1</sup> 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.

		NUMBER.		AVERAGE COM	SINED CIRCULATI	ON PER ISSUE.	PER CENT OF TOTAL.		
CHARACTER.	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. College and school Commerce, finance, insurance, railroads, etc. Education and history Fraternal General literature Labor Law Medicine and surgery Reform and social science Religion Science and mechanics Society, art, music, fashion, etc. Trade Miscellaneous.	24 33 1 77 87 25 13 16 380 38	81 88 84 18 31 56 84 22 524 524 20 55 227	92 65 84 14 69 52 (*) 19 7 (*) 483 23 49 195 42	3,713,502 157,888 208,121 1,112,240 549,667 12,853,816 557,901 672,299 7,889,870 420,092 1,776,911 893,425 87,973	4,008,547 94,249 283,925 1,043,466 275,100 7,701,592 385,900 110,487 286,081 12,116,666 275,167 555,543 1,104,976 211,103	2,851,308 72,460 340,819 397,902 454,930 5,799,138 (2) 47,843 105,811 (3) 8,644,678 289,478 209,945 1,041,735 160,470	11. 9 0. 5 0. 9 3. 6 1. 8 41. 2 1. 8 0. 1 1. 1 2. 2 24. 7 1. 3 5. 7 2. 9 0. 3	14. 1 0. 3 1. 0 3. 7 1. 0 27. 0 1. 2 0. 2 0. 4 1. 0 42. 5 1. 0 3. 9 0. 7	11. 8 0. 4 1. 7 2. 0 2. 3 29. 2 (a) 0. 5 (b) 43. 0 1. 5 5. 2 0. 8

<sup>&</sup>lt;sup>1</sup> Includes a number of publications devoted to news comments and literary review.

\* Included in "Fraternal."

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.

Included in other classifications, principally "General literature."

Table 31.—Weekly Newspapers and Periodicals in Foreign Languages—Average Combined Circulation, by Principal Languages: 1919, 1914, and 1909.

LANGUAGE.	1919	1914	1909		CENT CREAS			CENT	
LANGUAGE.	1910	1914	1909	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 Croatian Danish Dutch Finnish	37, 899 61, 100 62, 196 34, 950 30, 075	44,000 53,526 51,800	7,000 65,950 42,850	772.0 -5.7 -18.4	38. 9 16. 2 -32. 5	18.8	1.1 1.8 1.9 1.1		1.9
FrenchGermanHungarianItalianLithuanian	34, 692 939, 574 40, 575 212, 300 48, 305	1,438,888 30,715 271,276	1,668,369 11,275 219,475	-43.7 259.9 -3.3	32.1 $-21.7$	-13.8 172.4 23.6	6.4	1.8 33.9 0.7 6.4 2.2	1.9 47.1 0.3 6.2 0.8
Norwegian Polish Portuguese Slovenian	346,565	383,722 19,100	288,820 14,050	20.0 11.7	-9.7 $-17.8$	35.9	4.0 10.5 0.5 1.0	4.1 9.1 0.5 0.1	5.9 8.1 0.4 0.3
Spanish Swedish Yiddish All other <sup>2</sup>	370, 577	727,927 157,500	449, 944 91, 160	368.7	-49.1 171.3	61.8 72.8	11, 2 12, 9	4.1 17.2 3.7 10.6	

<sup>&</sup>lt;sup>1</sup> A minus sign (—) denotes decrease.

<sup>2</sup> Includes, in 1919, Albanian, Arabic, Armenian, Bulgarian, Chinese, Czechoslovak, Esthonian, Flemish, Greek, Hebrew, Japanese, Lettish, Magyar, Russian, Ruthenian, Seandinavian, Serbian, Slovak, Ukranian, Weish, Wondish, 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.

	N	JMBI	en.	AVERA	GE COMBI	NED CIRC	ULATION	PER IS	SUE.
STATE.				-			Per cer	nt of inc	rease.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
	12	17	14	15,983	52,175	54,385	-70. 6	-69.4	-4.1
	13	11	10	23,320	27,691	21,750	7. 2	-15.8	27. 3
	74	93	95	602,498	981,137	559,617	7. 7	-38.6	75. 3
	4	6	9	8,100	47,255	10,750	-24. 7	-82.9	339. 6
Iowa	6	35	42	44,941	105,850	108, 583	-58.6	-57.5	-2.5
Kansas		13	11	11,275	19,255	18, 567	-39.3	-41.4	3.7
Louisiana		11	7	4,647	10,061	22, 000	-78.9	-53.8	-54.3
Maryland		6	9	5,900	6,430	20, 336	-71.0	-8.2	-68.4
Massachusetts		35	29	106,774	133,742	94, 106	13.5	-20.2	42.1
Michigan Minnesota Missouri Nebraska New Jersey	35 16	32 45 24 33 30	30 43 26 34 32	60,159 266,769 63,235 332,027 21,595	78,205 849,430 205,922 236,471 60,232	72,957 357,589 111,218 374,112 61,407	17. 5 25. 4 43. 1 11. 2 64. 8	-23.1 -23.7 -69.3 40.4 -64.1	7.2 -2.3 85.2 -36.8 -1.9
New Mexico	92	18	19	16,640	21,405	26,015	-36. 0	-22.3	-17.7
New York		103	94	692,267	624,127	417,494	65. 8	10.9	49.5
North Dakota		16	10	20,626	33,773	22,490	-8. 3	-38.9	50.2
Ohio		62	69	169,417	327,352	369,814	-54. 2	-48.2	-11.5
Oregon		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
	12	21	16	21,850	33,160	24,625	-11.3	-34.1	34, 7
	44	53	73	190,369	211,312	358,819	-46.9	-9.9	-41, 1
	17	26	39	113,810	43,394	62,126	-77.8	-68.2	-30, 2

<sup>&</sup>lt;sup>1</sup> A minus sign (—) denotes decrease.

<sup>2</sup> Includes, in 1919, Arizona, 2; Arkansas, 1; Delaware, 1; District of Columbia, 1; Florida, 1; Kentnoky, 1; Maine, 1; New Hampshire, 2; Oklahoma, 2; Tennessee, 1; Vermont, 2; Virginia, 2.

Of the 27 states shown in the table, only 3—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.

			NUMB	ER OI	PUBL	ICATIO	<b>1881 87</b>	ued—		
DIVISION AND STATE.	Sei wee		Tı wee		Mon	thly.	Quar	terly.	At oth periods dai Sundan week	er ods ept ly, lay, id
	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 Maine. New Hampshire. Vermont. Massachusetis. Rhode Island. Connecticut.	16 2 2 2  5 3 4	26 5 3 7 .3 8	10 3 2 3	6 1 2 3	165 6 5 4 119 9	173 13 5 7 118 11 19	49 1 1 44 3	49 2 1 44 1 1	24 3 1 14 6	30 1 24 2 3
MIDDLE ATLANTIC	51 26 4 21	86 43 3 40	10 7 1 2	19 13 6	832 615 26 191	919 622 33 264	159 69 5 85	185 66 6 113	98 68 8 22	122 80 9 24
EAST NORTH CENTRAL. Ohio Indiana Illinois Michigan Wisconsin	105 41 17 33 6 8	150 47 27 36 21 19	17 8 1 3 5	20 6 2 5 7	684 179 68 305 72 60	697 183 62 312 84 56	141 44 12 63 11 11	133 57 13 54 4 5	88 21 7 44 6 10	106 80 8 51 9
WEST NORTH CENTRAL. Minnesota. IOWA. Missouri. North Dakota. South Dakota. Nebraska. Kansas.	12 28 14 8	82 7 34 11 2 3 17 8	13 1 8 3	10 6 1 1 2	820 63 58 113 10 11 43 22	313 65 53 110 10 8 37 30	40 5 9 20 1 3	34 3 23 23 1	77 11 13 35 4 6	64 13 12 26 2 1 7
SOUTH ATLANTIC.  Delaware.  Maryland  District of Columbia  Virginia.  West Virginia.  North Carolina.  South Carolina.  Georgia.  Florida.	2	78 2 4 2 28 17 14 6	16 i i  12 1	1 1 2 2	180 4 25 45 23 8 17 15 34	177 9 16 34 31 9 18 8 46 6	36 	38 1 11 5 16 3	37 11 7 2 2 8 3	31 4 0 6 1 7
EAST SOUTH CENTRAL. Kentucky. Tennessee. Alabama Mississippi.	29 16 4 5 4	37 21 8 2 2 6	1	5 4 	77 20 48 6 3	98 28 50 7 13	47 3 41 2 1	34 2 31 1	13 5 4 2 2	23 8 8 3 4
WEST SOUTH CENTRAL Arkansas Louisiana Oklahoma Texas	41 8 5 5 23	45 9 4 3 29	2 1 1	1 1	116 14 24 14 64	119 10 24 20 65	1 1 2	7 5 1	14 3 2 1 8	19 1 5 4 9
MOUNTAIN  MODIANA Idaho. Wyoming Colorado. New Mexico. Arizona Utah Nevada	28 3 5 4 5 2 3 6	28 4 7 6 4 2	12 1 1 1 1 3 6	1 1 1 1 3	72 10 2 2 30 3 6 19	85 11 5 4 35 8 3 19	2	3 1	10 2 1 4	15 2 1 4 2 3 3
Pacific Washington Oregon California	42 8 9 25	56 9 12 35	12 2 2 8	9 2 2 5	201 37 32 132	241 53 22 166	11 1 1 9	16 4 6 6	27 6 3 19	32 8 5 10

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.

United States	36, 622 184, 590 22, 571 121, 991 37, 810	3, 033, 124 39, 209 104, 369 40, 176 134, 263	2,648,308 2,648,308 44,856 138,165 51,978 156,920	1919 100.0 1.5 5.3 0.9 4.9	1914 100.0 1.3 3.4 1.3 4.4	1909 100.0 1.7 5.2 2.0
California. Illinois. Indiana. Isomo	36, 622 134, 596 22, 571 121, 991	39, 209 104, 369 40, 176 134, 263	44, 856 138, 165 51, 978 156, 926	1, 5 5, 3 0, 9	1.3 3.4 1.3	1.7 5.2 2.0
Illinois. Indiana. Iowa. Kentucky Massachusetts Michigan Minnesota.	184, 596 22, 571 121, 991	104, 369 40, 176 134, 263	138, 165 51, 978 156, 926	5.3 0.9	3.4 1.3	5.2 2.0
Nebraska New York North Carolina Ohio Oregon Pennsylvania South Carolina Texas Washington Wisconsin	37, 810 17, 485 25, 004 134, 647 404, 235 34, 246 378, 217 65, 165 94, 711 23, 400 72, 533 24, 665 275, 176 32, 940 67, 221	58, 584 26, 550 45, 883 117, 374 108, 326 38, 219 364, 733 79, 341 185, 140 30, 009 337, 806 29, 250 221, 852 46, 038 130, 414	61, 248 23, 225 82, 640 37, 062 353, 481 31, 085 250, 403 55, 891 131, 806 26, 725 243, 089 44, 622 205, 816 59, 937 42, 708	1.5 0.7 1.0 5.4 16.1 1.4 15.0 2.6 3.8 0.9 1.0 10.9	1.5 3.9 3.6 1.3 12.0 6.1 1.0 7.3 14.3	5.9 2.3 0.9 3.14 13.3 1.2 9.5 2.10 9.2 1.7 10.0 2.16

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, only 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.

	7010	1914	1909	PER CE	NT OF T	OTAL.
STATE.	1919	1914	1909	1919	1914	1909
United States	91,681,807	79, 190, 838	63, 280, 535	100.0	100.0	100.0
Arkansas California Colorado District of Columbia Georgia Illinois Indiana Iowa Kansas Kentucky Malne Massachusetts Michigan	25, 900 876, 878 86, 907 2, 900, 546 109, 603 11, 279, 045 2, 305, 409 2, 334, 376 1, 928, 635 94, 695 3, 758, 300 2, 880, 640 1, 464, 830	100,700 1,122,367 168,932 1,037,184 276,066 10,242,371 1,965,086 2,256,097 1,584,540 4,059,797 2,153,439 1,428,889	136,750 619,900 230,308 518,784 386,337 9,492,099 976,962 1,490,861 932,288 136,995 3,960,766 2,789,665	(1) 0.1 0.1 2.1 12.5 2.5 2.1 1.1 2.1 2.5	0.1 1.4 0.2 1.3 0.4 12.5 2.5 2.0 0.1 2.7	0.2 1.0 0.8 0.0 15.5 2.4 1.5 2.3 4.5
Minresota Missouri Nebraska New Jersey New York North Carolina Ohio Oregon Pennsylvania Tennessee. Texas Virginia Washington Wisconsin All other states	1,416,610 2,258,270 1,404,849 594,493 39,847,749 6,082,211 125,203 6,001,752 1,872,318 407,384 178,559 106,938 411,039	1, 122, 240 1, 756, 852 1, 354, 508 643, 247 33, 648, 962 104, 510 5, 501, 906 108, 850 6, 040, 975 876, 688 375, 035 232, 195 256, 479 267, 130 442, 465	927, 601 924, 955 2, 265, 275 684, 513 156, 862, 275 684, 513 156, 862, 470 219, 351 6, 107, 571 6, 107, 571 183, 605 161, 624 468, 688 473, 682	1.5 2.5 1.5 0.2 0.2 0.1 6.5 2.0 0.2 0.2 0.2	1.4 2.2 1.7 0.5 42.5 7.0 1.5 0.3 0.3 0.4 0.6	1.3 3.6 1.1 0.2 40.5 0.1 4.0.3 9.7 0.8 0.3 0.7 0.7

1 Less than one-tenth of I per cent.

Table 36.—Quarterly Publications—Average Circulation per Issue, by Leading States: 1919, 1914, and 1909.

				PER CE	NT OF T	OTAL.
STATE.	1919	1914	1909	1919	1914	1909
United States	18, 920, 544	18,853,901	16, 058, 099	100.0	100.0	100.0
Illinois.  Massachusetts  Missouri  New York  Ohlo.  Pennsylvania.  Tennessee  All other states	4, 150, 368 1, 056, 934 303, 090 2, 048, 000 2, 697, 832 3, 291, 478 4, 495, 400 877, 414	3, 828, 606 1, 361, 467 414, 245 1, 447, 019 2, 874, 657 3, 838, 678 4, 497, 800 591, 434	1, 967, 558 1, 401, 844 203, 504 2, 437, 289 2, 288, 134 3, 516, 933 3, 649, 100 593, 737	21. 9 5. 6 1. 6 10. 8 14. 3 17. 4 23. 8 4. 6	20. 3 7. 2 2. 2 7. 7 15. 2 20. 4 23. 9 3. 1	12.3 8.7 1.3 15.2 14.2 21.9 22.7 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.

	41140		40.00	PER CENT OF TOTAL.				
STATE.	1919	1914	1909	1919	1914	1909		
United States	5, 067, 517	8, 922, 684	4, 093, 874	100.0	100.0	100.0		
Illinois. Iowa. Massachusetts Minuesota Missouri Naw York Ohio. Pennsylvania. Texus. Virginia All other states.	231, 002 196, 250 41, 931 102, 322 526, 006 931, 143 357, 948 185, 142 83, 400 87, 545 2, 324, 738	453, 821 209, 830 646, 900 259, 690 713, 906 3, 319, 141 720, 244 448, 317 37, 226 5, 031 2, 108, 578	276, 335 110, 010 622, 223 311, 170 280, 798 602, 819 545, 279 82, 134 58, 281 6, 950 1, 137, 877	4. 6 3. 9 0. 8 2. 0 10. 4 18. 4 7. 1 3. 7 1. 6 1. 7 45. 9	5.1 2.4 7.3 2.9 8.0 37.2 8.1 5.0 0.4 0.1 23.6	6.7 2.7 15.2 7.6 6.9 16.2 13.3 2.0 1.4 0.2 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.

	NU	ЈМВЕ	ER.		AGE COMP ATION PER		PER CENT OF INCREASE. <sup>1</sup>		
STATE.	1919	1914	1909	1919	1914	1900	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 Illinois. Indiana Iowa. Massachusetts. Michigan Minnesota Missouri Nebraska New York Ohio. Pennsylvania Wisconsin All other states.	73 10 17 21 15 29 20 8 77 36 29 18	12 45 10 11 15 23 28 15 62 39 29 25 47	7 47 7 15 13 12 27 19 9 55 42 14 27 33	101, 862 668, 771 461, 300 159, 252 168, 608 49, 800 180, 299 372, 200 163, 959 1,287,202 209, 365 205, 060 154, 418 157, 335	57, 300 448, 462 92, 958 122, 144 438, 523 46, 509 156, 502 338, 737 332, 338 487, 045 281, 872 420, 564 213, 768 173, 013	25, 750 421, 826 78, 934 152, 049 264, 732 40, 150 158, 695 281, 876 81, 625 527, 186 317, 461 89, 935 209, 065 124, 326	295.6 58.5 484.4 -36.3 24.0 13.6 32.0 100.9 144.2 -34.1 194.7 -26.1	77.8 49.1 396.2 80.4 -61.6 7.1 15.2 9.9 -50.7 164.3 -25.7 -37.0 8	122. 5 6. 3 17. 8 -19. 7 65. 6 15. 6 -1. 4 20. 2 307. 2 -7. 6 -11. 2 867. 6 2. 2 39. 2

<sup>1</sup>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.

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# PRINTING AND PUBLISHING.

TABLE 39.—COMPARATIVE SUMMARY, BY STATES: 1919, 1914, AND 1909.

STATE.	Cen- sus year.	Num- ber of estab- lish-	Wage earners (average num-	Pri- mary horse-	Wages.	Cost of materi- als.	Value of prod- ucts.	STATE.	Cen-	Num- ber of estab- lish-	Wage earners (average num-	Pri- mary horso-	Wages.	Cost of materials.	Value of prod- ucts.
	year.	ments.	ber).	power.	Expre	ssed in th	ousands.		year.	ments.	ber).	power.	Expres	sed in thou	sands.
United States	1919 1914 1909	32, 476 33, 471 31, 445	287, 278 272, 092 258, 434	362, 123 329, 210 297, 763	\$331,519 195,510 164,628	\$571, 510 257, 848 201, 775	\$1,699,789 901,535 737,876	Montans	1919 1914 1909	247 238 135	1,011 900 691	1,489 908 679	\$1,344 929 685	\$1,327 700 403	\$4,763 2,795 2,111
Alabama	1919 1914 1909	237 286 274	1, 253 1, 346 1, 117	1,637 2,804 1,092	1, 403 858 650	2,379 1,017 666	7,286 4,121 2,768	Nebraska	1919 1914 1909	694 692 674	2, 531 2, 413 2, 320	4, 075 8, 203 2, 552	2,750 1,652 1,397	4,948 2,244 1,711	15, 322 7, 836 6, 667
Arizona	1919 1914 1909	84 74 64	512 335 268	512 273 221	541 303 232	475 178 168	2,087 997 784	New Hampshire	1919 1914 1909	128 136 143	797 709 677	863 826 1,865	893 450 856	734 364 259	2,455 1,449 1,131
Arkansas	1919 1914 1909	294 307 295	1,102 892 981	1,307 1,032 846	1,081 570 538	1, 447 647 536	4,747 2,342 2,082	New Jersey	1919 1914 1909	772 732 684	5,356 5,433 5,451	6,280 7,124 5,636	6, 283 4, 036 3, 624	8,651 4,251 3,472	24,218 14,083 12,333
California	1919 1914 1909	1,504 1,543 1,240	10, 047 8, 759 7, 556	14, 696 14, 053 7, 674	12,059 7,772 6,432	20, 340 9, 709 6, 327	61, 815 34, 775 25, 032	New York	1919 1914 1909	4,831 4,806 4,426	67, 491 64, 020 63, 120	73, 421 66, 802 53, 973	85,857 49,008 43,559	152, 528 68, 915 56, 494	478, 898 257, 269 216, 946
Colorado	1919 1914 1909	464 475 489	2,306 2,173 2,366	2, 512 2, 413 2, 045	2, 684 1, 744 1, 823	4, 164 1, 977 1, 806	12, 613 7, 027 6, 962	North Carolina	1919 1914 1909	319 329 322	1,608 1,540 1,376	1,991 1,684 1,119	1,814 877 661	2, 033 806 645	6,404 3,232 2,497
Connecticut	1919 1914 1909	412 364 363	3, 021 2, 838 2, 878	4, 150 3, 618 3, 425	3,244 1,932 1,737	4,540 2,195 1,769	14, 036 7, 713 6, 370	North Dakota	1919 1914 1909	318 351 330	660 752 783	1,278 1,212 948	781 547 533	851 455 440	3, 225 2, 220 1, 910
Delaware	1919 1914 1909	56 54 48	370 360 288	457 420 305	399 198 129	417 211 138	1, 433 676 480	Ohio	1919 1914 1909	1,780 1,783 1,655	19,174 18,070 15,756	27, 268 24, 308 18, 417	21,665 12,800 9,355	38, 317 17, 070 11, 904	112,029 55,609 41,057
District of Columbia	1919 1914 1909	186 156 156	2,154 1,671 1,565	2,746 2,085 1,703	2,690 1,239 1,101	4,548 1,648 1,095	16, 859 6, 242 4, 900	Oklahoma	1919 1914 1909	510 624 598	1,931 1,619 1,698	2,659 2,288 1,664	2, 332 1, 022 1, 044	3, 049 923 1, 004	10,241 4,024 3,989
Florida	1919 1914 1909	237 235 174	1, 172 1, 220 905	1, 523 1, 325 794	1, 258 898 529	1,708 803 434	5, 618 3, 017 1, 866	Oregon	1919 1914 1909	358 877 324	1,595 1,556 1,459	2, 584 2, 230 1, 927	2, 195 1, 407 1, 448	3, 006 1, 563 1, 103	10, 155 6, 011 5, 041
Georgia	1919 1914 1909	418 441 442	2, 844 2, 476 2, 395	3, 273 2, 985 2, 008	2,711 1,696 1,344	5,222 1,972 1,588	14, 130 7, 576 6, 400	Pennsylvania	1919 1914 19 <b>0</b> 9	2, 457 2, 538 2, 461	26, 456 26, 909 24, 696	35, 419 35, 659 25, 839	29, 782 17, 701 14, 335	61, 022 27, 478 22, 753	165,344 84,977 70,584
Idaho	1919 1914 1909	159 173 132	438 487 468	653 539 388	600 371 373	633 306 243	2, 175 1, 343 1, 148	Rhode Island	1919 1914 1909	155 162 147	1,650 1,515 1,454	2, 140 2, 587 1, 944	1,815 1,044 956	2, 218 1, 162 1, 064	7,326 4,293 3,740
Illinois	1919 1914 1909	2, 647 2, 722 2, 608	36, 537 32, 838 28, 644	40, 987 33, 503 26, 975	43, 830 24, 048 18, 437	79,308 33,278 24,680	219, 331 112, 833 87, 247	South Carolina	1919 1914 1909	174 166 161	1,022 893 834	1, 257 937 603	971 531 412	1,204 452 340	4,005 1,985 1,601
Indiana	1919 1914 1909	865 922 892	6,772 6,140 6,756	0,557 7,978 17,868	6,741 3,994 3,522	10,109 5,019 4,025	30, 612 17, 117 14, 356	South Dakota	1919 1914 1909	358 379 892	766 801 825	1,414 1,159 931	811 533 493	982 462 <b>4</b> 56	3,882 2,136 1,976
Iowa	1919 1914 1909	997 1,076 1,110	4,808 4,948 4,858	7,023 6,545 5,527	5, 134 3, 336 2, 591	7,851 4,130 3,287	26, 806 15, 934 12, 129	Tennessee	1919 1914 1909	366 437 413	2,967 2,665 2,914	4,735 2,892 2,965	2,891 1,871 1,701	5,472 2,323 1,954	15,839 8,201 7,173
Kansas	1919 1914 1909	738 772 798	3,043 2,818 3,232	7, 578 3, 722 4, 868	2,818 1,547 1,650	5,021 2,351 2,290	12,717 6,991 7,009	Texas	1919 1914 1909	1,087 1,188 1,067	5,594 4,690 4,408	8,098 6,111 4,392	6,003 3,557 2,785	11, 128 3, 997 2, 807	82,687 15,051 11,587
Kentucky	1919 1914 1909	378 414 431	2,850 3,028 3,135	3, 674 3, 025 2, 945	2,686 1,968 1,690	3,614 1,965 1,645	11,785 6,984 6,454	Utah	1919 1914 1909	156 166 122	1,218 872 967	1,069 1,246 1,357	1,138 741 685	1,416 880 723	4,581 2,780 2,405
Louisiana	1914	270 290 268	1,581 1,405 1,544	2,065 1,619 1,494	1,407 985 1,061	3,081 1,062 1,013	8,110 4,317 3,823	Vermont	1919 1914 1909	108 111 115	615 651 666	697 784 625	478 409 326	488 297 250	1,715 1,243 1,039
Maine	1914	175 204 195 385	1,599 1,772 1,651	1,943 1,760 1,565 5,540	1, 293 955 779	2,401 1,210 1,102 9,115	5, 932 3, 717 3, 438 23, 835	Virginia	1919 1914 1909	380 396 369	2,719 2,700 2,555	2, 986 2, 881 2, 210	2,817 1,595 1,307	4,536 2,037 1,405	13, 162 7, 070 5, 370
Maryland	1914	368 371	4,391 4,173 3,386 18,247	7,013 3,694 21,129	4, 937 2, 652 1, 985 20, 805	3,715 2,464 34,906	11, 263 8, 360 104, 551	Washington	1919 1914 1909	569 638 506	2, 453 2, 341 2, 624	3,710 3,108 2,232	3,608 2,092 2,140	4, 553 2, 435 2, 224	17, 349 9, 824 9, 286
Michigan	1914 1909 1919	1,327 1,344 1,279 1,045	7,880	11.587	9,590	34,906 16,818 12,881 15,536	56, 195 47, 445 46, 829	West Virginia	1919 1914 1909	222 239 235	1,339 1,188 1,255	1,947 1,835 1,560	1	1,582 635 541	4, 837 2, 376 1, 992
Minnesota	1914 1909 1919 1914	1,113 1,045 1,003 994	8, 166 7, 219 6, 319 6, 134	7,680	6,778	4,934 10,353	24, 953 17, 348 33, 480 20, 187	Wisconsin	1919 1914 1909	842 829 833	5, 838 5, 653 5, 360	7,442 6,527 5,293	5,932 3,473 2,913	1	28, 467 14, 455 11, 861
Mississippi	. 1909 . 1919 1914	950 193 219	5,841 595 663	698 643	514 371	551 314	2,009 1,267	Wyoming	1919 1914 1909	92 81 65	234 183 162	1, 055 235 138	329	272 101	1,227 546 490
Missouri	1909 1919 1914 1909	1,310 1,353	736				1,308 61,250 33,173 29,651	All other 1	1919 1914 1909	176 174	947 546	1,126 572	977 419	1, 254 282	3,668 1,310 1,109
	1 2508	1,000	10,.00		1 3,02			]	لسل	<u></u>			antabliob	1	<u></u>

<sup>1</sup> Includes one or more branches of the industry, omitted from certain states, to avoid disclosure of operations of individual establishments.

# MANUFACTURES.

									TA	BLE 4	0	DETA	ILED 8	TATE	MENT	, TE	E F	RINTING
				······································	PERSO	NS ENGA	GED IN	THE INDU	STRY.				WAG NEARE	E EARN ST REPR	ERS DEC. ESENTAT	15, or IVE DA	Υ.	
					Sala-	Clerks	, etc.		Wag	e earner	s.			16 and	l over.	Unde	r 16.	
	STATE.	Num- ber of estab-		Pro- prie-	ried offi- cers,				Nu	nber, 1	th da	y of—						Capital.
		lish- ments.	Total.	tors and firm mem- bers.	super- in- tend- ents, and man- agers.	Male.	Fe- male.	Average num- ber.		imum nth.		mum nth.	Total.	Male.	Fe- male.	Male	Fe- male	
					PRINT	TING A	ND PU	BLISHI	NG, 1	воок	AND	јов.						
1	United States	13,089	171,199	12,185	10,571	12,916	12,522	123,005	De 1	33,741	Ja 1	19,117	134, 379	97,732	33, 433	2, 401	813	Dollars, 405,554,984
4	Alabama	15 47 661	702 129 494 5,635 1,294	57 16 51 708 111	68 5 35 320 63	47 5 49 363 117	28 8 29 326 51	502 95 330 3,818 952	De Ja <sup>3</sup> No De De	536 98 379 4,166 1.023	Ja Jy Ja Ja Se	450 90 293 3,560 838	535 94 353 4,151 1,032	386 77 239 3,035 767	147 16 108 1,047 238	2 1 6 60 26	9	1, 288, 246 225, 502 1, 205, 735 13, 287, 543 2, 383, 417
7 8 9 10 11	Connecticut Delaware District of Columbia Florida Georgia	.] 23	2,232 135 1,278 495 1,582	249 25 108 68 163	188 14 76 38 96	88 1 32 41 129	162 6 28 17 84	1,600 89 1,034 331 1,110	De Se <sup>8</sup> De De De	1,705 98 1,175 375 1,207	Ja Je Ja Je Fe	1,529 85 968 312 1,048	1,720 94 1,253 365 1,210	1,211 51 942 266 815	423 39 302 94 361	65 4 8 3 31	21  1 2 3	4,880,850 330,776 3,169,845 1,205,977 3,246,420
12 13 14 15 16	Idaho Illinois Indiana Iowa Kansas	1,240	109 28,861 4,005 1,775 977	25 1,021 260 199 168	7 1,540 233 160 58	2,290 212 27 55	2,371 259 145 72	67 21,639 3,041 1,244 624	De De De De De	73 23,474 3,176 1,402 668	Ja <sup>8</sup> Ap Ja Ja Ap	20, 284 2, 778 1, 170 598	78 23,775 3,197 1,428 663	17, 386 2, 075 902 440	5, 518 933 484 218	3 514 101 27 4	357 88 15 1	281, 211 70, 260, 836 7, 979, 717 3, 971, 693 2, 194, 319
17 18 19 20 21	Kentucky Louisiana Maine Maryland Massachusetts	109	1,520 1,129 557 3,003 11,102	89 91 96 188 705	89 112 44 190 598	74 83 11 211 890	73 48 26 171 1,276	1, 195 795 380 2, 243 7, 634	De De De De De	1,340 855 415 2,411 8,217	My Mh Fe Ap s Ja	945 760 370 2,183 7,141	1,343 853 418 2,367 8,261	872 668 280 1,843 5,866	453 163 127 479 2,125	12 22 8 38 220	6 3 7 50	3,027,428 2,194,791 971,624 6,890,651 31,978,693
22 23 24 25 26	Michigan Minnesota Mississippi Missouri Montana	277 37 460	5,216 4,412 255 7,910 253	413 259 35 391 10	399 801 16 508 25	318 355 10 741 21	369 -435 11 404 15	3,717 3,062 183 5,866 182	De De No De De	4,017 8,299 195 6,401 188	Ja Ja Fe Ja Fe	3,535 2,911 175 5,510 177	3,986 3,266 194 6,406 189	2,726 2,153 144 4,254 149	1,208 1,084 46 2,006 40	47 27 4 121	5 2 25	11,366,835 11,725,692 458,142 15,117,887 794,187
27 28 39 30 21	Nebraska Nevada New Hampshire New Jersey New Mexico	. 63 . 421	1,290 36 459 3,132 43	118 4 63 427 7	102 5 16 172 4	53 6 85 1	63 13 109 1	954 27 361 2,339 30	De Oc De De Se	1,072 30 411 2,608 35	Ja Fe Ja Ap Ap	877 25 338 2,196 27	1,068 28 411 2,671 29	755 24 277 2,035 19	310 4 134 570 10	3 58	8	3,977,421 69,481 662,620 9,908,576 73,679
32 33 34 35 36	New York North Carolina North Dakota Ohio Oklahoma	104 17 871	37, 626 885 149 11, 213 784	2,248 91 17 709 88	2,390 90 12 695 66	3,427 27 10 597 78	3,465 45 7 707 47	26,096 632 103 8,505 505	De Oct De De De	28, 582 655 115 9, 346 526	Oc Ap Ja Ja Ja	21,154 616 94 7,837 481	28,617 663 114 9,364 517	23,059 493 85 6,466 379	5,270 156 23 2,829 134	228 13 6 62 4	60 1 7	91,065,831 1,550,129 435,538 25,482,824 1,348,566
37 38 39 40 41	Oregon Pennsylvania Rhode Island South Carolina South Dakota	1,289 105 48	14, 198 1, 351 400	7110 53	81 766 78 23 11	64 804 47 33 15	58 783 172 12 16	944 279	De De De De De	618 11, 148 1, 099 290 111	Mh Fe Ja Ja Ja	549 9,977 899 269 88	11,303 1,108 293 110	471 7,928 705 220 85	2,974 363 65 21	8 347 30 8 4	54 10	2,090,450 36,730,672 2,442,825 712,858 363,827
42 43 44 45 46	Tennossee. Texas. Utah. Vermont. Virginia.	308 51	3, 254 544 427	50 55	128 184 36 23 145	633 338 65 5 99	80 150 20 15 92	1, 277 2, 258 373 329 1, 695	No Oc Oc De No	1,380 2,434 487 343 1,746	Ja Ja Jy My Fe	1,169 2,129 346 320 1,663	1,384 2,428 403 346 1,754	979 1,814 311 233 1,081	391 585 76 108 546	10 25 15 5 101	4 1 26	3,639,428 7,370,359 785,166 793,982 5,590,917
47 48 49 50	Washington	. 71 261	536 2,917	222 60 223 15	120 33 257 1	166 29 162 2	72 27 150	906 387 2, 125 24	De No De Se	1, 039 402 2, 492 20	Se Ja Ja Ja	749 366 1,858 23	1,017 398 2,491 24	748 255 1,688 13	240 93 722 9	22 41 55 2	7 9 26	3, 105, 521 998, 009 5, 827, 967 109, 421
	<u> </u>		li .	11	1	RINTI	NG AN	D PUBL	ISHI	AG, MU	sic.					-		
1 2	California	. 4	8	3	198	843	575	899	De (4)	956 5	Ja (1)	840 5	952	744	=	7	1	8,006,122 6,896
3 4 5 6	Illinois. Indiana Massachusetts	26 4	241 7 325	18	22 1 17 6	75	66 78 33	. 111 3 142	De (1) No Oc	126 3 146 20	Ja (4)	99 3 135 2	124 3 142 17	04 2 116 8	56 1 26			6, 896 677, 430 5, 060 1, 190, 277 488, 244
7 8 9 10	Ohio Pennsylvania	117	84 197	9	12 15	34	356 15 26 1	14 128	De Jy Oc	490 18 139	Mh Ja Jy	411 12 119	490 11 133 27	408 9 114 19	16	2	i	4,642,297 423,634 431,942 140,342

<sup>1</sup> 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.

			EXPEN	ises.								PO	WER.			
Sala	ries and wa	ges.		Rent an	d taxes.	For mat	terials.				Prin	ary ho	sepow	er.		Elec
								Value of products.	Value added by manufac-			Own	ed.	ĺ		horse powe
Officials.	Clerks, etc.	Wage earners.	For contract work.	Rent of factory.	Taxes, Federal, State, county, and local.	Principal materials.	Fuel and rent of power.	products.	ture.	Total.	Steam en- gines (not tur- bines).	Steam tur- bines,	Internal- combus- tion en- gines.	Wa- ter pow- er.1	Rent- ed. <sup>2</sup>	ated in estal lish- ment re- port ing,
	<u> </u>		<u> </u>	T	RINTIN	G AND PU	BLISHIN	G, BOOK	AND JOB.							
Dollars. 5,072,491	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	9,39
176, 938 10, 992 100, 052 850, 510 213, 752	71,056 13,247 85,670 829,882 181,497	481,819 114,508 316,670 4,387,233 1,117,478	19,470 8,351 586,228 88,510	44, 894 10, 962 26, 102 426, 277 100, 113	21, 054 4, 499 34, 086 228, 834 77, 495	749,899 98,409 476,550 7,663,580 1,304,864	18,757 3,993 15,910 114,750 63,990	1,994,661 371,885 1,341,816 19,871,377 3,985,230	1, 226, 005 269, 483 849, 356 12, 093, 047 2, 616, 376	395 91 395 4,368 785	75 60		4 19		395 91 391 4,274 725	16
334, 725 33, 288 252, 806 88, 058 239, 881	247,826 7,136 70,937 61,321 204,013	1,674,471 86,824 1,182,500 342,110 1,099,436	182,683 23,526 47,042 17,054 30,319	102,766 7,317 64,222 32,304 89,462	82,448 3,876 127,041 50,114 43,493	2,140,023 127,352 1,384,560 594,534 1,710,219	72,954 5,139 40,990 13,740 37,398	6,246,748 352,607 3,974,976 1,517,625 4,409,104	4, 033, 771 220, 116 2, 549, 426 909, 351 2, 661, 487	1,590 125 854 469 1,081	132 16		65 15 8 18 19	15	1,378 110 846 451 1,046	
12,991 6,124,489 651,554 378,306 151,184		81,256 27,380,468 2,790,208 1,176,739 595,826	5,527,964 360,204 35,909 46,483	11,628 1,965,897 174,074 114,813 62,196	7,690 1,424,260 136,939 38,688 51,112	105, 248 41, 675, 229 4, 119, 008 1, 844, 838 992, 468	3, 114 815, 520 102, 028 59, 022 26, 293	321,564 110,886,458 10,741,232 5,209,560 2,926,415	213, 202 68, 395, 709 6, 520, 196 3, 305, 700 1, 907, 654	23,005 3,167 1,440 677	4,136 810 5	442	94 54 29 <b>32</b>		111 18,393 2,303 1,411 640	3,78 48
266, 268 286, 813 83, 481 702, 699 2, 061, 109	185,543 128,951 33,079 439,667 2,649,370	1,054,293 721,079 344,755 2,492,302 8,245,099	54,597 83,001 17,827 521,391 3,735,861	51, 164 67, 400 26, 341 138, 575 674, 254	78, 163 45, 468 10, 804 240, 430 598, 515	1,457,356 1,097,486 405,854 3,973,485 12,606,733	44,518 33,917 17,763 92,072 328,352	4, 421, 926 2, 940, 703 1, 193, 897 10, 690, 650 41, 626, 859	2,920,052 1,809,300 770,280 6,625,093 28,691,774	1,181 772 655 2,453 8,212	10 4 571 1,973		5 2 37 128 50	 1 2	1,166 770 613 1,754 6,187	83 1,55
1,146,866 829,001 36,159 1,737,349 63,470	990, 327 844, 441 18, 064 1, 439, 194 34, 575	4,681,124 3,088,185 172,587 6,235,986 223,458	562,319 480,288 14,103 694,285 373	372, 228 263, 684 11, 409 434, 756 17, 186	253, 518 214, 192 6, 311 531, 313 20, 892	6,318,942 4,232,697 226,172 9,020,897 268,004	152,854 117,952 7,597 217,587 8,564	17, 675, 925 12, 994, 804 661, 719 25, 880, 461 849, 810	11, 204, 129 8, 644, 155 427, 950 16, 641, 977 573, 242	4,261 3,050 187 6,194 183	540 100 870	46	22 2 5 24		3,653 2,948 182 5,300 183	43 15
302, 960 13, 617 53, 004 584, 305 6, 330	21, 231 217, 456 1, 560	1,054,291 39,342 339,958 2,622,432 30,578	199, 188 960 1, 994 116, 313 100	99, 123 2, 895 19, 084 171, 834 2, 636	45,567 2,225 18,287 153,755 1,150	1,814,399 41,391 265,061 3,702,852 28,025	51,087 1,282 11,890 125,926 1,573	4,897,424 143,161 1,030,955 9,569,344 96,637	3, 031, 938 100, 488 754, 004 5, 740, 566 67, 039	1,230 75 341 2,532 20	27 562		4 2 145	8	1,199 75 331 1,825 20	20
9, 153, 281 201, 433 31, 709 2, 128, 365 222, 363	8,551,325 58,199 18,450 1,360,392 340,041	34, 246, 976 572, 118 106, 814 9, 097, 772 593, 569	14,997,237 31,615 6,811 1,007,485 35,964	3,494,841 41,977 12,030 657,841 69,821	1,526,385 26,103 3,072 571,483 19,839	44, 310, 039 716, 310 204, 055 14, 862, 138 833, 043	1, 117, 227 25, 250 12, 580 319, 782 24, 862	149, 123, 975 2, 063, 446 539, 158 39, 201, 684 2, 507, 449	103, 696, 709 1, 321, 886 321, 923 24, 019, 764 1, 649, 544	26,568 508 144 9,628 513	657 770		455 9 2 812 3	25 1 2	25,431 499 142 8,045 508	12 38
247,676 2,387,955 284,235 56,052 31,223	146, 484 1,943,981 122,905 49,705 22,515	724, 532 11, 160, 613 898, 894 255, 703 119, 073	23,952 1,355,029 25,375 3,001 1,908	76,145 888,396 61,973 12,441 16,111	54,691 605,967 90,802 29,206 10,562	1,233,513 16,883,029 1,152,906 300,052 124,838	23, 858 404, 461 32, 086 8, 973 5, 852	3,395,859 46,152,747 3,233,117 869,683 415,958	2, 138, 488 28, 865, 257 2, 048, 125 560, 058 285, 268	703 11,315 805 281 141	1,753		853 3	1 6 1	792 8,703 801 281 138	1, 21
399, 810 594, 840 87, 197 47, 567 400, 151	395, 017 662, 754 85, 294 14, 916 171, 320	1,250,758 2,305,204 382,184 258,402 1,617,355	76,611 286,823 13,960 5,817 684,835	109,140 201,814 31,963 14,999 93,462	128,469 208,416 10,817 6,701 139,568	2,079,986 4,736,313 507,223 255,433 2,347,700	89, 807 78, 250 16, 022 12, 172 70, 773	5, 604, 176 12, 233, 688 1, 384, 249 820, 736 7, 028, 143	3, 434, 383 7, 419, 125 801, 004 553, 131 4, 609, 670	2,538 2,309 314 338 1,404	25 150	40	10 9	i ii	2,493 2,291 314 292 1,245	2
310,047 73,908 619,927 1,800	252, 014 59, 171 332, 252 2, 380	1,192,789 464,830 2,026,103 29,539	120,771 8,491 98,090 2,570	134,006 36,104 145,806 5,086	64,861 18,780 94,279 1,274	1,475,340 513,841 3,048,621 49,980	35,325 13,051 87,170 1,446	4,710,018 1,434,478 7,970,336 148,765	3, 199, 383 907, 586 4, 834, 545 97, 339	1,041 378 2,943 41	90		2 44 77 9	i	1,039 833 2,776 32	
	<del>,</del>		<del></del>		PRI	NTING AN	D PUBLI	SHING, MU	JSIC.	<del>,,</del>			<del></del>	,	,	
1,029,874	2,017,366	926, 988	2,713,899	296, 554		2,097,144	26,637	14, 592, 177	12, 468, 396	634	<u></u>		12		622	<u></u>
82, 583 900 73, 407 40, 092	93,053 162,813 97,502	7,200 112,172 2,778 123,371 11,230	19, 234 157, 121 7, 131 546, 107 6, 641	1,790 20,495 1,662 46,437 3,992	158 36,253 18 46,562 1,391	11,038 375,920 410 303,183 31,765	180 3,287 66 3,850 787	60,246 1,211,810 17,298 1,708,990 285,303	1	7 74 2 147 10			2		7 74 147 10	
772, 266 21, 974 29, 327 9, 325	1,573,391 44,864 42,057 4,186	563,889 9,662 59,396 37,290	1,692,241 128,061 124,629 32,734	196, 297 8, 326 12, 032 5, 523	241,963 5,155 10,307 3,938	994, 658 61, 682 195, 047 123, 443	864	9,844,268 447,037 732,462 284,763	8, 833, 955 385, 108 536, 551 159, 619	288 10 36 60			10		288 10 36 50	

Same number reported throughout the year.
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

				PERSO	ns eng.	AGED IN	THE INDU	JSTRY.			E EARNI ST REPR				
				Sala-	Clerk	s, etc.		Wage earne	rs.		16 and	l over.	Unde	sr 16.	
STATE.	Number of establishments.	Total.	Proprietors and firm members.	ried offi- cers, super- in- tend- ents, and man- agers.	Male.	Fe- male.	Average number.	Number, 1  Maximum month.	Minimum month.	Total.	Male.	Fe- male.	Male	Fe- male	Capital.

#### PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS.

			<del></del>	1									· ·			<u> </u>		
1	United States	17, 352	228,630	14,570	16, 290	45,102	32, 287	120,381	De :	25,967	Ja :	115,926	126,219	100, 559	21,129	4,244	287	Dollars, 614,045,344
2 3 4 5 6	Alabama Arizona Arkansas California Colorado	69 247	1,471 732 1,280 10,028 2,155	150 52 273 691 313	115 48 88 801 139	361 169 93 2,589 433	148 46 54 1,377 191	697 417 772 4,770 1,079	De De No No Se	735 452 811 5,101 1,106	Ja Ja Ja Ap Fe	668 397 744 4,590 1,048	783 453 818 5,061 1,126	645 406 645 4,371 958	47 26 158 330 111	40 21 13 360 56	1 2	3,406,284 1,070,324 2,290,362 23,729,018 5,336,465
7 8 9 10 11	Connecticut Delaware District of Columbia Florida Georgia	134 33 67 160 262	2,354 398 2,183 1,412 3,124	79 24 20 135 223	205 26 160 142 296	465 34 519 179 664	276 33 676 115 222	1,329 281 808 841 1,719	De Se De De De	1,421 293 851 942 1,810	Ja Ja Ja Jy Ap	1,242 264 735 805 1,647	1,441 294 849 889 1,803	1,173 242 705 721 1,476	198 48 125 131 193	65 4 16 36 134	5 3 1	6, 576, 634 1, 165, 029 5, 745, 257 3, 778, 417 4, 858, 052
12 13 14 15 16	Idaho Illinois Indiana Iowa Kansas	136 1,204 559 774 590	676 19,604 5,957 6,363 3,709	123 891 500 826 611	50 1,544 454 487 205	3,612 871 1,050 222	3,437 621 698 257	371 10,120 3,511 3,352 2,414	De De Oc De De	414 10,395 8,599 8,764 2,513	Mh Ja Ja Ja Ja	339 9,963 3,396 3,176 2,336	415 10,579 3,646 3,501 2,579	327 8,037 2,817 2,530 1,578	1,847 783 812 910	26 607 44 150 88	1 88 2 9 3	1,556,602 54,099,750 10,931,688 15,545,132 6,971,867
17 18 19 20 21	Kentucky Louisiana Maine Maryland. Massachusetts	252 149 69 142 412	2,298 1,532 1,510 2,495 10,405	235 144 39 89 188	217 106 83 140 635	375 436 110 603 2,072	199 135 124 266 1,625	1,272 711 1,154 1,397 5,885	No De Mh De De	1,325 760 1,221 1,422 6,105	Ja Ja Au Ja Ja	1,238 657 1,056 1,361 5,650	1,311 759 1,179 1,423 6,155	1,091 585 655 1,287 5,077	191 82 516 111 861	26 90 7 23 207	3 2 1 2 10	5,325,551 3,321,746 2,792,098 4,970,311 22,964,151
22 23 24 25 26	Michigan Minnesota Mississippi Missouri Montana	565 701 156 774 225	6,643 5,713 683 8,095 1,336	483 641 173 714 192	1,021 408 50 538 92	1, 142 914 26 1, 566 134	821 692 22 1,094 89	3,170 3,058 412 4,183 829	De No De De No	3,365 3,230 429 4,417 861	Ja Ja Ja Ja Fe	3,032 2,941 400 3,868 799	3,392 3,235 431 4,381 855	2,723 2,484 319 3,397 712	596 683 75 754 87	66 60 36 211 56	7 8 1 19	14,562,346 14,794,809 1,110,634 15,273,683 2,841,772
27 28 29 30 31	Nebraska Nevada New Hampshire New Jersey New Mexico	554 34 65 295 80	2,961 158 630 3,708 400	544 29 48 211 76	176 15 47 274 34	420 4 46 555 14	299 7 53 810 19	1,522 103 436 2,352 257	No De De De De	1,610 107 453 2,396 264	Ja Ja Je Jy Ja	1,451 101 421 2,284 248	1,611 106 426 2,404 264	1,185 84 288 2,118 206	354 5 102 251 26	70 17 36 34 32	2 1	6, 219, 318 352, 289 958, 268 8, 378, 261 812, 236
32 33 34 35 36	New York North Carolina North Dakota Ohio Oklahoma	215 301 794	49,584 1,602 1,040 13,708 2,673	792 165 253 586 416	3,241 193 84 790 167	12,956 186 75 2,403 477	9,431 82 71 2,302 198	23,164 976 557 7,627 1,415	De No De Oc	24, 338 1, 018 583 8, 069 1, 503	Oe Fe Fe Ja Fe	21,304 944 534 7,241 1,335	24,370 1,016 595 8,114 1,501	19,822 822 460 6,667 1,244	4,264 106 101 1,368 232	245 84 28 72 23	39 4 6 7 2	150,435,954 2,664,943 2,739,607 37,353,788 5,124,641
37 38 39 40 41	Oregon Pennsylvania Rhode Island South Carolina South Dakota	963 36 126	1,857 22,461 965 1,187 1,260	205 750 24 85 328	130 1,460 58 118 64	374 4,304 191 163 90	3,616 90 78 107	929 12,331 602 743 671	De No No De No	999 12,697 632 782 729	Fe Ja Fe Ja Fe	877 11,684 564 712 641	1,011 12,557 641 769 732	877 9,995 578 584 490	2, 161 55 90 179	19 388 8 94 60	13 1 3	3,493,200 101,030,354 3,296,189 2,880,607 3,263,251
42 43 44 45 46	Tennesses Texas Utah Vermont Virginia	765 101 53 197	2, 781 6, 153 1, 236 465 1, 758	190 809 63 41 172	217 463 93 36 146	1,316 1,316 172 39 318	256 438 83 63 158	1,690 3,127 825 286 964	De No De De De	1,786 3,356 836 291 1,001	Ja Ja Je Fe Fo	1,570 2,983 817 280 921	1,788 3,319 836 272 1,016	1,300 2,822 744 190 846	327 343 69 77 112	160 146 21 5 50	1 8 2	7,612,775 12,535,954 1,412,337 777,538 5,131,285
47 48 49 50	Washington West Virginia Wisconsin Wyoming	151 529	2, 985 1, 453 5, 077 372	274 168 453 79	213 86 354 31	719 173 922 29	375 74 668 23	1,404 952 2,680 210	De No De De	1, 523 975 2, 795 243	Fe Fe Ja Fe	1,301 921 2,611 181	1,521 971 2,822 249	1,373 765 1,946 192	116 195 721 25	29 9 141 31	3 2 14 1	7,807,753 2,724,023 11,166,421 796,263

### BOOKBINDING AND BLANK-BOOK MAKING.

	<del></del>																	
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 3 4 5 6	California. Colorado. Connecticut. District of Columbia. Georgia.	40 4 16 6 4	839 42 91 84 21	48 9 17 9 6	26 8 1	80 1	62 1 5 2	623 31 66 71 15	De Ap P De Jy No	708 33 73 77 20	Ja Ja Se Ja Ja	547 27 60 65 12	708 31 73 74 19	343 15 34 40 10	362 16 36 32 9			1,736,721 47,738 104,729 76,399 24,336
7 8 9 10 11	Illinois. Indiana. Iowa. Kansas Louisiana.	113 14 12 5 7	2,872 88 160 11 54	98 10 12 6 8	137 9 9	130 37		2,395 68 85 5 40	De Oc De No My	2,576 76 91 7 44	Ja Mh Se Jas Jas	2, 164 64 80 4 29	74	1,351 38 48 1 27	1,113 33 42 5 16	66 1 1	84 2 1	4,703,224 107,870 115,431 8,209 50,153
12 13 14 15 16	Maine Maryland Massachusetts Michigan Minnesota	15 94	84 206 3,334 687 151	13 20 83 19 23	5 5 97 43 5	5 116 81 2	1 4 102 62 2	65 172 2,936 482 119	De Ja De De Au	70 179 3,097 556 123	Mh Je Ja Je Se	60 161 2,709 445 115	71 177 3, 112 557 127	35 84 1,446 268 57	35 81 1,461 279 68	1 8 129 8 1	76 2 1	87, 537 395, 879 5, 016, 995 1, 422, 432 176, 665

<sup>1</sup> 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.

			EXPEN	ises.								PC	WER.	,		
Sa	laries and wa	ges.		Rent an	d taxes.	For ma	terials.				Prin	nary hor	sepow	er.		Elec- tric
			_					Value of products.	Value added by manufac-			Own	ed.			horse- power gener- ated
Officials	Clerks, etc.	Wage earners.	For contract work,	Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.		ture.	Total.	Steam en- gines (not tur- bines).	Steam tur- bines.	Inter- nal- com- bus- tion en- gines.	Wa- ter pow- er.1	Rent- ed. <sup>2</sup>	ated in establishments reporting.

## PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS.

			,							,	<del>,</del>					
Dollars. 50,343,115	Dollars. 93,507,413	Dollars. 144,348,173	Dollars. 50,776,049	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
378,171 143,398 191,277 1,775,903 427,056	461,846 211,330 148,477 4,485,486 710,289	869, 882 426, 210 769, 668 5, 922, 396 1, 321, 725	70, 487 32, 799 51, 469 1, 127, 546 324, 435	32,444 29,655 59,191 484,626 83,362	135,640 20,557 76,686 515,475 126,873	1,507,980 345,533 908,949 9,446,955 2,242,550	44,231 26,726 45,345 230,062 72,661	5,054,877 1,714,510 3,405,163 34,342,963 7,583,978	3,502,666 1,342,251 2,450,869 24,665,946 5,218,767	1, 201 421 972 8, 373 1, 518	7 445 30		133 101 204 81 162	6 34 2	1,062 320 761 7,813 1,324	2 2 51 3 400 5 7 6
547, 273 66, 391 683, 497 329, 260 787, 546	863, 763 67, 575 1, 423, 694 307, 041 896, 507	1,486,886 312,358 1,166,320 915,491 1,595,152	224, 508 19, 876 2, 567, 489 89, 239 354, 135	71,973 31,095 57,294 51,806 96,428	144,885 21,654 278,749 103,565 152,776	2,120,457 268,824 2,754,828 1,042,512 3,387,245	119,389 16,046 43,930 57,117 80,423	7,513,467 1,080,600 11,897,555 4,100,841 9,683,328	5,273,621 795,730 9,098,797 3,001,212 6,215,660	2,480 332 1,679 1,054 2,189	320 20 385 14		27 23 217 235	9 2	2,124 289 1,294 837 1,938	34 7 8 9 17 10 1 11
102,715 5,664,915 1,110,505 1,222,800 445,914	150, 286 9, 534, 888 1, 477, 048 1, 658, 300 500, 638	518,532 11,407,047 3,718,805 3,746,063 2,219,400	12,512 6,265,024 839,240 470,076 173,624	38, 425 1, 087, 750 175, 457 245, 771 114, 777	20,495 2,176,112 344,108 355,805 101,029	491, 265 29, 440, 143 5, 475, 746 5, 162, 464 3, 877, 492	32,909 544,779 212,089 303,934 121,035	1, 853, 587 88, 945, 960 19, 184, 687 20, 430, 956 9, 774, 647	1,329,413 58,961,038 13,496,852 14,964,558 5,776,120	542 14,037 6,178 5,353 6,897	2,667 69 499 61	5 4	37 531 406 445 505	6 8 3	505 10,833 5,698 4,397 6,328	2,248 13 73 14 355 16 167 16
509,002 331,990 191,189 478,347 2,457,055	524,594 636,007 227,346 1,121,185 4,544,556	1,317,140 620,250 900,908 1,611,779 8,086,782	205, 794 149, 689 110, 418 344, 363 1, 842, 154	73,652 47,741 44,462 100,290 605,625	66,655 132,894 123,026 90,537 1,124,667	1,661,454 1,856,859 1,828,516 3,433,986 16,029,925	90,718 37,450 52,462 68,472 443,230	6,183 394 4,979,417 4,561,473 9,363,579 46,801,145	4,431,222 3,085,108 2,680,495 5,861,121 30,327,990	2,306 1,252 1,242 2,310 10,267	320 4 1,073	200	228 120 16 107 251		1,974 1,132 899 1,999 8,922	4 17 1 18 207 19 20 421 21
1,378,009 1,075,169 104,836 1,492,194 223,942	51,938 3,129,680	3,935,040 3,531,693 341,665 4,410,609 1,120,993	583, 320 1, 169, 380 10, 733 1, 128, 253 54, 862	199, 152 257, 875 22, 670 370, 786 99, 718	985,318 424,678 18,239 526,676 54,054	7,506,072 5,676,389 292,267 11,594,122 988,924	190,073 202,352 25,084 265,451 61,137	24,930,421 20,088,590 1,347,777 30,011,808 3,912,779	17, 234, 276 14, 209, 849 1, 030, 426 18, 152, 235 2, 862, 718	6, 438 4, 550 511 7, 014 1, 306	15 279 1,868 25		396 373 162 731 248	15 7 6 3	6,012 3,891 849 4,409 1,030	14 22 47 28 1 24 1,168 28
490,379 45,535 100,778 997,880 62,354	11,533 86,302 1,011,070	1,626,981 147,058 553,320 2,945,543 258,469	488, 386 3, 635 38, 502 202, 572 7, 028	149, 459 13, 960 22, 452 131, 260 22, 805	113, 884 5, 833 18, 505 289, 247 8, 632	2,886,268 82,833 433,524 3,942,083 190,279	117,561 10,101 23,085 167,239 21,117	10,179,309 467,631 1,423,983 12,399,856 803,899	7,175,480 374,697 967,374 8,290,534 592,503	2,797 189 522 3,304 284	255 613		438 31 6 181 72	2 5 50 29	2,102 153 466 2,481 212	309 2 22 51.5 3
13, 399, 255 402, 078 183, 097 2, 427, 824 403, 295	239, 124 148, 837 4, 834, 362	1,241,817 674,011 9,411,413	24,008,073 64,501 74,092 2,270,258 102,880	2,801,550 56,373 59,073 358,946 140,830	4,378,812 61,270 25,846 1,933,940 84,105	81,589,594 1,221,878 564,201 18,039,722 2,098,231	1,213,294 69,592 69,715 402,303 84,683	252,109,402 4,340,731 2,685,869 58,567,435 7,704,823	3,049,281 2,051,953 40,125,410	1 1.134	2,050	<u>5</u>	1,222 158 347 1,010 . 385	286 23 11	24,810 1,270 775 10,830 1,740	2,913 3 38 3 2,088 3 1 3
341,155 4,691,054 206,680 244,086 156,404	8,170,249 389,347 241,408	794,977 714,718	284,037 2,311,528 35,180 40,582 47,032	118, 484 697, 908 39, 730 38, 198 47, 367	218,906 3,075,031 268,203 84,733 42,383	1,582,253 38,385,149 908,242 847,177 782,036	61,838 663,075 47,924 46,698 69,217	6,408,348 106,666,923 3,771,831 3,134,951 3,465,969	67,618,699 2,815,665 2,241,076	1,268	6,485		1,072 2 126 412	13 137 2 4	1,614 14,351 299 844 851	5,516 522 7 4
514,821 1,227,486 198,548 61,554 340,292	741,579 1,894,465 247,877 91,112	3, 567, 216 738, 286 219, 613	18, 259	15, 169	222, 498 313, 727 25, 251 14, 184 110, 025	3,216,522 5,925,638 837,581 203,280 2,024,426	85, 425 196, 272 28, 066 17, 169 59, 826	10, 228, 670 19, 998, 949 3, 129, 560 894, 527 5, 997, 572	13, 877, 039 2, 263, 913 674, 078	1 201	794	5	19 32	13 13 4	1,980 4,211 727 314 1,388	7 4 419 4 11 8
637, 958 191, 997 909, 289 90, 967	1,259,076 246,344 1,409,234	2, 250, 200 930, 144	623, 478 35, 776 397, 157	192,787 47,628 145,846	336, 927 57, 022 343, 776 9, 459	2,679,459 997,027 4,202,897 200,105	118, 434 58, 238 164, 782 20, 566	11, 954, 252 3, 402, 541 14, 639, 902 1, 078, 443	10, 272, 223	2,488 1,589 3,708 1,014	5 II - 13		537 537 335 87	16 13 19 7	3,338	123 30 12

### BOOKBINDING AND BLANK-BOOK MAKING.

3, 390, 421	4, 063, 491	18,658,821	452, 225	1,516.503	984, 763	22,750,119	485, 052	66, 020, 677	42, 785, 506	11, 123	555	 133	 	 1
89, 367 7, 088 3, 380	139, 886 2, 640 4, 217 2, 282	627, 505 35, 839 60, 903 67, 244 17, 327	26,002 5,912 2,952	33, 124 2, 740 5, 974 7, 096 1, 564	19,623 224 849 229 164	873, 747 28, 287 62, 305 53, 127 6, 221	13, 290 449 1, 175 1, 435 738	2, 462, 669 87, 832 194, 612 169, 780 37, 262	1, 575, 632 59, 096 131, 132 115, 218 30, 303	463 20 66 28 3			 463 20 66 28 3	 5
454, 882 9, 915 14, 621 5, 910	311, 781 936 84, 869	2, 170, 659 55, 005 64, 865 3, 125	138, 744 4, 500	190, 725 6, 862 8, 281 960 2, 090	124,391 2,395 12,596 49 61	2,581,130 53,232 183,442 3,470 17,453	57, 161 1, 556 2, 965 262 628	7,477,722 164,415 421,508 15,770 91,045	4, 839, 431 109, 627 285, 101 12, 038 72, 964	1, 263 60 92 4 22	75	 	 1,186 60 92 4 22	 7 8 9 10 11
9, 922 8, 100 352, 606 138, 076 5, 636	600 10,023 299,073 222,144 2,760	47, 169 182, 669 2, 595, 018 405, 144 94, 239	103 1,712 22,083 693 2,791	4, 115 10, 054 156, 021 20, 805 7, 369	780 2,739 133,420 140,367 1,573	95,000 240,213 2,975,746 531,725 69,144	1, 168 4, 689 57, 263 11, 823 2, 662	546,371 8,179,841 2,091,826	80, 554 301, 469 5, 146, 832 1, 548, 278 173, 471	46 77 1,368 174 50	390	 2	 46 77 976 174 50	 12 13 14 15 16

\* Same number reported for one or more other months.

# MANUFACTURES.

									TA	SLE 40	0.—1	DETAI	LED S	TATE	MENT	, TH	E P	RINTING
					PERSO:	NS ENGA	GED IN	THE INDU	STRY.			(I		E EARNE ST REPRI			y.	
- {					Sala-	Clerk	s, etc.		Wag	e earner	rs.			16 and	l over.	Unde	r 16.	
	STATE.	Num- ber of estab-		Pro- prie-	ried offi- cers,				Nu	mber, 1	5th đe	y of—						Capital.
		lish- ments.	Total.	tors and firm mem- bers.	tend- ents, and man- agers.	Male.	Fe- male.	Average number.		imum nth.		imum onth.	Total.	Male.	Fe- male.	Male	Fe- male	·
				BO	OKRINI	ING A	ND RI	ANK-BO	OK	MARIN	7GC	Continue	đ					
-						1												Dollars
1 2 3 4 5	Missouri. Nebraska. New Jersey. New York Ohio	39 4 34 397 54	1, 243 35 445 10, 429 1, 301	38 5 38 395 56	58 2 14 407 44	90 2 52 567 255	80 2 26 547 112	977 24 315 8, 513 834	De De De De De	1,238   27 341 8,800 1,004	My Ja Ja Ja Fe	753 21 276 8, 306 762	1, 286 29 341 9, 819 997	532 12 212 4, 446 529	722 14 127 5, 268 464	17 3 2 55 4	15  50	2, 389, 189 87, 469 615, 485 18, 211, 949 3, 242, 432
6 7 8 9 10	Oregon	6 109 6 3 8	1, 776 87 15 176	110 5 3 7	6 68 5 4	39 4 3	3 40 2 1 3	55 1,519 21 11 159	Au 8 No Je No 8 De	67 1,591 31 12 171	Jas Ja Aps Mh Fes	1,441 18 18 8 153	1,623 23 11 170	24 739 14 7 84	29 831 9 4 136	2 25	28	91, 881 2, 706, 534 75, 468 27, 447 130, 102
11 12 13 14 15	Utah Virginia Washington Wisconsin All other states 4	4 14 32 18	28 50 52 651 <b>2</b> 56	2 6 14 23 24	3 1 25 18	83 22 22	40 11	20 42 37 480 181	No s My De Oc	22 47 44 536	Ja Ja Se Ap	17 36 27 436	20 44 41 526 183	9 17 22 195 105	9 27 17 244 75	2 34	53 3	82, 947 56, 070 121, 587 857, 386 340, 943
			ENG	RAVINO	, stee	L AND	COPPE	R PLAT	E, IN	CLUD	ING I	PLATE	PRINTI	NG.			<u></u> U	
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 3 4 5 6	California. Colorado. Connecticut District of Columbia. Illinois.	7 5	186 56 44 58 1,462	23 2 6 6 21	10 2 3 3 98	9 1 4 1 74	9 4 5 4 80	135 47 26 44 1,189	De De De De De	173 60 35 52 1, 286	Ja My Mh Ja Ap	101 42 16 39 1,109	159 60 34 52 1,281	95 30 23 33 774	63 21 8 19 436	1 2 3	7	217, 147 38, 012 34, 626 69, 053 3, 649, 362
7 8 9 10 11	Indiana Kentucky Louisiana Maryland Massachusetts	5	128 257 49 53 524	6 3 4 13 16	6 19 4 22	7 11 3 1 21	6 17 3 2 33	103 207 35 37 432	Oc De (5) My Oc	115 219 35 42 515	Ja Mh (5) Au 3 Fe	92 201 35 31 386	111 210 35 38 465	88 101 28 27 224	17 107 7 5 189	3 2 4 24	3 2 28	106, 902 222, 409 30, 831 33, 033 488, 256
12 13 14 15 16	Michigan Minnesota Missouri New Jersey New York	15	93 101 206 212 3,198	16 7 12 15 112	2 1 18 12 164	4 8 2 2 176	4 5 9 6 160	67 80 165 177 2,586	De De De De De	85 96 211 198 <b>2,</b> 945	Jas Jy Ja Ja Ja	61 73 146 155 2,378	78 91 208 199 2,900	56 39 92 168 1,737	21 51 110 27 1,148	1 2 2 2 11	4 2 4	76,018 93,063 188,538 279,675 10,324,198
17 18 19 20 21	Ohio. Oregon Pennsylvania. Rhode Island Texas	54	304 58 1,221 102 66	15 6 48 11 9	14 2 58 5	12 84 1 2	8 6 93 2 5	255 44 938 83 50	Jy De De De De	271 51 1,070 116 70	Fe Ja Ja Fe Jy	224 37 873 63 42	271 51 1,054 111 70	174 43 494 70 41	97 8 486 40 29	41 1	33	225, 887 72,018 2,302,541 94,886 111,221
22 23 24 25	Virginia Washington Wisconsin All other states	. 3 8 14	24 33 146 198	4 2 1 12	1 3 16 14	4 4	1 4 10 11	18 24 115 157	De a No No	19 29 125	Ja <sup>3</sup> My Mh	16 21 105	19 24 120 183	11 10 84 102	5 14 30 80	1 1 1	2 5	15, 624 38, 333 110, 073 218, 554
							LITHO	GRAPH	ING.									
1	United States.	331	19,305	150	1,134	1,470	933	15,618		16,850	-	14,743	16,810	13,223	3,422	110	55	60, 817, 330
2 3 4 5 6	California. Colorado. District of Columbia. Illinois. Indiana.	4 6 31	889 241 242 1,380 61	10 4	35 10 23 91 4	106 25 14 131 1	50 8 8 65 65	696 197 197 1,083 46	No De Jy De Se	771 218 214 1,133 49	Fe Fe Ja Ja Ja	634 175 185 1,035 39	754 218 189 1,135 48	618 124 156 870 35	134 94 32 247 6	1 7 6	1  ii 1	2,989,533 632,879 561,861 4,187,623 190,382
7 8 9 10 11	Iowa Kentucky Maryland Massachusetts Michigan	5 6 14 10	165 249 664 1,519 550	1 1 11 1 4	13 23 22 85 43	15 34 62 106 49	9 15 27 109 16	127 176 542 1,218 438	No Se De De De	144 186 573 1,349 504	My Ja Mh Ap Ja	118 163 507 1,166 361	141 184 576 1,349 504	97 146 517 917 384	41 36 52 412 120	3 1 6 14	1 1 6	323, 913 853, 362 3, 692, 162 4, 141, 125 1, 912, 267
12 13 14 15	Missouri New Jersey New York Ohio	136 28	384 186 8, 209 2, 312	9 1 63 10	28 9 487 109	65 1 609 126	20 2 375 128	262 173 6,675 1,939	De No De No	278 189 7, 218 2, 103	Ja Ja Fe Ja	241 148 6,285 1,764	257 189 7,205 2,091	198 164 5,897 1,715	50 23 1,282 374	6 2 21 2	3 5	940, 976 276, 339 25, 522, 633 8, 364, 037
16 17 18 19	Pennsylvania. Washington. Wisconsin. All other states 7	12	1,294 108 529 323	20 1 11	85 10 37 20	63 10 30 23	47 6 23 19	1,079 82 438 250	No No Au	1,205 97 466	Ja My Ja	998 66 398	1,154 92 437 287	803 64 336 182	818 24 88 89	28 2 6 4	5 2 7 12	3,057,194 342,529 2,066,276 762,239

<sup>1</sup> 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 sheft-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 P	OBLISH	ING INI	USTRY	, BY ST	rates:	1919—Cor	atinued.	- li	1	Tr			
			EXPE	NSES.		-					POWER.		i
Sal	aries and w	ages.		Rent a	nd taxes.	For ma	terials.				Primary horsepower.		Elec- tric
			For contract		Taxes, Federal			Value of products.	Value added by manufac- ture.		Owned.		horse- power gener- ated
Officials.	Clerks, etc.	Wage earners.	work.	Rent of factory.	state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Steam en- gines (not tur- bines).  Steam com- tur- bines.  Inter- nal- com- ton- bines.  inter- nal- com- ton- ton- en- gines.	w-	in estab- lish- ments re- port- ing.
		,		воо	KBINDI	NG AND I	BLANK-B	OOK MAK	ING-Conti	nued.			., .
Dollars. 150, 998 3, 720 42, 199 1, 580, 645 150, 281	Dollars. 234, 764 3, 997 97, 828 1, 637, 053 665, 969	Dollars. 822,656 23,156 296,631 8,228,273 824,540	Dollars. 3,441 1,573 121,008 80,486	Dollars. 42,110 2,640 15,321 756,888 46,279	Dollars, 37,730 646 6,323 320,460 39,489	Dollars. 1,310,074 16,007 446,981 0,587,720 882,094	Dollars. 21, 190 1, 363 14, 992 205, 886 26, 126	Dollars. 3, 194, 651 61, 315 1, 180, 032 27, 892, 678 3, 836, 561	Dollars. 1,863,387 43,945 718,059 18,099,072 2,928,341	518 17 192 4,589 846	20 2 111		
20,354 199,100 6,293 9,650	4, 304 129, 506 8, 394 150 19, 800	52,843 1,236,541 21,320 11,238 85,027	2,520 9,043	3,875 116,373 27,092 1,000 4,879	2,738 106,204 788 1,477	74, 618 1,687, 019 33, 141 7, 977 141, 063	1,705 33,941 330 335 1,725	195, 734 4, 537, 388 104, 004 27, 791 309, 902	119, 411 2, 816, 428 70, 533 19, 479 167, 114	38 741 12 6 64	16	38 . 725 12 6	
6,200 1,300 50,099 70,079	1,600 2,200 128,282 48,433	17, 690 35, 297 42, 604 355, 309 143, 697	1, 400 21, 948 5, 238	2, 184 1, 332 5, 225 26, 612 7, 413	391 161 1,570 15,660 11,666	25, 881 20, 838 34, 390 602, 248 155, 826	1,026 1,448 1,376 9,269 7,077	67, 059 83, 205 133, 622 1, 406, 875 627, 208	40, 152 60, 919 97, 857 795, 358 464, 305	9 23 19 189 124		9 23 19 189 124	
	<del></del>	·	ENGF	AVING,	STEEL A	ND COPPI	ER PLAT	E, INCLUD	ING PLAT	E PRIN	TING.		
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	4,576	536
22,379 3,890 8,200 4,840 376,295	22,260 2,584 2,924 3,889 203,355	154,971 34,765 21,775 49,799 1,386,968	6,824 250 11,973	12,875 3,060 4,060 4,655 59,559	2,113 472 676 318 132,374	116, 425 27, 354 23, 440 29, 006 1, 530, 363	2,352 483 380 1,052 40,441	494,544 91,150 81,088 129,480 4,794,095	375,767 63,313 57,262 99,422 3,223,291	72 20 14 7 1,372	725	72 20 8 7 647	536
21,600 49,886 4,300 122,682	13,541 28,718 3,932 2,468 55,549	130, 671 116, 316 30, 408 34, 557 407, 250	6,000 1,476 655 9,074	5,594 5,922 3,710 3,442 29,780	1,028 4,848 316 37 30,912	73, 563 150, 602 35, 711 36, 896 254, 262	4, 553 4, 110 1, 493 815 7, 340	362,724 480,121 98,596 110,669 1,318,098	284,608 325,409 61,392 72,958 1,056,496	92 38 19 13 110	2 10	92 36 19 13 100	1
3,000 2,080 42,751 32,202 716,028	6,088 7,238 9,841 13,220 430,725	81,748 63,923 141,576 242,571 3,299,803	300 1,200 2,100 6,817 50,456	7,570 4,745 11,180 12,978 141,637	187 575 1,480 1,231 203,317	38,572 51,242 118,398 61,321 2,705,292	1,207 938 2,029 7,824 87,824	201,395 151,126 405,082 540,197 9,384,258	161,616 98,946 284,655 477,052 6,591,142	27 30 70 118 2,558	72 8	27 30 70 110 2,486	1 1 1 1
49,718 6,565 178,612 10,060	26,172 4,282 247,965 1,975 4,740	313, 953 54, 818 872, 306 100, 159 45, 678	3,102 17,691 3,997	18,848 5,100 51,449 6,968 4,424	12,462 521 24,718 2,482 534	173,905 25,919 964,688 41,560 46,464	4,936 2,018 21,414 1,737 644	825,800 154,837 3,213,669 217,100 144,199	646,059 126,900 2,227,567 173,803 97,091	103 72 464 55 15		103 72 448 50 15	1 1 1 1 2 2
1,800 8,070 46,945 47,093	780 2,540 12,902 12,633	19, 262 26, 446 116, 686 161, 700	2,246 13,014 1,040	1,300 3,895 8,000 12,896	75 198 17,444 3,577	11,055 18,255 78,867 164,345	362 496 3,428 5,360	53,435 79,884 370,353 501,254	42,018 61,133 . 288,058 331,549	10 9 36 96		. 10 9 - 36 - 96	2 2 2 2 2
			· · · · · · · · · · · · · · · · · · ·			LITH	OGRAPE	IING.					
210,658		18,201,089	1,363,424		1,380,634	27,128,998	589,219	73, 151, 115	45,432,898	18,624	6,188 254 575	11,607	7,424
33,648 86,502 416,603 7,435	259, 255 115, 276 54, 780 440, 517 6, 881	960,111 174,427 224,575 1,373,085 43,369	200 157, 546 2, 791	25,895 15,921 10,171 82,837 805	326,102 18,949 3,770 112,157 1,075	1,849,067 417,356 230,190 2,199,558 64,408	18,082 6,293 9,032 44,283 1,902	4,583,473 914,680 687,447 6,014,666 141,962	2,716,324 491,031 448,225 3,770,825 75,652	1,413 169 178 1,176 58	127 30	1,403 169 178 1,019 58	93 136
50,492 55,580 97,910 339,417 138,474	61,070 115,411 141,426 377,626 117,924	146,719 197,783 615,209 1,347,811 467,455	4,490 243 12,939 158,643 33,344	9,960 3,195 11,242 25,735 14,705	8,630 6,635 80,961 97,661 57,172	339,557 199,495 1,237,337 1,845,058 766,042	4,857 5,769 27,280 51,369 18,817	744,462 649,098 3,123,785 4,916,351 1,929,149	400,048 443,834 1,859,118 3,019,924 1,144,290	138 149 687 1,025 687	100 300 668 517 25	138 49 387 237 145	380 1,515 26
168,948 18,649 1,175,665 475,937	134, 135 3, 506 1, 784, 433 405, 324	333,062 175,360 8,204,500 2,007,817	5,628 9,312 870,770 45,482	21,925 5,230 628,214 46,770	147,450	584,372 176,180 10,434,998 3,491,174	10,045 5,128 265,773 52,583	1,472,240 522,304 30,543,890 9,150,614	877,823 340,996 19,843,119 5,606,857	329 134 7,867 2,720	3,161 134 125 995 285	4,447	3,053 1,539
209,669 32,216 137,633 61,216	215, 504 26, 445 90, 660 46, 126	1,071,137 95,475 496,527 266,667	17,473 18,446 26,117	80,674 3,926 14,721 17,843	26,397 12,744 98,450 27,583	1,751,533 185,164 872,731 484,778	81,967 4,444 19,730 11,865	4,040,955 470,724 2,079,440 1,165,925	2,257,455 281,116 1,186,979 669,282	818 153 569 854	310 110	398 153 569 354	702 16 17 18

<sup>&</sup>lt;sup>6</sup> Same number reported throughout the year.

<sup>6</sup> 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.

<sup>7</sup> All other states embrace: Alabama, 1 establishment; Connecticut, 2; Louisiana, 1; Minnesota, 3; Nebraska, 1; Tennessee, 1; Virginia, 1; West Virginia, 1.